UNIVERSITY OF CAMBRIDGE

Teacher collaboration for professional learning: Case studies of three schools in Kazakhstan

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February 2018

This thesis submitted for the degree of Doctor of Philosophy

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This thesis explores the nature of teacher collaboration for professional learning, key enabling and inhibiting factors, and their implication for the development of a culture of collaboration for professional learning in Kazakhstani schools. The current teacher professional development reform initiative in Kazakhstani secondary education has incorporated teacher collaboration as a strategy to encourage teachers to take ownership of innovations and changes. The underlying assumption for it is that when teachers engage in professional collaboration, there is both an individual and collective benefit. However, an increasing scepticism that followed the initial enthusiasm about the benefits of teacher collaboration in Western countries, where a second look at collaboration from a cultural and micropolitical perspective identified the contradictions between human agency and power, voluntarism and determinism, action and settings. Against this background this study was undertaken to examine the Kazakhstani teachers' beliefs, values and attitudes towards collaboration and interdependence.

The study draws upon case study data gathered in three purposefully selected Kazakhstani schools. The first two schools represent Kazakhstani schools established during the Soviet communist era. One of them is selected from among the comprehensive rural schools and the second is a gymnasium located in a district town. The third one is an autonomous school tasked to serve as a platform to pilot a new reform initiative before its dissemination to all the mainstream schools of the country. Each case-study was covered during a six-to-seven week period, which corresponds to a term in a school year in Kazakhstan.

The findings demonstrate the dependence of teachers' personal beliefs and values about teacher collaboration on micropolitical, school organisational culture, and socio-political factors, mainly inherited as a legacy of the Soviet education system, as well as ambiguities in the understanding and implementation of reform initiatives dictated from the top. The study suggests that Kazakhstani school history and the culture of the teaching profession possess the potential to overcome these barriers, for there is a tradition of peer evaluation and peer observation in the system with teachers expected to observe and be observed by other teachers on a frequent basis within an appropriately defined school organisational structure, which historically is seen by the authorities as a means of control. The study concludes that it is of particular importance to build on the momentum of the recent reform initiatives and help teachers to develop agency by providing the support and conditions conducive to the continued development of professional learning communities based on teacher collaboration for learning.

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Acknowledgments

Undertaking this PhD has been a truly life-changing experience for me and it would not have been possible to complete it without support and guidance from the many people whom I am pleased to thank here.

First and foremost, I would like to pay tribute to my late colleague, Dr Makpal Zhumabaikyzy Zhadrina, whose whole-hearted, committed and passionate talks about the future prospects of Kazakhstan's secondary education system and its teachers kept me interested in the subject. If it were not for her encouragement, I would not have had the courage in the first place to embark on this journey of being a researcher. Rest in peace, Makpal Zhumabaikyzy.

I am deeply grateful to my supervisors, Professor Colleen McLaughlin and Dr Ros McLellan, for the challenges to which they have introduced me, for their invaluable guidance, encouragement and constant emotional support. I have learnt so much from both of you.

Many thanks go to my PhD adviser, Professor David Bridges and former NIS Chairperson's advisor and current member of the Board of Trustees, Professor Alan Ruby, both of whom tirelessly and patiently guided me through intellectually stimulating exchanges and discussions, combined with the opportunity to get to know the world of philosophers, policymakers and scholars in education.

I would also like to thank the Chair of the Board of Trustees of the Autonomous Educational Organisation 'Nazarbayev Intellectual Schools', Mr. Yerbol Orynbayev, and the Chairperson of the Executive Board, Ms. Kulyash Shamshidinova, for their constant support and belief in me. I also extend my thanks to all my colleagues at the Autonomous Educational Organisation 'Nazarbayev Intellectual Schools' for their intellectual and emotional support.

I gratefully acknowledge the award of a Talap scholarship from the 'Nazarbayev University'. This scholarship fully funded my PhD study at the Faculty of Education, Cambridge University.

I would like to thank the Ministry of Education and Science of the Republic of Kazakhstan, its Department for Pre-School and Secondary School, the Regional Division of Education and the District Department of Education for making it possible to conduct my fieldwork in the selected schools.

This PhD study would not have been possible without the research-participants from three case-study schools in Kazakhstan. I am extremely thankful to all the participants for their time, patience and openness. Unfortunately, I am not able to name some of you to whom I am extremely grateful for your sincere dedication and commitment towards educating the future generation of our country.

I also would like to extend my thanks to my colleagues and friends at the Cambridge University Faculty of Education who are engaged in the Kazakhstani secondary-education reform project; with many of whom I have been in close cooperation on different initiatives; and who have offered me collegial guidance and friendly support over the years. I appreciate your interest in Kazakhstan's education system and your contribution to its development.

I would like to extend my thanks to Mary Jane Drummond, who introduced me to the concept of children as learners; and to the hundreds of languages of children. You gave me a life-changing experience that I hope to be able to put into practice back in my homeland.

I am grateful to my dear friend, Anel Kulakhmetova, for being there to share the challenging journey of a PhD student. We began this journey in the same year; and we made to finish together.

I wish to thank Dr Rey Taganas, whose words of edification encouraged and supported me all the way when I was doing my MBA degree in Bangalore; and now technology has made it possible for us to stay in touch and made it possible for me to be guided by your wisdom. I wish you all the best for your business that you are about to start.

My sincere thanks go to Mr. Robert Sim, whose proofreading and editing greatly helped the readability of my work. Thanks a lot for all the time you dedicated to working with me.

Finally, I thank my parents, my sisters and my brother for their love, belief, encouragement and support throughout the all the years of my study and beyond!

I dedicate this work to my mother and father in gratitude for their unconditional love!

List of Abbreviations:

Abbreviation	Full Form
AEO	- Autonomous Educational Organisation 'Nazarbayev Intellectual Schools'
AS	-Activity System
BERA	- British Education Research Association
Ministry of Education	- Ministry of Education and Science of the Republic of Kazakhstan
Government of RK	- Government of the Republic of Kazakhstan
IAC	- Information Analytical Centre
IMF	- International Monetary Fund
KERA	- Kazakhstan Education Research Association
MPhil	- Master of Philosophy
MGS	- Multi-Graded Schools
NAE	- National Academy of Education
NCTPD '*Örleu*'	- National Centre for Teacher Professional Development '*Örleu*'
NIS	- Nazarbayev Intellectual Schools
NQT	- Newly Qualified Teacher (interchangeably used with the term – Young Teacher)
SABER	- Systems Approach for Better Education Results (World Bank)
SPED-2020	- State Programme for Education Development of the Republic of Kazakhstan for years 2011-2020
State Standard	- State Compulsory Standard for Secondary Education
Cambridge FoE	- University of Cambridge Faculty of Education
CBR	- Country based Report prepared for the World Bank
CIE	- Cambridge International Examinations
CoE	- Centre of Excellence of the Autonomous Educational Organisation 'Nazarbayev Intellectual Schools'
CoE course	- Centre of Excellence Teacher Professional Development course

Abbreviation	Full Form
CoT	- Centre for Textbooks
OECD	- Organisation for Economic Cooperation and Development
PISA	- Programme for International Student Assessment
PDC	- Professional development course
PLC	- Professional learning communities
PSSED	- Pre-school and Secondary School Education Department of the Ministry of Education and Science of the Republic of Kazakhstan
SMU	- Subject Methodological Unit
SUPER	- School-University Partnership for Educational Research of the Cambridge University Faculty of Education
TIMSS	- Trends in International Mathematics and Science Study
UNESCO	- The United Nations Educational, Scientific and Cultural Organisation
UNICEF	- The United Nations International Children's Emergency Fund
UNDP	- The United Nations Development Programme
UNT	- Unified National Test
USSR	- Union of Soviet Socialist Republics
VET	- Vocational Educational Training

Note on transliteration

In transliterating Kazakh words/expressions/sayings, I have applied transliteration table developed by UNESCO, except when another spelling has become commonly accepted in English, for example *Zhuz* instead of *Žuz,* and *Bolashak* instead of *Bolašak.* The transliteration table was accessed through this link in April 2017:
http://webarchive.unesco.org/20161115183439/http://portal.unesco.org/culture/en/files/36150/12015162453kazakh_en.pdf/kazakh_en.pdf (please see the full version of the Table in Appendix Q).

For Russian and other Cyrillic names and places as well as words/expressions/sayings, I have also applied transliteration table developed by UNESCO, except when another spelling has become commonly accepted in English, for example Vygotsky instead of Vygotski. The transliteration table was accessed through this link in April 2017:
http://portal.unesco.org/culture/en/files/32320/11625495633russian_en.pdf/russian_en.pdf (please see the full version of the Table in Appendix R)

All transliterated terms, expressions and sayings will be italicized in the thesis.

List of transliterated words/expressions/sayings in Kazakh and Russian and their meaning in English

Transliteration of words/expressions/sayings	Kazakh/ Russian	Meaning of Kazakh and Russian words/expressions/sayings in English
Auyl /Ауыл/	Kazakh	- Village
Audan /Аудан/	Kazakh	- District
Aimak /Аймак/	Kazakh	- Region
Äkím /Әкім/	Kazakh	- Mayor/Governor
Äkímat /Әкімат/	Kazakh	- Local Authority
Aktöbe /Актөбе/	Kazakh	- Name of the regional city
Blat /Блат/	Russian	- Useful people
Bízdíkí /Біздікі/	Kazakh	- One of us
Belaya vorona / Белая ворона	Russian	- *White crow*
Bolashak /Болашақ/	Kazakh	- The Future
'Bölíngendí börí žeidí' /'Бөлінгенді бөрі жейді/	Kazakh saying	- 'He who splits from the tribe will be eaten by a wolf' - 'He who separates himself from the collective will be eaten by a wolf'
Gorono /Городской отдел образования/Гороно/	Russian	- City Department of Education
Is-areketti zertteu /Іс-әрекетті зерттеу/	Kazakh	- Action research
Issledovanie praktiki v destvii/Исследование практики в действии/	Russian	- Action research
'Köš žure tuzeledí' /Көш жүре түзеледі/	Kazakh	- 'The dogs bark, but the caravan moves on'
Klassnyi rukovoditel' /Классный руководитель/	Russian	- Class lead teacher
Kollektive /Коллектив/	Russian	- School collective
Komsomols /Комсомол/	Russian	- Member of 'All-Union Leninist Communist League of Youth' for young people aged 14 to 28
Mäžilis /Мәжіліс/	Kazakh	- Lower House of Parliament of the Republic of Kazakhstan
Malokomplektnyie školy /Малокомплектные школы/	Russian	- Multi-Graded Schools/Ungraded Schools

Transliteration of words/expressions/sayings	Kazakh/ Russian	Meaning of Kazakh and Russian words/expressions/sayings in English
'Ne pljui v kolodetc, - prigoditsja vody napit'sja' /'Не плюй в колодец, пригодится воды напиться'/	Russian saying	- 'Do not spit into the well – it may provide you with water to drink'
'Ne vynosi musor iz izby' /'Не выноси мусор из избы'/	Russian saying	- 'Keeping the trash in-house'
Nužnye ljudi /Нужные люди/	Russian	- Useful people'
Oblono /Областное управление образования /Облоно/	Russian	- Regional Division of Education
Octobrists /Октябрята/	Russian	- Member of a Communist organisation for children aged 9 and under
Pedsovet /Педагогический совет/Педсовет/	Russian	- School Pedagogical Council
Pedagogika storudničestva /Педагогика сотрудничества/	Russian	- 'Pedagogy of cooperation'
Perestroika /Перестройка/	Russian	- Restructuring
Pioneers /Пионеры/	Russian	- Member of a Communist organisation 'All-Union Lenin Pioneer Organisation' for children aged 9 and 14
Qyzylorda /Қызылорда/	Kazakh	- Name of the regional city
Raiono /Районный отдел образования/Районо/		- District Department of Education
Shymkent /Шымкент/	Kazakh	- Name of the regional city
Staž /Стаж/	Russian	- Employment track record
Subbotnik /Субботник/	Russian	- Saturday was a day of volunteer work following the October Revolution.
'Su íšken qudyqqa tukírme' /'Су ішкен құдыққа түкірме'/	Kazakh saying	- 'Do not spit into the well – it may provide you with water to drink' -'Never bite the hand that feeds you'
Svoii ljudi /Свои люди/	Russian	- People of the circle
Tovarišči po newscast'ju /Товарищи по несчастью/	Russian	- Comrades in misfortune'
Vospitanie /Воспитание/	Russian	- Moral upbringing
Zaočnoe /Заочное/	Russian	- Distance part-time study
Žuz or Zhuz /Жуз/	Kazakh	- Horde/Tribe

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Chapter 1: Introduction and rationale

This study aims to provide a case study of teacher collaboration for professional learning in three purposely selected case-schools in Kazakhstan. Specifically, it aims to generate an understanding about the nature of teacher collaboration for professional learning, key enabling and inhibiting factors in Kazakhstani state-funded schools. It further aims to explore schools' capacity to internalise and assimilate a reform of teacher professional development in which teacher collaboration is embedded as an effective strategy for encouraging teachers to take ownership of current innovation and change in the curriculum.

The Russian psychologist Lev Vygotsky (1978) argued that the development of language and thought go together and that the origin of reasoning is more to do with our ability to communicate with others than with our interaction with the material world. In the case of my study, it would be difficult for me to interpret the Kazakh saying '*Bölíngendí börí žeidí'*, used by one of the teacher-participants to explain her understanding of collaboration, without my knowledge of the language, local culture, way of life and customs in a specific context, i.e. Kazakhstan. As such, from my insider-researcher perspective, if the saying had been used in the historical context of a Kazakh nomad's life, it would have been translated as: 'He who splits from the tribe will be eaten by a wolf'. A saying like this was not just good advice for the members of a tribe but also a warning. However the use of this saying by the teacher-participant in a secondary school context should be translated as: 'He who separates himself from the *collective* will be eaten by a wolf'. In relation to teacher collaboration, the saying has two polar-opposite meanings, the positive and the negative. The positive meaning is: 'A collective supports its members in learning and coping with problems as long as one stays loyal to it'. The negative meaning, on the other hand, is expressed by yet another saying – this time in Russian: *'Ne vynosi musor iz izby'*. The Russian saying can be translated as, 'keeping the trash in-house' - that is, never discussing problems and issues outside the collective. The problem of reflection on the historical, sociocultural,

organisational and micropolitical context is thus at the heart of my study; as is the insight it provides into the teacher-participants' thoughts and feelings about collaboration for professional learning. At the end of my thesis, I will return to my subjective interpretation of the teacher-participant's way of expressing herself.

In this chapter, I describe the rationale behind my research interest in understanding teachers' collaboration for professional learning. I discuss how the study emerged from my own engagement in the current reform processes in Kazakhstan and my own positionality in undertaking the challenge to conduct this research. I then provide an outline of the organisation of this thesis and briefly highlight the major points of the content of each chapter.

1.1. Rationale for undertaking the study

This study into the nature of teacher collaboration for learning in the current Kazakhstani school culture has arisen from my professional interest. I worked as a teacher in a secondary school and an educator in a higher-education institution. Since 2009, I have served as Deputy Chairperson for academic issues in the Autonomous Educational Organisation (AEO), which manages a network of 20 Nazarbayev Intellectual Schools (NIS). According to the State Programme for Education Development of the Republic of Kazakhstan for years 2011- 2020 (SPED-2020) NIS schools were established to act as an experimental platform to pilot major educational reform in Kazakhstan and tasked to disseminate successful practices to the mainstream schools of the country. The status of 'autonomous' was awarded to the company managing the NIS schools to allow it to operate under specially adopted legislation [1], guaranteeing better financing to conduct the piloting of innovations. It also allowed all 20 NIS schools to operate in newly-constructed buildings located in the regional capitals of Kazakhstan and be resourced with state-of-the-art equipment.

[1] Law No.394-IV of January 19, 2011, 'On the status of Nazarbayev University, Nazarbayev Intellectual Schools and Nazarbayev Fund' (www.zakon.kz, accessed in April 2017).

My role as an insider in these education-reform initiatives allowed me to develop a strong conviction about the creation of professional communities of practice that emphasise teachers' collaboration for learning. I came to feel that such communities of practice can serve as a powerful force in accelerating the dissemination of practices successfully piloted in NIS schools and sustaining reform efforts beyond the NIS platform. This conviction was developed from my involvement as team leader of a working-group devising a new skills-based curriculum for NIS schools; and by working closely with a team of trainers and scholars from the University of Cambridge[2] in introducing reflective practice and collaborative action research into NIS teachers' practice. These initiatives were tested between 2010-2015, each one as a separate NIS project; and one after the other building on the achievements and lessons learnt from the previous project.

In brief, the first project was implemented between 2010-2011. This aimed at developing a more skills-based and student–centred curriculum, to be piloted by NIS schools before its dissemination to the mainstream schools of the country. A fundamental premise of this project was that teachers should be explicitly involved in the curriculum-design process. The second project was initiated in March 2011. It was implemented in a form of year-long, on-the-job professional-development training for NIS teachers. The training programme aimed at developing teachers' confidence in writing their own subject programmes, as well as analysing their own pedagogical practices in collaboration with colleagues. Finally, in 2012, colleagues from a partnership between the University of Cambridge Faculty of Education (Cambridge FoE) and Cambridge schools - entitled the Schools-University Partnership for Educational Research (SUPER[3]) - were invited to start a long-term collaborative action research project within 20 NIS schools (McLaughlin

[2] The Cambridge International Examination and the Faculty of Education of the University of Cambridge has served as a strategic partner for the Nazarbayev Intellectual Schools since 2011.

[3] The School-University Partnership for Educational Research (SUPER) was created by the University of Cambridge Faculty of Education and a group of head teachers. It aims to create useful educational research within a school-university partnership and document and explore the partnership. It also offers a two-year part-time research-based Masters in Education (https://www.educ.cam.ac.uk/research/projects/super/, accessed in April 2017)

& Ayubayeva, 2014, p.53). Its ultimate goal was to develop NIS schools' capacity to create structures and conditions for teachers to engage with action research and contribute to knowledge creation and its dissemination beyond NIS.

In general, the implementation of these projects contributed to an emerging discourse in education policy and research in Kazakhstan about the importance of teachers' agency and their collective role in creating pedagogical knowledge (Zhumagulov, 2011; Ayubayeva, 2012; Shamshidinova, Ayubayeva, & Bridges, 2014, p.81; McLaughlin, McLellan, Fordham, Chander-Grevatt & Daubney, 2014); as well as the importance of establishing professional communities of practices for the dissemination of NIS practices and sustaining reform efforts (Shamshidinova, 2015; Turner, Wilson, Ispussinov, Kassymbekov, Sharimova, Balgymbayeva, & Brownhill, 2014). My active involvement in the process of the initiation, implementation and evaluation of these projects, which I shall discuss next, became a powerful turning-point in my own learning and an inspiration for me to undertake this study.

1.2. Initiation, piloting and implementation of projects

During the course of implementing each of the above-mentioned projects, NIS teachers encountered various tensions and contradictions. Some of the tensions were easy to overcome, as they related to an individual teacher's choice or decision. For example, joining any of the projects was initially voluntary. Thus, teachers who did not feel comfortable with being observed or with sharing and collaborating were free to leave the project at any stage. However more complex internal and external challenges were identified when analysing and evaluating the outcomes of the projects. While trying to provide NIS teachers with more opportunities to take ownership of the reform and control over their own work, we, the AEO decision-makers, underestimated micropolitical challenges, the school organisational and a broader sociocultural factors impacting upon teachers' beliefs and behaviours in the process. This understanding grew gradually from project to

project and made me realise the importance of capturing NIS teachers' perception about their own learning. It was also vital to understand how the key decisions made by the AEO impacted upon the teacher's beliefs about collaboration for learning. In the following subsections I reflect on how each of the projects was initiated and the main lessons learnt to guide the reader regarding how the study emerged and on my own positionality in undertaking the challenge to conduct this research.

1.2.1. Nazarbayev Intellectual Schools: Curriculum project

At the beginning of 2010, I was entrusted with leading a working group, consisting of scholars specialised in curriculum writing and teacher-practitioners, focused upon devising a new skills-based curriculum to be tested on the NIS schools platform. As mentioned above, a fundamental premise of this project was that it asked teachers to be explicitly involved in the curriculum-design process. It was believed that there would be better adaptation and implementation of the curriculum if a working group allowed teachers to function as 'developers' and 'implementers' of the curriculum. In other words, there was an agreement among key stakeholders to pursue a renewed vision of 'teachers as developers of curriculum' at the national level, and more widely as 'agents of change' (Shamshidinova, 2015a; 2015b; Zhumagulov, 2011).

The new curriculum framework that was expected to be developed by scholars in collaboration with the teachers was associated with a fundamentally new approach to curriculum development in the Kazakhstani context. It placed the individual student and his/her learning outcomes at the centre of all the teaching. Teaching primarily had to be undertaken for the development of 'understanding' and not for 'repetition'. It had to answer the question of how we bring about learning or why students study in school instead of the traditional question of what should be taught. The new approach sought to create an educational environment favourable to the development of a highly educated, rounded person; as well as the creation of

an individual able to demonstrate in themselves the ability to think critically and creatively, able to make the right decision and constructively participate in social life; communicate and creatively use a variety of means to act and work as part of a team; respect other cultures and opinions, understanding reality in an objective way; take responsibility; carry out their duties as an active citizen; and be ready for life-long learning (NIS, 2017; Nazarbayev, 2009). To this end, scholars and teachers worked on establishing values and long term-objectives; learning outcomes; the content of the curriculum; the assessment model; and the requirements for leading a group of Intellectual Schools focused on delivering Science and Mathematics education. (Dzhadrina, 2017, pp.196-198). An initial NIS curriculum framework was developed, composed of three interconnected components: i) integration of the best practices of the Kazakhstani and international curricula in the area of secondary education; ii) interdisciplinary integration and ensuring continuity between pre-school; primary; lower secondary; and upper-secondary school, with a clear link to the requirements of higher education; iii) development of subject knowledge and skills in order to ensure depth and complexity of subject content through active learning, taking into account the age-specific features of students and the local context. The framework also sought to create space for teachers to contribute to establishing values, objectives and learning outcomes based on the realisation of their pedagogical principles in practice.

Here is how the issues of the development of a new curriculum were formulated by Professor Makpal Dzhadrina and about which she wrote in her article 'Prerequisites for the creation of a new model of secondary education in Kazakhstan':

> 'The current methodological system (the aims, content, methods, forms and means) for the teaching of each subject, and the corresponding educational and methodological set-up in general, is still about answering the question 'What to teach?' rather than 'How does one help a student to learn?' For

> example, the content and structure of schooling at present are focused on providing a student with a comprehensive education at the more academic level. Textbooks are thus full of information to be reproduced by students, with no room for finding ways of organising a creative way of learning. … Therefore, it is time for us to look for a new approach in organising the educational process in a secondary school. … To that end, I think we have to answer the question: 'Why study in school?' (Dzhadrina, 2017, pp.203 - 204).

However, by the end of 2010, a year into our project, our team formally concluded that the gap between the new curriculum that we were trying to devise and existing teaching theory and practice was so large that it was 'difficult to conceptualise and connect the content and teaching strategies' (Ayubayeva, 2012, p.2, in reference to the NIS Protocol, 2010). Informally, it was difficult to find evidence of teachers' contribution in the process. In other words, from the decision-makers' point-of-view, it was naïve to think that teachers accustomed to working with a centrally-devised and dictated curriculum would be enthusiastic about the opportunity to design a new skills-based curriculum alongside experienced scholars. It was a reminder that, in the NIS schools, there were still teachers who had been trained under the Soviet system. As Johnson (1996) argued, the Soviet system was the one in which the authorities restricted the ability of teachers to develop a separate professional identity, controlling the degree to which teachers could influence the nature of such issues as teacher education, educational research, and the type of professional associations which teachers could participate in (Webber, 2000, p. 88, in reference to Johnson, 1996, p.37).

Thus, feedback received from the working group members showed that there was a deeply established belief among teachers and scholars that scientific knowledge of how to write a curriculum was something superior to teachers' knowledge about pedagogical practice. Teachers were afraid to express their opinion, believing it would not sound scientifically right, whereas scholars specialising in curriculum

writing lacked the skills to work alongside teachers. The following quotation illustrates teachers' feelings about their role in this project:

> 'I cannot express myself in a scientific way. I am scared to be criticised by academics for not knowing how to do it' (Teacher B, 2010, from the MPhil data, Ayubayeva, 2012).

As a result, it was concluded that there was a need for teacher training aimed at developing their capacity to understand bottom-up pedagogical approaches and confidence in practicing them. Hence, in search of an effective strategy to train teachers, the AEO approached Cambridge International Examinations (CIE), which resulted in the initiation and implementation of a teacher professional development programme, discussed in more detail next.

1.2.2. Nazarbayev Intellectual Schools: Teacher professional development programme

In March 2011, a cohort consisting of forty-six teachers from six NIS schools joined a year-long on-the-job training programme designed and delivered by CIE. The training was aimed at helping teachers devise their own syllabus to develop learners' critical thinking abilities and use reflection and critical friendship to improve teaching. It was the first experiment in which teachers were made responsible for devising the content to teach and developing students' capacity to assess their own learning progress. Thus, providing teachers and students with full autonomy and accountability. The underlying assumption was that the training would gradually develop teachers' confidence in writing subject-programmes and develop their skills to work in collaboration with peers, promote sharing and a culture of enquiry. Moreover, it was aimed at eliminating teachers' fear of engaging in scholarly and scientific discourse around curriculum theory and practice.

In parallel, I conducted a small case study in one of the NIS schools as a part of my MPhil study (Ayubayeva, 2012), aimed at investigating the implications of reflective practice for teachers' learning as a result of this intervention. In general, the findings showed that the NIS teacher-participants' experience of engaging with reflective practice helped them to become more confident about their ability to promote student-centred learning and more thoughtful in dealing with problematic situations that arose in teaching in their own classrooms. However, there was limited use of critical friendship and teacher sharing in their practices. Collaboration was not among their priorities. One of the factors that served as a barrier, as I concluded in the study, was the contradiction within the school organisational culture, in which teacher learning was treated as an isolated and individual activity. Moreover, the lesson observation, as it was put by one of the teacher-participants in the study, meant for many teachers 'stealing ideas' (ibid, p.48). In other words, if classroom teaching was observed, it was mainly for the sake of teacher attestation (appraisal) only, according to which teachers were required to demonstrate their individual innovations in methods of teaching and improving students' achievements, rather than his/her participation in collective or collaborative activities.

Another factor that emerged as a barrier was the role of the school administration, who did not show any interest in cultivating reflective practice in his school. The reason for that, as he explained, was that there was no value of the reflective practitioner in preparing students for the Unified National Test (UNT) – i.e., a school-leaving test requiring students to answer multiple-choice questions based on what is already covered in the textbooks. Thus, the context in which teachers operated was more contradictory than complementary. On the one hand, teachers were asked to follow the policy aiming to educate creative and critical learners. On the other hand, they were constrained by the school administration's expectation to deliver high results at the school-leaving tests that required rote learning and memorisation techniques.

The results of my study came out the same time as a change in the school-leaving exams for NIS students, requiring some level of problem-solving and critical-thinking abilities instead of multiple-choice questions. Hence, as one of the decision-makers in the AEO, I was able to communicate to the key stakeholders 'the importance of collaboration to the development of practice in NIS schools and need to create new patterns of interaction and in doing so interrupt a competitive dynamic that had inadvertently grow up' (McLaughlin et al., 2014, p.240). For this to be realised, the University of Cambridge Faculty of Education (Cambridge FoE) was consulted. As a result, a partnership programme, based on the principles of collaborative action research, was agreed between the AEO and the Faculty of Education and SUPER project (McLaughlin et al, 2014; McLaughlin & Ayubayeva, 2015, pp.53-54), details of which are presented next.

1.2.3. Nazarbayev Intellectual Schools: Collaborative action-research project

The partnership programme initiated between the AEO and the Cambridge FoE was viewed as a long-term strategy, with its ultimate goal being to develop NIS schools' capacity to: i) create structures and conditions for teachers to engage in action research; ii) contribute to pedagogical knowledge creation; and ii) its dissemination to the mainstream schools of the country. In other words, the AEO wished to adopt and adapt the Cambridge FoE trainers'[4] approach and their tradition of working with teachers based on Stenhouse's (1975) view of the teacher as an 'extended professional'. According to him extended professionals are

[4] A team of trainers from the University of Cambridge Faculty of Education and SUPER schools engaged in action research project in training teachers at Nazarbayev Intellectual Schools: Professor Colleen McLaughlin, Deputy Dean of the University of Cambridge Faculty of Education; Dr Ros McLellan, Principal Investigator, the University of Cambridge Faculty of Education; Dr Richard Byers, Lecturer in Special and Inclusive Education and Course Manager for Practitioner Professional Development, Faculty of Education, University of Cambridge, UK; Dr Michael Fordham, Senior Teaching Associate, Faculty of Education, University of Cambridge, United UK; Jan Schofield, Teaching Associate with the SUPER team at the University of Cambridge Faculty of Education, an Assistant Headteacher at Biddenham International School and Sports College, UK; Kate Evans, Principal of Bottisham Village College, UK; Jenny Rankine, Assistant Principal, Bottisham Village College, UK; Jennie Richards, Teacher Research Co-ordinator, Sharnbrook Upper School; course tutor for Masters level teacher learning, UK.

teachers who are duty-bound to research their own teaching and continue to learn about the curriculum and practice throughout their career (SUPER project, in reference to Stenhouse, 1975, p.241).

To implement the action research project effectively on NIS school platform, an external evaluation of the project was undertaken by specialists from the University of Sussex during three consecutive years (Daubney & Chandler-Grevett, 2012, 2013, 2014). The role of the external scholars evaluating the project outcomes was vital, as they provided insights into some of the sociocultural and micropolitical factors impacting upon teachers' attitudes, which many insiders, including myself, would have otherwise missed.

For example, the project evaluation and careful reflective accounts provided by the external assessors and the trainers (McLaughlin et al., 2014) identified a number of NIS schools' cultural characteristics and conditions that were antithetical to the ideas of collaborative action research. Those characteristics included: dominance of a transmission view of teaching and learning; lack of attention to younger and more junior teacher's voices, who are expected to defer to older colleagues and those in more senior positions; high levels of competition between teachers; a lack of sharing as the result of high pressure to perform well; and a widely held view that the teachers has unquestionable expert knowledge to transmit, which clashed with the underlying beliefs and values associated with the action research programme (ibid, p.247-252).

In their attempt to explain and tackle the issues, scholars build their knowledge and understanding upon the Kazakhstan's wide sociocultural aspects, which in number of studies (McLaughlin et al, 2014; Ardichvili 2001; Minbaeva and Muratbekova-Touron 2013) were identified being collectivistic, having a large power distance and a high index of uncertainty avoidance. As such, the existence of a large power-distance in the wider sociocultural context in Kazakhstan, as demonstrated by the dominance of respect for authority, explained why teachers unquestioningly

accepted a vision of teaching and learning dictated from the top. The presence of a high index of uncertainty-avoidance, expressed in a high level of anxiety with a high level of control, meant that teachers were viewed as having all the answers and learning as structured. Given this view, scholars contended, it was not surprising that NIS teachers were reluctant to take risk and feared failure. They therefore argued that it posed a challenge to the collaborative action research programme, which assumed teachers to have agency to develop their practice based on enquiry and constructive feedback.

Finally, my co-constructed (McLaughlin & Ayubayeva, 2015) account, in which we attempted to examine and understand the emotional aspects of NIS teachers' involvement in a collaborative action research project, confirmed that there was a wider sociocultural and also a micropolitical context that impacted on how teachers related to their fundamental values and beliefs; professional roles and identity; purpose of their work; and their power and powerlessness as regards new ways of doing things. In our findings, issues of authority and ambiguity were dominant due to teachers' feelings of being under-qualified as researchers. In addition, teachers encountered anxiety and uncertainty when asked to shift to questioning and problematisation of their own teaching practices. This kind of anxiety and uncertainty is explained best when looked at in the context of the teachers' past experience working in a Soviet system that had no room for questioning (Webber, 2000, p.88 in reference to Johnson, 1996, p.37; Davydov, 1995). Furthermore, with the dominance of a tradition of using authority and power relationships in a hierarchical structure as mentioned above, teachers felt constant uncertainty and a concern with getting things right. This relates to what McLaughlin and her colleagues (2014) identified as the dominance of a transmission-based view of learning in the context of teachers as professionals going about their daily practices.

1.2.4. Lessons learnt from the pilot projects and my own positionality as a researcher

In general, it can be argued that the AEO's institutionalised top-down approach to promoting teacher-collaboration for learning as a 'push strategy' contributed to the creation of professional communities of practice in NIS schools, as there is now a better understanding of the situation. A 'pushing change is the way of placing teachers in situations requiring changes in practice in the hope that this will then lead to changes in their beliefs' (Hargreaves, 2015, p119). In international literature, this approach has been shown to be successful in countries with a collectivist value system and a very hierarchical management-structure within schooling (Hairon and Tan, 2016; Wang, 2015; Lam, Yim and Lam, 2002). I am going to discuss this further in Chapter Two.

However, in the context of the NIS schools, successful implementation of a push strategy would not have been possible, if there was not heavy financing available from the central budget, which allowed the NIS schools to attract internationally recognised institutions as partners to train teachers. In other words, a 'pull strategy' used by the partners in developing teachers' capacity, and the partners' role as outsiders in relation to the Kazakhstani secondary education system, made it possible to ease some of the tensions teachers encountered from authority. A 'pull strategy' is what countries with a more individualistic value-system and a distributed management-structure within schooling argue to be the preferable approach in order to bring about teacher professional collaboration. That is, 'change by inspiring and enthusing teachers in their efforts by appeal to the moral principles of their work' (Hargreaves, 2015, p.119).

The results of the NIS projects implemented between 2010-2015 and the evaluation reports (Daubney & Grevett, 2012, 2013, 2014) show that the process of making teachers engage in collaborative professional learning is delicate, very complex and takes time (Ayubayeva, 2012). It is delicate because it deals with

various personal, professional and emotional characteristics of individual teachers while trying to bring about change related to the structures, traditions and routines of their working lives (Hargreaves, 1998, p.562; Evans, 1996; McLaughlin, 2003). It is complex, because in devising new policies for educational change, there is a need to understand that policy is not so much implemented as reinvented and redefined at each level of the system (Darling-Hammond, 1998, p.647; Bridges, 2014). In other words, as Darling-Hammond argued, what ultimately happens in schools and classrooms is therefore less related to the intentions of policy makers than it is to the knowledge, beliefs, resources, leadership and motivations that operate in a local context (1998, p. 647-648). A particular point will be given an account in Chapter Two in which I discuss and review secondary literature that of central relevance to my study.

By being actively involved in the process of the initiation, implementation and evaluation of the NIS projects, along with local experts and international scholars, I became a learner myself. On the one hand, I was committed to reflection and 'meaning-making', in understanding collaborative teacher learning. At the same time, I benefited from communication and discussions with national and international scholars who have a better understanding than myself of a particular concept under investigation. As the result, I can see the change that happened for me, from being a strategic decision maker with little reliance on research results to an emerging researcher keen to create a deeper understanding of how teachers' learning takes place regarding the task of improving teaching.

However, as I contended in an article co-authored with McLaughlin (2015), 'my acceptance of that very stance happened in an environment supportive of such learning' (p.58), i.e. the University of Cambridge FoE. As such, my own collaborative and dialogical stance towards my own learning contributed a great deal towards how I came to be interested in teachers' shared and collaborative learning and the importance of the supporting conditions that needed to be created for it to be facilitated, just like in the case of my own learning journey. In other

words, I undertake this study believing that teachers' learning can be said to be more enduring when the learning process is combined with reflection; when that reflection is done in collaboration with peers passionate about the ideas, activities and processes; and that this takes place within well-functioning, cohesive groups and communities (Shulman, 1997, pp. 514- 515; Cochran-Smith & Lytle, 1999, p.278). I examine the various aspects of these arguments and how they inform my study in Chapter Two.

As a result, and also by trying to justify my own research study, when I reflect on my role as one of the co-decision-makers who was in charge deciding what was good to do for and to the NIS teachers, I now understand that those decisions lacked teachers' and school leadership voice. Instead, many of the decisions were based on the perceptions of politicians; the influence of advisors (mainly international); and empirical evidence from education systems elsewhere (particularly things learnt from visits to schools outside Kazakhstan). In other words, some level of success was possible at the NIS platform thanks to a push and pull strategies afforded due to the political and financial support.

However, little is known about individual teachers' and mainstream schools' collective capacity to internalise the successfully piloted practices by NIS schools as declared by the SPED-2020. In the next section I present the details of the dissemination of the NIS practice that started in March 2012, in parallel with the collaborative action research project piloted in the NIS platform, and some emerging debate and discourses in relation to this reform initiative that set the base for my study.

1.3. Dissemination of practices to mainstream schools

In March 2012, the key decision-makers agreed that the dissemination of the NIS practice should start with the reform of teacher professional development. Hence, a new teacher professional development programme was initiated by the AEO, based on the NIS teachers' experiences. It was devised and delivered by the Centre of Excellence (CoE) of the AEO in collaboration with the Cambridge FoE. The programme was endorsed by the Ministry of Education (Zhumagulov, 2011) and approved by the Government of the Republic of Kazakhstan (Government of RK). This programme came to be known as 'the CoE course' among teachers, and I will use this term throughout the thesis to refer to the programme.

The CoE course aimed to build the 'human capital' invested in developing individual teacher capacity; and at the same time building the 'social capital' of the school collective, in which knowledge and skills are shared and benefited. It was designed to help teachers become reflective practitioners; use the action research cycle in understanding their own practices; and develop critical friendship to improve teaching and learning. It consists of three levels - Basic, Intermediate and Advanced. Each level is planned to last for three months. Teachers are released from their teaching for the duration of a programme, with their salary paid as usual. It is assumed that teacher trainers will allocate more time for teachers' interaction and practice observation than for one-way lecturing.

In other words, this initiative marked a willingness of the policymakers in Kazakhstan to move away from the previous top-down approach to teacher professional development, imposed by experts from outside, towards one in which a professional community of practice is developed by the school collective and teachers through engaging in sharing and collaboration to improve practice. Here is how Shamshidinova, the chairperson of the AEO, when speaking to the media, formulated the intention of building professional communities of practice based on teacher collaboration:

> ‘We are trying to create professional communities of practice [teacher sharing and cooperation] because we believe it will serve as a significant impulse to increase the level of teacher qualification [confidence], … and as a result better pedagogical support to students' (Shamshidinova, June 2012).

According to the Ministry of Education’s plan, 120,000 teachers or 40 percent of all teachers in Kazakhstan will be trained by 2020 (NIS Centre of Excellence, 2012; OECD, 2014, p.35). It was expected that trained teachers would create a critical mass and train other teachers in their own school settings. Hence, the exponential multiplication of learning and development is intended to speed up the implementation process and maximise the reach of the key drivers of the reform (Wilson, Turner, Sharimova & Brownhill, 2013, p.4).

However, while the CoE course was a detailed and thought-through process, the creation of professional communities of practice in schools by using trained teachers has been shown to be problematic. For example, early feedback received from the first cohort on the CoE course indicated that the school administration did not support trained teachers. Thus, teachers’ suggestions of training colleagues in the school were discouraged by school leadership. As a result, a nine-month school-leadership programme was initiated ‘for the school administrative team to learn the new approaches to teaching and create optimal conditions within schools for implementing change accordingly’ (OECD, 2014, p.178). Furthermore, while developing the leadership programme for school administration, a need for training for the Heads of the Regional (*Oblono*), District *(Raiono*) and City (*Gorono*) Departments of Education emerged as urgent. Moreover, a survey (NIS Centre of Excellence, 2015) conducted with 50,000 teachers, their students and the parents showed that, while the CoE course had been a turning point in changing teachers' beliefs about pupils' learning, there remained the challenge of how to develop ‘social capital’, a process of change in which school leadership and culture

emerged as playing a pivotal role. Here is how the results of the survey were reported at the 2015 NIS Annual International Conference:

> ‘94% of teachers admitted that the CoE course provided them with contemporary methods of teaching and technologies. 95.1% of students responded that lessons became dynamic and that content of the subjects comprehensible. 92.5% of parents acknowledged increased child interest in learning. Therefore, we can conclude that the CoE course supplied teachers with the necessary instruments for leadership and helped to change their belief [about pupils’ learning]. However, there remains an issue of ‘social capital’ dependent on the interplay of internal and external factors. Considering the internal factor, one should admit, that the school culture plays an important role and how the school leaders create conditions to build internal capacity in their daily activities’ (Shamshidinova, 2015b, www.nis.edu.kz).

Referring back to the lessons learnt from the NIS projects implementations, therefore, it can be argued that offering to establish professional communities of practice based on collaboration is not only a matter of providing teachers with professional-development courses, such as the CoE course. It should also draw reformers’ attention ‘to norms, beliefs of practice, collegial relationships, shared goals, occasions for collaboration, problems of mutual support and obligation’ (McLaughlin, 1993, p.81) within each school context.

Although some of the findings and assumptions made by the evaluation of the NIS projects, as discussed earlier, might be applicable to the context of mainstream schools, the basic statistics and available knowledge about the secondary education system in Kazakhstan show that the latter do not possess the conditions and resources that the NIS schools enjoy.

That is, according to the Ministry of Education Statistics report for 2014, there are 7648 primary, lower and general upper secondary schools serving 2.5 million students in Kazakhstan. 98.5 percent of schools are state-owned day-time schools (OECD, 2014, p.38), of which 70 percent are multi-graded schools[5] located in rural areas. The share of GDP devoted to secondary education in mainstreams schools remained around two percent of GDP in recent years, which is significantly below the OECD average (3.6%) (ibid, p.63). There is variance in per-student expenditure across regions indicating considerable spending disparities, from KZT 170 000 (USD 557) to KZT 373 000 (USD 1243) per year. Teachers in Kazakhstan are considered civil servants and paid according to the salary scale defined for civil servants. Their monthly salaries range between KZT 42 000 (USD 140) to KZT 82 000 (USD 273) based on the qualification level of a teacher. It should also be noted that teachers in mainstreams schools work in two shifts, thus leaving little or no time available for collaboration and professional development. Yet another obvious constraint that serves as a barrier for changing teachers' views about teaching and learning is the lack of resources and academic literature for teachers in school libraries together with lack of access to the internet, especially in rural areas.

So, on the one hand, the CoE course became popular among teachers as the Government of the Republic of Kazakhstan announced a 30, 70 and 100 percent salary increase for teachers as they successfully completed successive levels of the programme. On the other hand, the financial investment from the national budget has created a degree of scepticism among some of the policy-makers, educators and practitioners; and continues to generate discourse about teachers' and schools' capacity to internalise the innovations. For example, some activists (Kalikova, 2015; Smirnova, 2015, Akhmetzhan, 2016) contend that, despite the impact of the CoE course on teachers, they are in practice resistant to change, especially

[5] 'Multi-Graded Schools' (*malokomplektnyie shkoly,* in Russian) and sometimes referred to as 'Undgraded Schools' are small schools characterised for having a small number of students and combined teaching of the students from different grades in one class by one teacher.

experienced teachers; and they lack the interest to engage in meaningful discussion about new ways of teaching and learning. Kalikova (2015), a national expert at Soros Foundation Kazakhstan, states that, in top-down reform, 'teachers might equally choose to act as the agents of changes or become the inhibitory force to changes' (p.7). Smirnova, the chairperson of the branch office of the Public Association of Teachers and Educators, *Ar-Namys,* in the city of Almaty and a school Director, argued that what happens in a classroom was something to which only a teacher has access. Hence, she described the classroom as a 'black box' adding that what the school administration and inspectors observe in the 'Open lesson[6]' as the result of the CoE course does not always demonstrate teachers' every day pedagogical repertoire. Rather, she said, observers see rehearsed and pre-prepared lessons:

> 'When we talk about new approaches to learning [in reference to the CoE course], yes, we [teachers] learn about them, we kind of use them in our practice. . Those teachers, who attended a very expensive three-months [CoE] course, are not going to work in new ways. ... I shall admit that the classroom is a 'black box'. Yes, it is, because even in a position of a school Director, I cannot tell you with full responsibility what goes into the classroom. …Yes, we [school administration] attend lessons, and we observe Open lessons. But, these are Open lessons, which is rehearsed and prepared and so on. ...Whenever we [teachers] are told there will be an inspection [lesson observation by the CoE trainers], no problem, we [teachers] quickly adjust and show the inspectors what they require from us. Once they are gone, we get back to old ways of working' (Smirnova, 2015, pp.20-21).

[6] Open lessons are exemplar or demonstration lessons to which a teacher invites school administration, colleagues and inspectors for two purposes: to share the best practices and to get written feedback to apply for teacher attestation (teacher professional qualification appraisal).

Although it is not possible to generalise these assertions across all the mainstreams schools in Kazakhstan, they still confirm that what ultimately happens in schools and classrooms is less related to the intentions of policy makers. That is, the mainstream schools operating in current legislation platform and the UNT did not see the value in reflective practice, action research and professional collaboration just like the NIS teachers until the conditions and requirements for students' learning have changed.

At the same time, in serving as a facilitator of the dissemination campaign for the AEO, the main feedback that I received from the audience was predominantly about returning to 'the good old Soviet system'. In other words, there was a shared belief that whatever the CoE course was offering in terms of its content and teaching strategies it was something that has been part of the Soviet schooling. This is not surprising, as there is a deep-seated belief among citizens and educators that the Soviet education system was one of the best systems in the world (Fimyar, 2014b; Fimyar & Kurakbayev, 2016). According to an experienced teacher's opinion, a participant in my MPhil study, the schooling that was preserved in Kazakhstan as a legacy of the Soviet system had the necessary infrastructure for collective interaction and decision-making:

> 'During the Soviet time we [teachers and school administration] had a collective discussion at the *pedsovets* [Pedagogical Council], followed by the discussion in the Methodological Units of each subject to make sure that we have the same understanding of any document received from the authorities. We still have *pedsovets* and Methodological Units' (Ayubayeva, 2012, from the data collected for MPhil study).

The teacher did not call it 'collegiality' or 'collaboration', but there was the strong sense of belongingness to 'a collective', where sharing and shared understanding was promoted. As asserted by Kutsyuruba (2008), 'the concept of the collective can be very useful in the discussion of collaboration and to provide a basis for

establishing collaborative school culture' (p.14), especially in post-Soviet school culture. I will be discussing the legacy of the Soviet in more detail in Chapter Four as a part of research findings. Unfortunately, little attention was paid to the Soviet legacy when conducting our studies in the NIS schools platform as these schools were newly established and lacked the history.

My visit to the regions in Kazakhstan as a part of NIS dissemination campaign and the account of a teacher in my MPhil study made me question if teacher collaboration is something new to the Kazakhstani school culture or part of the forgotten past? Since no research study has been found that addresses this question, I wondered if what the experienced teachers saw as a platform for collective interaction in Soviet schools was still in practice in the state comprehensive schools. If so, what was its capacity to internalise teacher collaboration 'linked to the purpose of learning for all — for which members are held mutually accountable' (DuFour, DuFour & Eaker, 2007). Does the system in place allow teachers to undertake 'expansive learning'? And, if Kazakhstani teachers tasked to function as agents of change would be able to act as 'extended professionals'?

1.4. Structure of the thesis

My dissertation is divided into eight chapters. In Chapter One, 'Introduction', I outlined the rationale behind my research interest. I described how I came to be interested in teacher collaboration for professional learning and how it emerged from my own engagement in the current reform processes in Kazakhstan and my MPhil study.

Chapter Two, 'Theoretical framework for examining the teacher collaboration for learning', provides an overview of the theories and significant literature published on teacher collaboration for learning. In this chapter, I consider the implications for my own study of the theoretical perspectives adopted by scholars when examining

teacher collaboration for learning in various school settings in different parts of the world. I discuss the focus of my study and introduce the research questions.

Chapter Three, 'Research foundation and methodological rationale', presents a critical analysis of the philosophical stance and methodological approach that I have adopted in undertaking the study. I introduce the case-study schools as the main fieldwork site for my study. I explain the types and quality of data generated and how they were analysed. My role as an insider-outsider researcher and the power of positionality are discussed. Ethical considerations are addressed.

Chapter Four, 'Sociocultural context of the case-study schools', describes the policy environment in which the case-study schools operate. This chapter focuses on educational policies, with special attention given to the legacy of the Soviet education system. Current legal regulations, the mechanisms and the forces which inform the findings from the case-study schools concerning teacher collaboration for professional learning are all discussed.

Chapters Five, Six and Seven tell the stories of the case-study schools in relation to teacher collaboration for professional learning: respectively, the comprehensive rural school, Auyl; the gymnasium, Audan; and the autonomous school, Aimak. In those chapters, the school conditions and facilities are described. The characteristics of the teacher communities in each case-study school are explained. The rule-governed activity-systems reported by research-participants as requiring teacher interaction and collaboration for learning are analysed. The results of findings are summarised, synthesised and answers to the research questions in relation to the specific case-study school under consideration are offered.

Chapter Eight, 'Reflections, cross case analysis, discussion and implications of the study', sets out the conclusions and outlines the implications of my study for schools in Kazakhstan and for future research.

Chapter 2: A Theoretical Framework for examining teacher collaboration

As discussed in the Introduction, this study is based on the premise that teacher learning can be said to be more enduring when the learning process is combined with reflection; when that reflection is carried out in collaboration with peers committed to examining ideas, activities and processes; and that this all works best within well-functioning, cohesive groups and communities. However, from my own experience of being involved in major reform initiatives in Kazakhstan, it was evident that building a culture of collaborative learning is not an easy process. I also highlighted the lack of research about how secondary schools in Kazakhstan support teacher collaboration for learning in the pervious chapter. Therefore, in this chapter, I consider the theoretical perspectives used by international scholars to examine teacher collaboration for professional learning in various school settings in different parts of the world in order to inform my own study and its findings.

First, I discuss a new vision for learning and its impact on teacher learning. That is, how shifting student learning from the behaviourist concept of learning to skills acquisition through the construction of meaning concerned with context and conditions requires teachers to work together to develop a better repertoire of new pedagogies to address the constructivist perspective on students' learning (Hairon & Tan, 2016, p.1). Next, I discuss the concept of teacher collaboration for learning and expand on wider theoretical perspectives used by international scholars to study collaboration, namely the organisational culture, micropolitical and sociocultural perspectives, upon which I have built my own research design. These three perspectives taken together represent the three-fold conceptual framework (see Figure 2.1.) within which I present the results of my study and discussed more broadly in chapter Three. At the end of this chapter, the focus of my study and the research questions will be introduced.

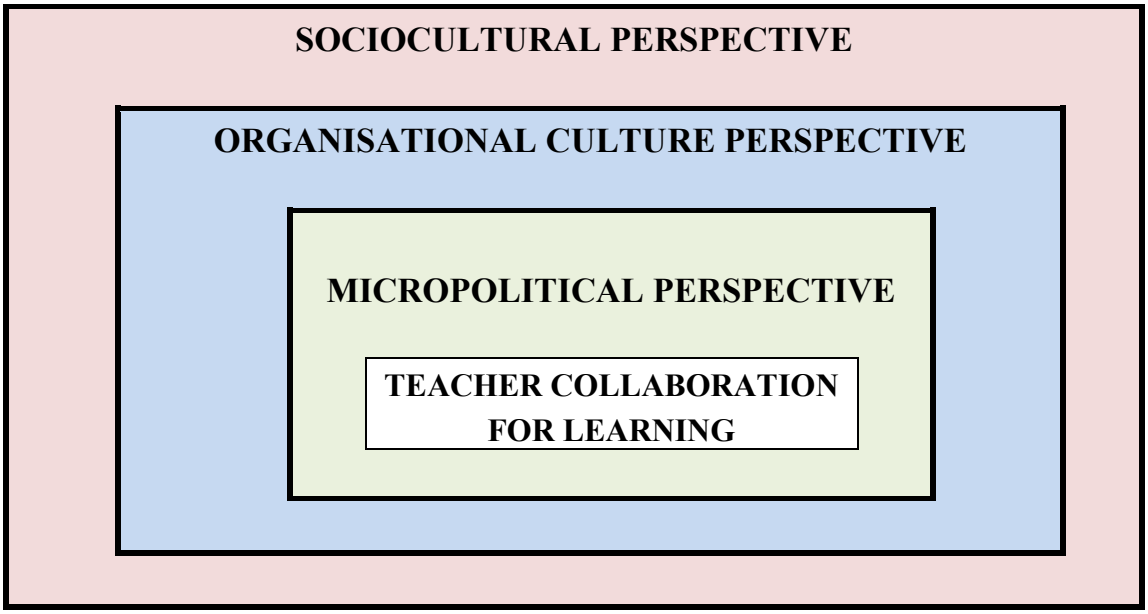

Figure 2.1: The three-fold conceptual framework for studying teacher collaboration in multiple and embedded settings and contexts.

2.1. A new vision for student learning and changes in teacher learning

For centuries, educators in different parts of the world, including those in Kazakhstan, believed that learning consisted of rote memorisation of new knowledge. In other words, 'for any given learning situation, the 'inside' of the learner was treated as more or less empty; education was understood as a process of getting the knowledge that was outside the learner - in books, theories, the mind of the teacher to move inside' (Shulman, 1999; Dzhadrina, 2012). This kind of learning was based on an objectivist theory of learning, i.e. when the knowledge was transferred by the teacher to the student, and when a student repeated what was taught. Thus, to become an effective teacher was a matter of having solid subject knowledge and experience (Shulman, 1999; Sotto, 1997, p.10). Having experience was often considered especially important and it still is in the context of Kazakhstani secondary education system, of which I am going to give a full account in chapter Four.

However, in the past two decades, there has been an evolving conception of

learning moving in stages from behavioural theories to skills acquisitions; to cognitive theories of conceptual change and the construction of meaning; to sociocultural theories concerned with the context and conditions of learning (Feiman-Nemser, 2012, p.22). Although this new way of conceptualising learning can be traced to John Dewey (1859-1952) and the progressive educators, Jean Piaget (1896-1980), Lev Vygotsky (1896-1934) (and Jerome Bruner (1915-2016), and discovery learning, it is only recently that constructivist perspectives on learning have become increasingly influential and can be said to represent a paradigm shift in the epistemology of knowledge and theory of learning in Kazakhstan (Shamshidinova, 2015; Ruby & Sarinzhipov, 2014).

The underlying premise of the constructivist perspective is that learning is an active process in which learners are active sense-makers who seek to build coherent and organised knowledge (Mayer, 2004, p.14; Taber, 2011). To put it another way, this approach looks for how students can analyse, investigate, cooperate, share and generate based on what they already know, rather than the facts they can reproduce. This learning approach derived from Vygotsky's (1928; 1978) sociocultural theory of mind, based on the concept of mediated action that advocates a holistic view about the act of learning. Lev Vygotsky shared John Dewey's view that social and psychological phenomena exist in the realm of relations and interactions. They both saw learning as an active endeavour, rather than as the passive transmission of knowledge (Taylor, 2014, p.96, in reference to Fenwick, Edwards, & Sawchuk, 2011). In an attempt to pursue this line of thought, Vygotsky put forward the idea of the development of higher mental functions mediated by cultural and technical artefacts in social interaction. It mainly suggests that the historical, social and cultural context should not be seen as something outside the process of learning and development, 'as that which surrounds' but 'as that which weaves together' (Cole, 1996, pp.132-135). In this interaction, individuals are not passive participants waiting for the environment to instigate meaning-making process for them, but, through their interactions, individuals make meaning of the world while they modify and create activities that trigger

transformations of artefacts, tools and people in their environment (Yamagata-Lynch, 2010, p.16, in reference to Scribner, 1997).

In this process, as Vygotsky advocates, every teacher should be able to predict the distance between a child's actual and potential levels of development or what he calls the 'zone of proximal development'. To support a child to achieve the next level in his potential zone of development, teachers use cooperative learning strategies to set up interactive activities between two or more learners with different levels of skills and knowledge, otherwise called 'knowledgeable others', and by using social and cultural tools and artifacts to support the learning processes. Moreover, Vygotsky (1978) recognises two basic processes operating continuously at every level of human learning: internalisation and externalisation. That is, he proposed that even though every complex mental function is first an interaction between people, it subsequently becomes a process within individuals. In other words, the process of 'internalisation' is used to explain how individuals process what they learn through mediated action to develop individual consciousness through social interactions. He advocates that it is the transition from the external operation to the internal development that undergoes qualitative changes. This transformation involves the mastery of an external means of thinking and learning to use symbols to control and regulate one's thinking. In his explanation of the processes of 'internalisation' and 'externalsiation', Vygotsky wrote:

> 'Any function in the [learner's] cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as interpsychological category, and then within the [learner] as an intrapsychological category'. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition …[It] goes without saying that internalisation transforms the process itself and changes its structure and functions. Social relations are relations among people

genetically underlie all higher functions and their relationships (Vygotsky, 1978, p.57; 1981, p.163, Wertsch & Tulviste, 1992, p.549).

Thus, teachers who focus on constructivist learning processes see their responsibility as 'helping students develop an understanding of learning as a complex and ongoing process that entails seeking feedback, revising work and regularly reflecting on what one has produced, as well as on the choices and decisions made throughout the learning process' (Martinez, McGrath & Foster, 2016, p.5). In other words, sociocultural theorists increasingly conceptualise learning as distributed (Cole & Engestrom, 1993), interactive (Chang-Wells & Wells, 1993), contextual (John-Steiner, Panofsky, & Smith, 1994) and the result of the learners' participation in a community of practice (Rogoff, 1994).

Given these challenges of contemporary schooling, scholars advocate (Cordingley et al, 2015; Shulman, 1997; Cochran-Smith & Lytle, 1999; Hargreaves & Fullan, 1991) that teacher learning should be based on the same constructivist perspective used to improve student learning. Dewey (1938) advocated that 'to the natural-born teacher learning is incomplete unless it is shared' (Simpson & Stack, 2010, p.35). That is, teachers and school leaders are compelled to work together to develop a repertoire of new pedagogies to meet these broadened learning outcomes, which have to be contextualised to students' specific needs and priorities (Hairon &Tan, 2016, p.1). With that in mind, 'a new vision' of teacher pre-service and in-service training based on teacher learning through sustained collaboration, especially through professional learning communities, has emerged internationally. What is common to all these studies is the attention to 'collegiality', 'cooperation' and 'collaboration' among teachers, which, according to Hargreaves (1994), have become 'articulating and integrating principles of action, planning, culture, development, organisation and research' (p.150).

2.2. Defining teacher collaboration and its characteristics

While there is no agreed universal definition for what is 'collaborative teacher learning', the terms 'collaboration, 'cooperation' and 'collegiality' are used as synonyms to explain various concepts related to how teacher learning can happen by working and sharing with colleagues (Hargreaves, 1994; Upton & Cozens, 1996; Lieberman, 2000; Kelchtermans, 2006). Much of the international literature outlines the following shared characteristics linked to the context of a culture of collaborative learning: a focus on a number of shared values and objectives; a culture marked by a negotiation of purpose in which parties share responsibility; reflective professional enquiry; the presence of a high level of trust; teacher voice; equality, ownership and mutuality; and a spirit of collective effort (Stoll et al., 2006; Nias, 1989a; 1989b; Hargreaves, 1994; King & Newman, 2001; McLaughlin & Talbert, 2010; Friend & Cook, 2010). Collaboration happens in an informal context as the result of teachers' own initiatives and through spontaneous conversations between two and more teachers. It also happens in formal settings, often related to team-teaching, mandated collaborative planning, peer coaching and mentoring. For the purpose of my study, I use DuFour, DuFour, and Eaker's (2007) definition of collaboration, which is teams of teachers who work interdependently to achieve common goals — goals linked to the purpose of learning for all — for which members are held mutually accountable.

2.3. Teacher collaboration and its benefits

It is widely acknowledged that teacher collaboration supports teacher learning and professional development (Timperley, Wilson, Barrar, & Fung, 2007; McLaughlin & Talbert, 2006; Stoll et al., 2006; Doppenberg, Bakx & den Brok, 2012) and leads to changes in teachers' cognition and/or behaviour (Achinstein, 2002, p.422; Lieberman & Miller, 1984; Rosenholtz, 1985; Sergiovanni, 1994; Talbert & McLaughlin, 1994). Collaboration takes teachers' professional growth beyond personal reflection and their dependence on outside experts to a point where

teachers can learn from each other, sharing and developing their expertise together (Lieberman & Miller, 1984). Thus, the confidence that comes with collaboration and sharing leads to a greater readiness for experimentation and risk taking; and with this a commitment to continuous improvement among teachers as a recognised part of their professional responsibility (Hargreaves, 1994). It can also have an impact on teachers' beliefs, motivations, interdependence, autonomy, empowerment, self-efficacy, job-satisfaction and emotional wellbeing. The importance of teachers collaboratively learning from one another has also been highlighted to be significant in bringing about improvement in education systems (Hairon &Tan, 2016, p.2, in reference to Mourshed, Chijike, and Barber, 2010).

2.4. Concepts of teacher collaboration for professional learning

Over the past decades, scholars and various reforms have called on teachers to overcome their historic isolation through the development of the 'teacher-researcher' (Stenhouse, 1975). We have seen 'collaborative action research' (Elliott, 1991); 'enquiry communities' (Cochran- Smith & Lytle, 2009); 'reflective practitioner' (Pollard, 2005); 'collaborative school-university partnership for educational research' (Zeichner, 2003; McLaughlin, Black-Hawkins and McIntyre, 2008; Martinovic, 2012); 'knowledge creating schools' (D.Hargreaves, 1999); 'professional learning communities' (Stoll, et al, 2006; Bolam, et al., 2005; Kruse, Louis and Bryk, 1995; McLaughlin, 1993); 'learning organisations' (Fullan, 1993); and 'communities of practice' (Lave & Wenger, 1991; Wenge,1998). All of the above highlight the need for teachers to work together as members of a community focusing on reflection, collaboration, and enquiry as they work to transform their classroom practices (Chan & Pang, 2006, p.3). Table 2.1 outlines what these concepts bring into focus in relation to teacher learning and collaboration.

Table 2.1: Concepts for teacher learning and their focus

Concepts	What this concept brings into focus
Reflective practitioner	Self-reflective enquiry and critical friendship with the aim of understanding and improving one's own teaching practice (Pollard, 2005; Schön, 1983; Carr & Kemmis, 1986).
Teacher-researcher	Practitioner research with the aim of constructing local knowledge focused on the curriculum, in collaboration between teachers and academics (Stenhouse, 1975; 1981).
Collaborative action research	Critical enquiry by practitioners with the aim of transforming practice, re-defining the relationship between theory and practice and creating local shared knowledge (Elliott, 1988; 1991; Lewin, 1946).
Enquiry communities	'Enquiry as stance' in order to address the gap between university discourse and the reality of the daily life in schools (Cochran- Smith & Lytle, 2009).
Collaborative school-university partnership	Co-production of theory and knowledge, in order to create a tradition among practitioners of making use of academic research findings to inform their own practices; and thus help to bridge the gap between research and classroom practice (Zeichner, 2003; McLaughlin, Black-Hawkins and McIntyre, 2008; Martinovic, 2012)
Knowledge-creating schools	A high volume of internal debate and professional networking; regular opportunities for reflection, enquiry and dialogue; and a culture of 'no blame' experimentation and challenge (D.Hargreaves, 1999).
Professional learning communities	The teachers in a school and its administrators continually seek and share learning; and act on their learning. The goal of their actions is to enhance their effectiveness as professionals for the students' benefit (Stoll, et al, 2006; Bolam, et al., 2005; Kruse, Louis and Bryk, 1995).
Learning organisation	This refers to the organisation's collective ability to make sense of and respond to internal and external changes. Effective professional development for teachers must be a long-term enquiry process with a collective focus on school goals and student learning. The domain of knowledge and experiences covered should therefore include collaboration, change processes and school culture as well as teaching and learning (Fullan, 1995)
Communities of practice	Groups of people who share a concern or a passion for something they do and who learn how to do it better as they interact regularly. It does not require intentionality. Learning can be, and often is, an incidental outcome that accompanies these social processes. (Lave &Wenger, 1991; Wenger 1998).

It should be pointed out that these diverse contemporary initiatives and concepts of teacher learning are all dynamic in nature. For example, the teacher researcher movement advocated by Stenhouse (1975) took as its original purpose to involve teachers in a process of curriculum construction. However, in the Western context the idea has moved in different directions. Some scholars (Zeichner, 1993; Pollard, 2005) interpret the teacher research as a means of professional development in which teachers, by deploying the tools of classroom-based research, might reflect further on their own practice, perhaps with the aim of establishing greater professional autonomy (Fordham, 2016). On the other hand, as Fordham (2016) contends, increasing demands for teaching to become an evidence-based profession have led to calls for practising teachers to work with university academics in order to produce knowledge about good pedagogical practice, whether this be context dependent (Elliott, 1991; Zeichner, 1993; Carr & Kemmis, 2005; Somekh & Zeichner, 2009) or context independent (Cochran-Smith & Lytle, 1999; D.Hargreaves, 1999). Within these broad movements, Stenhouse's original vision of teacher research as involving a process of curriculum construction, interpretation and evaluation has tended to be eclipsed by one that emphasises the development of pedagogy.

Moreover, the concepts that have migrated across different educational systems in different parts of the world have consequently been interpreted in terms of the context of different education systems and at different times. For instance, Somekh and Zeichner (2009) distinguish five indicative variations of action research worldwide that have been derived from the analysis of 46 publications of researchers' work between 2000 and 2008. The include: i) action research in times of political upheaval and transformation in Namibia, South Africa, Spain and Russia; ii) action research as a state-sponsored means of reforming schools in Singapore, Japan and Hong Kong; iii) co-option of action research by governments and school systems to control teachers in the USA; iv) action research as a university-led reform movement in Austria, South Africa, Palestine, Thailand and China; v) action research as locally –sponsored system reform in the USA

(Somekh & Zeichner, 2009, pp.11-18; Somekh, 2011, pp.38-39)

Hence, while one can argue that the current diverse initiatives and conceptions discussed in the international literature are applicable in the Kazakhstani secondary school context, my own experience of working with teachers shows that teacher collaboration does not come easily: it requires time and effort to create appropriate professional conditions and establish the infrastructure to support teacher collaboration (Cordingley et al, 2015) by understanding 'the particular context of a school' (Kelchtermans, 2006, p.221) within a particular socio-cultural environment. To resolve this problem, scholars employed various culturally relevant research design approaches to study teacher interaction for learning, considering of which was helpful to devise my own research approach to this study.

2.5. A theoretical framework for examining teacher collaboration for professional learning

As suggested by researchers (Cordingley et al, 2015; Smith and Scott; 1990), before introducing collaboration into a school an accurate assessment of the school's need and resources and the ability to enlist the support of all appropriate personnel are needed (p.77). For example, according to Smith and Scott (1990), while collaborative schools offer fundamental ideas for improving a school, until those who inhabit the school recognise the need for collaboration, devise their own distinctive model for moving toward collaboration, and assume ownership of the major task of moving themselves toward collaboration, lasting change in the workplace is unlikely to occur (ibid, p.8). On the other hand, Achinstein (2002a) states that: 'in their optimism about caring and supportive communities, advocates often underplay the role of diversity, dissent, and disagreement in community life, learning practitioners ill-prepared and conception of collaboration underexplored' (p.421). She, therefore, argues that the school community that embraces conflict generates more stress, but also creates greater potential for ongoing organisational

learning and diversity amid its community (Achinstein, 2002b, p.113). Hence, 'although positive collegial ties among members of a school team in many respects make it a satisfactory workplace, its effects are not automatic and not always positive' (Kelchtermans, 2006, p.228), especially for individual teachers (Brownell, Adams, Sindelar, Waldron & Vanhover, 2006, p.170).

Once again, as in the case of my own work with NIS teachers, not all teachers benefit equally from collaboration. The various projects that I discussed in the Introductory Chapter demonstrate the complexity of this issue. This implies that teacher collaboration can only be properly understood by taking into account not only the particular school context, but also the particular teacher's experience. In other words, just as the school context differs from school to school within one country, individual teachers' motivations, beliefs and values in relation to collaboration differ from one another. Hence, as argued by Brownell and her colleagues (2006), 'without understanding how individual teacher qualities influence a teacher's ability to profit from collaborative learning opportunities, we have no way of understanding how to gauge the potential success of such efforts or determine what type of collaborative structures teachers need' (p.171). The analysis of interpersonal relationships in schools should therefore not be considered from the perspective of the organisational culture alone. This needs to be complemented by the micropolitical perspective (Kelchtermans, 2006, p.232, in reference to Hargreaves, 1994, p.190; Blasé, 1991). Both the organisational and the micropolitical perspectives will be discussed further in the next subsection.

Finally, as the ideas behind 'collaboration', 'cooperation' and 'collegiality' transcend geographical boundaries, we must note that a few studies (Wang, 2015; Burkhalter & Shengebayev, 2012; Harion &Tan, 2016; Lam, Yim and Lam, 2002) acknowledge the importance of attending to the nuances of the wider sociocultural characteristics that have a direct impact on school culture and teaching and also on teacher collaboration for learning. Hargreaves and Fullan (2012) point out that some of the best examples of school networking and partnership can be found in

England, Shanghai, Singapore, Finland and the US. According to them, successful school networking and partnership is very much the exception in the case of the US; and it is more regulated in Shanghai, Singapore and South Korea, all of which are the world's highest performing education systems as judged by PISA results. They caution that, while it is tempting to transplant the principles of success from the Asian context to other contexts, things might not work successfully in a non-Asian cultural context because of the wider traditional and cultural differences in terms of building human relationships.

From the above discussion, it can be said that all three main perspectives: organisational, micropolitical and sociocultural, used in the discussions about teacher collaboration among international researchers have their relevance for my own study and will be used to frame my approach to the research design. To inform my research design and its findings, therefore, it is essential for me to explore how each of these perspectives have been employed by scholars across different countries and in the context of various schools. In the following subsections, I will discuss all three theoretical perspectives and school collaborative cultures as explored in the context of different countries with individualistic and collectivistic cultures.

2.5.1. The organisational culture perspective

Discussions about teacher collaboration among international researchers (Hargreaves, 1994, p.189; Nias, Southworth, & Yeomans, 1989, p.11; Kelchtermans, 2006; Kutsyuruba, 2008a; 2008b), mainly in Anglo-American contexts with an individualistic culture, have largely taken place within organisational theory with a cultural perspective. The organisational perspective, or teacher collaboration in terms of the workplace, as employed in several early studies (Little, 1982; 1990; 2003; Nias, Southworth & Yeomans, 1989; Rosenholtz, 1989), has demonstrated how and why teachers are engaged in common work in certain schools' organisational culture. That is, the organisational

perspective used to study teacher collaboration for learning allows us to capture historically transmitted patterns of meaning that include the norms, values, beliefs, traditions and myths, understood - maybe to varying degrees - by members of the school community (Stolp & Smith, 1995, p.13). It explores how norms comprising shared and often unstated expectations guide behaviour and impact teachers' work with colleagues. In other words, scholars considering teacher collaboration from the organisational perspective argue that the particular pattern of teacher collaboration has to be understood as being determined and mediated by the cultural and structural working conditions.

For example, scholars (Lortie, 1975; OECD, 2009; Doppenberg, den Brok, & Bakx, 2012) assert that it is easy to find the characteristics of collaborative practice in the practice of individual teachers or small groups; but it is more difficult to establish and sustain as school-wide practice. Particularly in western countries, teachers prefer one-to-one interaction, which, according to researchers, does not contribute fully towards the required changes in the system. Thus, as scholars (Fullan, 2006; Nias, Southworth, & Yeomans, 1989) suggest that any strategy of change must simultaneously focus on changing individuals and the culture or system within which they work. In other words, 'school culture' is attributable to beliefs and values, understandings, attitudes, meanings and norms, symbols, rituals and ceremonies which are very much dependent on how they are actively constructed and re-constructed by members of the culture. It does not change by regulation. Instead, it changes by the specific displacement of existing norms, structures, and processes by others. Thus, the process of cultural change depends fundamentally on modeling the new values and behaviour that you expect to displace the existing ones (Stoll et al., 2006, p.11).

However, Hargreaves (1991) has identified at least two problems with using only the cultural perspective while researching collaborative practice. First, the existence of shared culture is presumed no matter how complex and differentiated the organisation being studied. Second, the theoretical and methodological

emphasis on what is shared in the organisation may exaggerate the consensus-based aspects of the human relationships; and their importance in research studies accordingly outweighs their significance in practice (p.50). In other words, as argued by Achinstein (2002b), while this conception of teacher collaboration offers a naïve image, which makes community sound natural and easy to build, it fails to appreciate the constructive debate that is necessary for authentic professional learning. Both Hargreaves and Achinstein have thus argued that, despite the analysis of interpersonal relationships in schools from the cultural perspective being pervasive, it needs to be complemented by the micropolitical perspective (Hargreaves 1994, p. 190).

The following section explores details of the micropolitical perspective as discussed in international literature, followed by a discussion of the different collaborative cultures.

2.5.2. The micropolitical perspective

The micropolitical perspective, as discussed by Hargreaves (1991), deals with the use of power, control and conflict within a school organisational setting in order to achieve preferred outcomes. Hargreaves explains that once the micropolitical perspective is adopted for the investigation of teacher collaboration, it casts doubt on the widely advocated virtues of team-teaching, and also raises questions about the rights of the individual teacher and the protection of individuality in the face of group pressure (p.52). Moreover, the micropolitical perspective helps us to understand why collaboration often does not go beyond a pseudo-collaborative culture; why some kinds of collaboration are better avoided; and why some are to be suppressed in the pursuit of more ambitious forms of collaboration. As the result, much of the literature that surrounds school-culture change emphasises that creating a collaborative culture by changing the traditional 'individualistic culture', when considered from the micropolicital perspective, results in collaboration having a positive as well as a negative influence on a school's effectiveness.

Furthermore, the micropolitical perspective encourages us to discriminate between the different forms of collaboration and collegiality; examine who is involved in constituting those different forms; and question whose interest they serve in each case. In their recent book about building 'professional capital', Hargreaves and Fullan (2012) revisit their earlier studies to distinguish four subsets of collaborative cultures, which have varying degrees of success and failure in their establishments. The discussion of these cultures provides me with a better understanding of the implications of considering aspects of school settings in developing an understanding of teacher collaboration for learning in the Kazakhstani context. In the following subsection, therefore, I discuss these cultures: 1) the balkanised collaborative culture; 2) contrived collegiality; 3) professional learning communities; and 4) clusters, networks, and federations.

2.5.2.1. Balkanised collaborative culture

According to Hargreaves and Fullan (1991; 2012) a balkanised collaborative culture is the culture made up of separate and sometimes competing groups, jockeying for positions and supremacy. In this culture, teachers may not be isolated but insulated. Usually, it is based on the strong subject-department structure found in secondary schools; or based on different grades and divisions in the case of a primary school, making interdisciplinary cooperation and collaboration between the grades difficult. As a result, teachers attach their loyalties and identities to particular groups within the school (Kutsyuruba, 2008a; 2008b). This form of cooperation thus has an influence on the exchange of ideas, solutions and networking of practical knowledge that is characteristic of more collaborative environments. For example, a study by McLaughlin, Talbert, and Bascia (1990) reports that, for most of the secondary schools they studied, the subject departments were professional communities; but there was a substantial variation in the experience of collegiality among teachers who worked literally across the hall from one another but who worked in different departments (p.92). As such, teachers who were in the highly collegial departments experienced daily

conversation on joint projects and reported high levels of innovation, energy and enthusiasm, as well as support for personal growth and learning. In contrast, teachers with a strong norm of privacy interacted only during the official department meetings and described their jobs as routine and the workplace as highly bureaucratised.

The strength of the culture of balkanisation, therefore, is the choice of the teacher to collaborate and communicate with teachers with whom they work more closely and spend most of their time. The weakness, though, is poor communication across different groups; and thus indifference regarding a common goal. As such, researchers (Fullan & Hargreaves, 2012; Achinstein, 2002b) propose the creation of creative conflict and tensions between groups and subgroups, thus creating collective responsibility for students' learning across grades, as one way to eliminate the dangers of balkanisation.

In general, within the hierarchical organisational structure of the Kazakhstani school, teachers belong to one of the Subject Methodological Units (SMU), an association of subject teachers established to develop suggestions and recommendations for the implementation of the curriculum in various subject areas, with the aim of improving student achievement and for the purpose of pastoral care. The SMU is one of the units of analysis for this study, one aim of which is to generate an understanding of the nature of teacher learning within and across the SMUs. This topic will be discussed in chapters Five, Six and Seven.

2.5.2.2. Contrived collaborative culture

The second collaborative culture, which Hargreaves (1994) calls 'contrived collaboration', is administratively regulated, compulsory, implementation-oriented, fixed in time and space, and predictable. The major consequences of contrived collegiality, as he identifies them, are inflexibility and inefficiency – regarding teachers not meeting when they should; meeting when there is no business to

discuss; and being involved in peer coaching schemes that they have misunderstood or not been able to work through with suitable partners.

However, Datnow's (2011) study, which was based on a data-driven decision-making initiative to build collaborative culture, tells us that what looked like a perfect example of a contrived collegiality in her study, having been administratively regulated and prescribed, later on evolved into spaces for more genuine collaborative activity, where teachers challenged each other and shared ideas (p.156). Another study conducted by Hu (2010), showed, in a Taiwanese context, that the schools' administratively regulated meetings had in fact paved the way for a collaborative culture. In other words, to enhance teachers' collaboration, structured collegiality seemed to be a necessity, especially at the early stage when the original cultures of teachers are still very individualistic. What has been learnt from these two studies is that schools' loosening of control was crucial later on, when spontaneous meetings and informal interactions among teachers had replaced administratively regulated meetings as the main bases of teacher collaboration.

Another study conducted by Wang (2015) confirms the relevance of regulated collaboration or, in other words, contrived collegiality in the Chinese context. He asserts that the findings from his study, based on two case-study schools, did not confirm the findings of the previous studies (Wang 2002; Wong 2010) that suggested Chinese schools have the distinct feature of 'contrived collaboration'. On the contrary, he suggests that a closer look at the regulated and deliberately arranged organisational structures in the shape of collaborative teams within Chinese schools shows that they facilitated greater shared commitment to student learning, mutual trust, emotional bonds and reciprocal responsibility among teachers. In his review of the literature, Wang asserts that Chinese schools have a long history of enhancing teachers' professional competency and teaching skills through collaboration in the school-based context by organising teachers into teaching-research groups and lesson-preparation groups, which idea was introduced from the Soviet Union in the 1950s (also mentioned in Harion and Tan

study, 2016). Chinese teachers were seen to be open to critique and being observed in class, followed by discussion or debriefing (Ryan et al. 2009), as there was an existing culture of promoting the use of research and evidence to inform teachers' professional practice (Harris, Zhao, and Caldwell 2009). Moreover, according to Wang, a collaborative school culture in these schools co-exists with the collectivist Chinese culture and facilitates the growth of successful peer-monitoring collaborative teams.

When it comes to the Kazakhstani secondary school system, it has also inherited from the Soviet education system a very top-down and hierarchical organisational structure, where power is concentrated in the hands of the school director, who serves as a bridge between policy level and the school. Beneath the director, the next layer of responsibility is that of deputy director, a post which covers academic, methodological and pastoral matters. Below the level of deputy director, the middle-management team members consist of a number of heads of the SMU, acting as a bridge between the teaching staff and the members of the administrative team. Although Kazakhstani teachers are formally represented in the school decision-making process through their participation in the School Pedagogical Council (*pedsovet)*, where the principle of collegiality manifests itself in shared responsibility for decisions taken collectively in pursuit of a common goal (Slastenin, Issaev, Mushenko and Shiyanov 1997), the idea that teachers do participate in a schoolwide decision-making process can be contested. As part of my findings, I will be describing and discussing the *pedsovet* in terms of a rule-governed activity system in Kazakhstani schools which is used as a means of teacher collaboration.

More recently, Hargreaves and Fullan (2012) assert that contrived collegiality is double-edged, with positive and negative aspects depending on how it is used. Its positive aspect is that it is a useful tool to start collaborative relationships between teachers where these are thin on the ground. To avoid confusion, they suggest calling it 'arranged collegiality' (Hargreaves & Fullan, 2012, p.118). 'The

difference between arranged collegiality and contrived collaboration is to be found in whether there is already enough trust, respect, and understanding in the culture for new structures to have the capacity to move that culture ahead' (Hargreaves & Fullan, 2012, p.125). They contend that it is more important who initiates the collaboration, rather than who enforces and pushes it.

2.5.2.3. Professional learning communities

Bolam and colleagues (2005) contend that the most significant and systematic efforts to build and sustain a collaborative culture in school have been within professional learning communities (PLC). Hargreaves and Fullan (2012) identified this as the third subset of a collaborative culture. From their perspective, PLCs are where educators work in continuing groups and relationships with a commitment to improve their practices in order to improve students' learning, well-being and achievement; where the problems are addressed through organisational learning; and most importantly where educators are guided by experienced collective judgement, and pushed forward by grown-up, challenging conversations about effective and ineffective practice (pp.127-128). What distinguishes PLCs from the first two categories discussed is their emphasis on collective learning.

Researchers (Bolam et al., 2005; King & Newman, 2001; Louis, 1994) report that PLCs are important contributors in the improvement of teaching and learning and school reform. Changes in teacher behaviour, including greater confidence and an enhanced belief in their ability to make a difference to pupils' learning, are among the benefits derived from PLCs. PLC champions and consultants put a lot of effort into working out clear strategies for a PLC by bringing together everyone in the school to work towards common goals to improve teaching; experiment with and receive helpful feedback; and perform enquiry-minded and distributed leadership. It also assists if there is development of other resources such as trust, positive working relationships and group dynamics; management of structural resources, such as time and space; and the bringing in of external agents to support a PLC, as

was the case in my own experience with NIS schools. However, such efforts can be hijacked by reformers and policymakers and thus, in many instances, become bogged down in technicalities, such as defining a focus, examining the data and establishing teams.

In other words, according to Hargreaves & Fullan (2012), instead of 'pulling people towards interesting change by the excitement of the process, the inspiration of the engagement and the connection to people's passion and purposes, the provision of time that is not consumed by classroom responsibilities and mandated change agendas' (p.130), in many instances 'pushing' strategies were adopted. Bryk, Camburn, & Louis (1999) caution that the connection between PLC and instructional improvement is not necessarily direct. However what is missing in all these discussions in the context of western countries is the impact of wider sociocultural norms that can dictate teacher behaviour in relation to collaboration.

2.5.3. The socio-cultural perspective

Researchers (Hargreaves and Fullan, 2012; Harion & Tan, 2016) point out that while the successful school networking and partnership is the exception in Europe (eg. Finland), it is more regular in the Asian context. For example, in Shanghai, the world's highest performing system according to PISA, high-capacity schools are paired with lower capacity schools to work together in a non-judgmental relationship. In Singapore, every one of its more than 400 schools is part of a formal network of 12-14 schools with a full-time coordinator to run the cluster (Fullan, 2013, p16). Many Asian cultures, as noted by scholars (Hofstead, 2001; Harion & Tan, 2016), have a traditional and historical respect for teachers; a traditional family focus on learning and achievement; and established deference to hierarchical authority. Hence, in general, the practice of collaboration and related regulations work out differently in those countries with a more collectivistic culture than in countries with an individualist culture (eg. the UK and the USA). In other words, the principle is that any type of learning from other countries'

experiences should be 'culturally relevant'. That is, one must take into consideration the influence of societal belief about education and how it is valued; and how this dictates student and teacher attitudes to teaching and learning.

As such, in their attempts to investigate the nature of PLCs in the Asian context, by comparing and contrasting the culture of PLCs in schools in Singapore and Shanghai, Harion and Tan (2016) turn our attention to socio-cultural norms by describing both countries as being more collectivist in nature than Western societies. They highlight the fact that Chinese culture is influenced by Confucianism, which intimately and inextricably ties collectivism to hierarchical relations comprising relationships of father-son, emperor-subject, husband-wife, elder-younger, friend-friend. Instead of creating tensions, therefore, hierarchical social relations serve as the glue for social harmony, for people to share, care, understand or tolerate differences, resolve conflicts and even for the promotion of prosperity (Chou 1996; Lee 1996). Therefore, from the point of view of Harion and Tan, the well-defined, top-down and communitarian sociocultural structure in Chinese society makes it easy for Shanghai teachers to collaborate in groups and share resources and ideas. In addition, the highly bureaucratic and systematic way in which PLCs are carried out works in perfect tandem with the spirit of collectivism, and discourages individualism.

In relation to the Singapore city-state, Harion and Tan highlight that, although Singapore teachers are relatively more individualistic than Shanghai teachers, Singaporean society is more collectivistic than Western socio-cultural norms (Hofstead, 2001). Therefore the tight-loose approach in PLC implementation, whereby the education ministry expects all schools to participate in PLCs but gives full autonomy to schools and teachers as to how it is to be carried out, attests to the value placed on both collectivism and individualism. This mirrors the hierarchical and efficient public sector established in Singapore, which is centrally motivated by economic pragmatism, fostering a culture of 'taking directives from the top' and 'productive efficiency' (Hairon 2006). On the whole, they conclude that both the

Singapore and the Shanghai education systems have very structured PLCs within a 'command and control' school system having all the characteristics of the Asian high power–distance culture (Hofstead, 2001); and that this traditionally ensures strong, direct alignment between all the stages from policy conception to implementation. This can be seen as incongruous with PLCs as understood in Anglo-American systems.

While Kazakhstan shares similar features to centralised education systems and hierarchical social relations and collectivist cultural values with Singapore and Shanghai, having a large power-distance as demonstrated by the dominance of respect for authority, there will be inevitable significant difference in implementing PLCs and promoting teacher collaboration. Because, the Kazakhstani secondary education system that was established during the Soviet time practiced specific collective responsibility and collective values as prescribed by the communist party. Hence, currently, many of the teachers serving in Kazakhstani schools are those who were indoctrinated by the communist philosophy and way of life and through the ideas of *kollekive*-building that were instilled in every aspect of Soviet schooling. This was done through teaching and *vospitanie* (moral upbringing); and through the youth organisations: the *Octobrists, Pioneers and Komsomols*[7]. The concept of *'kollektive*[8]*'*, developed by the most influential educational theorist in the Soviet Union, Anton Makarenko (1888-1939[9]), consisted of three basic elements: i) the primacy of the interest of the *kollektive* in relation to the interest of

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[7] To instill communist values into the younger generation, the Communist Party of the Soviet Union (CPSU) employed a system of nationwide youth organisations: the *Young Octobrists,* the *Pioneers*, and the *Komsomol*. The Young *Octobrists* and the *Pioneers,* were organisations devoted to the political indoctrination of children through age fifteen. The Young *Octobrists* prepared children ages six to nine for entry into the Pioneers, which in turn prepared them for entry into the *Komsomol* beginning at age fourteen. The *Komsomol's* structure mirrored the party's structure, from its primary units in schools and workplaces to its first secretary. The congress of the *Komsomol* met every five years and elected a central committee, which in turn elected a bureau and secretariat to direct the organisation's day-to-day affairs between central committee meetings. *Komsomol* members were encouraged to take part in political activities of the CPSU and to assist in industrial projects and harvesting. Most important, its members received preference for entry into higher education, employment, and the CPSU.

[8] I am using here the transliterated word '*kollektive'* as a term used specifically as part of the Soviet schooling.

[9] Anton Makarenko, teacher and social worker who was the most-influential educational theorists in the Soviet Union. His most popular work 'Pedagogical poem' and 'Road of Life' (1933-35) recounts his educational work at Gorky Colony. 'A book for Parents' (1937) and 'Learning to live' (1939) explore the theory of collective education.

the individual; ii) the *kollektive* as the primary legal subject of relations governing the allocation, distribution and use of resources; and iii) the principle that different *kollektives* do not compete or clash with one another because all of them are cooperating in the building of socialism' (Kharkhordin, 1999, pp.93-94). El'konin (1931) concluded that a *kollektive* exists only where we find the following features:

> 'the principle of socially useful labor; an expressed class collectivist attitude; a goal common to all participants; organisation, that is, knowledge by every member of his role and position (in the whole); the responsibility of each for *kollektive* work and of *kollektive* for the work of each of its members, together with the personal responsibility of each member for his own work; mutual help in work and a socialist attitude to labor' (Kharkhordin, 1999, p.94, in reference to El'konin, 1931, pp. 76-77).

Hence, for example, the saying that I used in the opening section of the Introduction, 'he who separates himself from the collective will be eaten by a wolf', can be interpreted as: 'members of the *kollektives* do not compete or clash with one another because all of them cooperate in the building of [socialism]'. Thus, it leaves no room for questioning and disagreement, leading to groupthinking and an absence of criticality.

Also, Burkhalter & Shegenbayev (2010) found, in their attempt to explore the question of whether critical thinking can eventually become a part of the cultural fabric in Kazakhstan, that Kazakhstani teachers' current practice as inherited from the Soviet era negatively influenced the adoption of student-centered and collaborative practice. They argue that the harsh, top-down, authoritarian hierarchy of the educational institution in the Soviet Union - where teachers often feared for their jobs and needed to appear competent at any cost - proved to be one of the biggest obstacles for future trainers in critical thinking in Kazakhstan. This argument is in line with what has been reported by the team of the Cambridge FoE

who introduced a collaborative action-research initiative in the NIS schools, as extensively discussed in the introductory chapter:

> 'In the past [in Kazakhstan] there was a tradition of waiting for directions from the centre and there was an emphasis on competition and obedience which run in a different direction to the new values [promoted by the collaborative action-research initiative] underpinning many new curriculum and pedagogical developments in policy. So NIS management needs to decide how much autonomy it can give schools to decide on matters of pedagogy and development' (McLaughlin, 2012, p.12).

Chapter Four will explore and discuss the sociocultural context of the Kazakhstani secondary education in the context of my findings.

2.5.4. Summary

On the whole, the literature review demonstrates that collaboration for learning is a dynamic concept. It is shaped by the context in which it takes place, as embodied in cultural assumptions, historical structures, and practices that construct and constrain the dynamics. In my study, I will be considering both the perspective of the organisational culture and the micropolitical perspective as ways of understanding teacher collaboration for professional learning. I will be applying the lens of the organisational culture perspective, which will allow me to explore the nature, functions, and elements of the school organisational hierarchical structure. It is believed that the discussion of the organisational cultures in the case-study schools will provide me with a better understanding of the shared beliefs and values which exist; as well as the meaning of the norms and daily rituals in place; and the implications of all of these factors for teacher collaboration for professional learning within the context of the Kazakhstani school. From a different angle, attending to the micropolitical perspectives - that is, the nature of the human relationships in the schools - will give me a better understanding of how

teachers deal with power, control and conflict in order to achieve desired outcomes. Finally, I am interested in the historical and the current wider sociocultural forces that impact teachers construct and interpret their experience. The sociocultural perspective will therefore also be applied in designing the study and collecting and reporting the findings which arise from the data.

2.6. Unpacking the research questions

As discussed in the introductory chapter, the CoE course, which operates within the context of the NIS initiative, set an ambitious agenda for developing teachers' collaborative professional learning as a means, in turn, of implementing the new skills-based curriculum in Kazakhstan. The wide range of research available and discussed in this chapter suggests that teachers' participation in more collaborative professional communities is important not only in terms of their personal growth and renewal, but also in developing the school's collective power for transformation. However creating the conditions for such mutual support can present a challenge for many schools, where effective collaboration is not prevalent (Murphy, 2014, p.38). I also share the contention of many researchers (e.g. MacBeath, 2012; Alexander, 2010; Bridges, 2014) that 'learning is situated in broad socio-economic and historical contexts and is mediated by local cultural practices and perspectives' (MacBeath, 2012, p.53). Such practices and perspectives can be distinctive and depend even on where a school is located within a country. One should therefore not underestimate the role sociocultural settings and participants in various discourse-communities play in the development of the multiple meanings of collaboration. In this regard, the background information which informs my research and which is described in Introductory Chapter challenges the sustainability of collaborative learning as advocated by the CoE course 'as a crucial factor for bringing about deep and lasting changes to belief and practice' (Turner et al., 2014, p.92). A great deal remains uncertain about whether the existing school culture has a capacity to internalise collaboration and sustain that beyond the CoE course.

I therefore argue that current access to the body of knowledge about school culture in Kazakhstan fails to take into account factors that can promote or constrain teacher-collaboration for learning within and outside the school setting: the dependence of teacher-collaboration for learning on individuals' own positions; and the specific demands of the various activity-systems set up by educational policy. Without properly understanding these complex relationships, the implementation of the CoE course is undermined. Thus, the point of this study is to develop an understanding of the current nature of teacher-collaboration in selected case-study schools in Kazakhstan not so that the system can be changed but rather so that potential within the system for transformation can be identified.

The following research questions were therefore designed to address this knowledge gap:

- What is the nature of teacher collaboration for professional learning in the case-study schools?

  Sub-questions:
  - Is there any teacher collaboration for professional learning in case-study schools?
  - If, yes, what forms of teacher collaboration for professional learning are there in case-case study schools?

- What are the key factors that facilitate or hinder teacher collaboration for professional learning in the case-study schools?

This brings me to the final question that can have implications for policy:

- What are the implications of the study for the development of a culture of collaboration for professional learning in Kazakhstani schools?

Chapter 3 – Research foundations and methodological rationale

'Inquiry counts as research to the extent that it is systematic, but even more to the extent that it can claim to be conscientiously self-critical' (Stenhouse, 1981, p.299; Bassey. 1999, p.38). Stenhouse explains further that 'systematic' means 'in the sense of being sustained by the strategy'; and stresses the importance of 'a critical process to control the temptations of different interests which may blow the researchers off course' (p.298). Moreover, according to the British Educational Research Association's (BERA) ethical guidelines for educational research: 'researchers must contribute to the community spirit of critical analysis and constructive criticism that generates improvement in practice and enhancement of knowledge' (BERA, 2011, p.10). Hence, the research design, and in particular its methodological integrity, should be open to the scrutiny and judgement of others, and all aspects of research subject to reflection and re-assessment by the researcher (Morrison, 2002, p.5). The primary aim of this chapter, therefore, is to present research questions and a critical analysis of the interrelationship that exists between the philosophical stance adopted; the research design; the methodology and methods used; the quality of the data collected; the data analysis; and how issues of ethical considerations were addressed.

3.1. Articulating the philosophical stance

To answer the research questions, I designed a study that allowed me to explore teacher collaboration for learning as something that can be found in teachers' practices *(a relativist paradigm)* and that can be comprehended in dialogue with research participants (*a subjectivist epistemology*). To be able to relate the teachers' talk to their practice and the various political and cultural aspects of the context, I employed cultural, micropolitical and sociocultural perspectives (*the theoretical perspective*). In other words, my philosophical stance assumes the

existence of multiple apprehendable and sometimes conflicting social realities that are the products of human intellects shaped by historically situated structures (social, political, cultural, economic, ethic or gender factors) and that knowledge is value mediated and hence value dependent (Guba & Lincoln, 1998; Robson, 2002). In addition, as an insider researcher I hold the view that 'the knower and the known are inseparable …and could not be studied in isolation from their context' (Lincoln & Guba, 1985, pp.35-39). Hence, I view the object of research from the point of view of a *subjectivist* epistemology, in which the investigator and the object of investigation are interactively linked so that the findings are *literally created* as the investigation proceeds (Guba & Lincoln, 1994, p.111). This allows me to work with *an interpretivist worldview* by adopting *a qualitative exploratory case-study methodology* by selecting research methods appropriately and employing a grounded-theory approach to the data analysis, as shown in Figure 3.1.

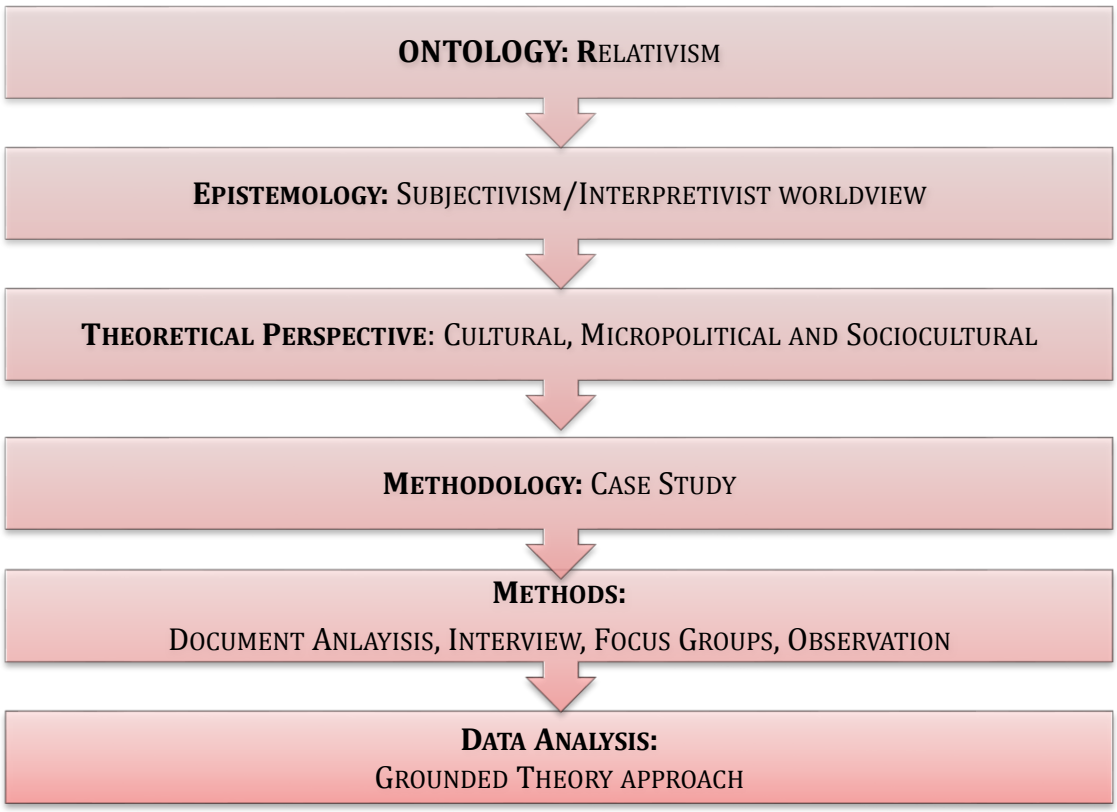


Figure 3.1: Research design for the study

3.2. Conceptual framework and research-design

The conceptual framework, research-design and methodology for this study mainly evolved from the available body of research works on teacher learning, teacher interaction and school professional-learning communities elsewhere (Little, 2002; Doppenberg, den Brok, & Bakx, 2012; Stoll et al., 2006; Bolam et al., 2005; Kruse, Louis and Bryk, 1995; Nias, 1989; Little 1982; Rosenholtz, 1989). As noted in the previous Chapter, discussions about teacher collaboration have largely taken place within two major perspectives on human relationships: the cultural perspective and the micropolitical perspective. Most of these studies are designed and presented in the form of interpretive or exploratory case studies that elaborate on and interrogate a variety of perspectives offered by individual teachers about their means of interaction for learning and professional development within a school and in a community of practice. My study was based on these precedents.

The study is designed as an educational case study of teacher collaboration for professional learning, based on teacher perception in secondary schools; and within the historico-socio-cultural time-bounded context of the educational sector of a specific country. It was therefore appropriate to use Stenhouse's definition of educational case studies. According to him, 'educational case studies' are 'concerned neither with social theory or with evaluative judgment, but rather with the understanding of educational action. They are concerned to enrich thinking and discourse of educators either by the development of educational theory or by refinement of prudence through the systematic and reflective documentation of evidence' (Stenhouse, 1988, p.50). This definition is useful, since I planned to study teacher collaboration for learning as a case and to come to know it well, as advocated by Stake (1995): 'not primarily as to how it is different from others but what it is and what it does in the context' (p.8).

In general, 'case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme

or system in a 'real life' context' (Simons, 2009, p.21). Therefore, taking into consideration the time limits for conducting the study, I argue for the opportunity to work on a smaller scale in order to conduct in-depth analysis aimed at obtaining more insights into the process surrounding teacher collaboration for professional learning in three secondary schools in Kazakhstan over the period of the school year. This was to provide the primary source material for the case study. The justification for the selection of only three case-study schools is discussed in subsection 3.2.2.

While the scale of the study is one of the biggest limitations of the study, and thus its generalisability to others of its type, it has the potential to serve as a real opportunity to learn about a great amount of detail grounded in the context and bounded by the time-period which otherwise would be difficult to access. In this sense, 'the basis of verification and cumulation in the study of cases is the recognition that a case is an instance, though not, like a sample, a representative, of a class and that case study is a basis for generalisation and hence cumulation of data embedded in time' (Stenhouse, 1978, p.21). Therefore, 'the problem of field research in case study is to gather evidence in such a way as to make it accessible to subsequent critical assessment, to internal and external criticism and to triangulation' (Stenhouse, 1980, p.4-5). The data gathering methods and the characteristics of the data collected are discussed in section 3.4.

In order to move forward and to think about how to extend the knowledge gained from the findings across three case-study schools, as well as contributing to the creation of a knowledge base, the cross-case analysis and discussion was organised in a way which was aimed at ensuring that the uniqueness of the findings regarding each case-study school was preserved; but at the same time drawing out the similarities and differences in findings across the schools. In other words, by providing a clear rationale for the selection of case-study schools from three different types of schools and providing ample details of the case-study context through the data-gathering methods, I was able to make some analytical

comparability that sought to be applicable to others of its type. In this regard, I agree with Bridges (2017) that:

> 'it is misleading to call this process 'generalisation', because there is no generalisation and none required. … It simply affirms that this single instance A is sufficiently like another instance B that I can gain some understanding of B (but also, perhaps, C, D, E, etc.)…. Let us call it – 'application' of the single case is especially significant in the context of relationship between research and practitioners, who are on the whole not too bothered about whole populations or systems of children, classrooms, or schools (and will probably regard their own situation as unique anyway) but only in their own situation' (p.245).

With this, I am more concerned with comparability than with generalisability. Comparability is the degree to which the parts of a study are sufficiently well described and defined that other researchers can use the results of the study as a basis for comparison' (Khan & Vanwynsberghe, 2008, in reference to Goetz & Lecompte, 1984). The results of my study should therefore not be treated as reporting of facts but the generation of probability statements about the relationships between concepts from empirical data (Glaser, 1998, p.3; Strauss & Corbin, 1990). The study provides an opportunity to learn how teacher collaboration for learning works in different Kazakhstani school contexts and present critical evidence to modify policy and practice as necessary.

At the start of my study, it was crucial for me to identify the fit-for-purpose units of analysis, i.e. the level at which I could collect the data to answer the research questions. To identify the units of analysis, I conducted the pilot phase of my study prior to my fieldwork. In this phase I asked randomly selected teachers from different schools in Kazakhstan to list types, forms and kinds of professional and informal interactions which they know within and outside of the school setting; and specify how often they interact with each other and what they discuss (not

restricted by school boundaries and professional responsibilities - see Appendix A). I collected information from thirty-eight teachers about their engagement in formal and informal interactions and collaborative work within and outside their school settings. A summary of the information collected from the pilot is presented in Table 3.1, in which the types of interactions reported by teachers were classified into four broad groups, along with some examples from their responses.

Table 3.1: Summarised classification of teacher interaction as reported in pilot phase

1. Internal Formal Group Interactions:	**2. Internal Formal/Informal One-to-One Interactions:**	**3. External Formal Group Interactions:**	**4. Informal Interactions:**
1.1. School Pedagogical Council (*pedsovet*) meetings	**2.1. Meeting with the School Administration**	**3.1. Preparation for Teacher Attestation (Teacher Appraisal)**	**4.1.Talking to Friend-colleagues**
e.g.: At *pedsovet* we usually receive important information about any changes and any Order issued by the Ministry of Education or the Department of Education	e.g.: I meet with the school administration - often with the Deputy Directors on different issues: student behavioural issues; my lesson plan; consult on participation of my students in Olympiads.	e.g. Preparation for teacher attestation makes you collaborate with everyone in and outside the schools and with your students, because you conduct an Open Lesson to demonstrate your skills.	e.g.: I have friends who are also my colleagues here in the school. Friends are always helpful, because you can discuss with them what you couldn't with others or get advice on issues.
1.2. Subject Methodological Units meetings	**2.2. Meetings with the Heads of the Methodological Units**	**3.2. Attending PDC/ Seminars/ Workshops/ conferences in country**	**4.2. Lunch time talk**
e.g.: I try not to miss Subject Methodological Units meeting. We usually analyse our own work at these meetings.	e.g.: Some issues require one-to-one talk with the Head of my Subject Methodological Unit.	e.g.: Attending the professional-development courses is the only chance where I can refresh my knowledge and interact with teachers from other schools	e.g.: At lunch I usually talk to colleagues and discuss students` behaviour, study habits and level of engagement. Sometimes we share with each other methods that we use in our classes.
1.3. Conducting Subject Decades and Open Lessons	**2.3. Young Teacher Mentoring**	**3.3. Attending Seminars/ Workshops/ conferences outside the country**	**4.3. Staff room interactions**
e.g.: All teachers work together in the Subject Methodological Unit to prepare for the Subject Decade and we help each other to prepare for Open Lesson	e.g.: I spend time with the young teacher whom I supervise. She comes to observe my lessons, and I also observe her lessons.	e.g. Attending conferences outside the country is more rewarding. I get more inspiration from those conferences.	e.g.: I always talk to someone during the break in a staff room. You always have something to discuss with someone.
1.4. Holding Schoolwide events	**2.4. Meeting with the Grade Lead Teacher**	**3.4. Participation in Teacher Competitions and Student Olympiads**	**4.4. Attending activities organised for teachers**
. e.g.: I try to attend all planned school wide events, concerts, and sport events. It is a good opportunity to get to know your students and colleagues from a different angle.	e.g.: Once a year, as a Class Lead Teacher I have a meeting with a psychologist and a social worker. I also meet with them as necessary during the school year. e.g.: I meet with the Grade Lead teachers often and learn something new about my students in the class.	e.g.: You get to know very good and experienced teachers when you participate in the Teacher competitions. You also learn good things watching the competition. e.g. Preparing students for Olympiads is something I like very much.	e.g.: I`m active. I attend a ball dance class organised for teachers, and I enjoy it a lot! There we forget all our problems and relax and enjoy informal chat with colleagues.

In their responses, the majority of teachers referred to rule-governed activity systems, such as the School Pedagogical Council (*pedsovet*) (1.1), Subject Methodological Units (1.2), Subject decades[10] and Open lesson (1.4), Young Teacher Mentoring (2.3), Teacher Attestation (3.1), Professional Development Courses (3.2), and Student Olympiads and Teacher competitions (3.4) as platforms for their interaction with each other and with professionals outside of their own schools. A few respondents reported informal opportunities for interactions, such as: friendship with a colleague (4.1), lunchtime talks with colleagues (4.2), interaction during a break time in a staff room (4.3) and school-wide events (1.4). Two teachers mentioned seminars and conferences outside of the country as a platform for their professional learning. Only one teacher mentioned her informal connections with colleagues at activities organised for teachers within a school (4.4).

Several important things were learnt as the result of conducting the pilot phase. First, the quantitative method I employed of counting the number of mentions of types, forms and kinds of interactions reported by respondents proved to be limited as far as investigating the real meaning and value of those interactions for professional learning was concerned. This therefore became one of the reasons for choosing a qualitative case-study approach. Second, the range of responses received had a common pattern that was mainly conditioned by the school norms and education-policy rules and procedures in place. Hence, by undertaking document analysis (Appendix B) related to formal settings requiring some form of interaction amongst teachers as reported by respondents in the pilot phase, I was able to choose fit-for-purpose units of analysis to focus on during the data collection phase. Figure 3.2 displays the level at which each of the activity systems requiring formal teacher interaction is located in the school organisational

[10] A subject decade is a ten-day-long event held by each of the SMUs in which the Head of a SMU and its teachers are expected to conduct Open lessons, together with a schoolwide event that can cover various aspects of teaching and pastoral care: from subject content and methodological exchange to pastoral work with students to sport events.

hierarchical structure; and by which of the Orders of the Ministry of Education it is regulated.

SCHOOL ORGANISATIONAL HIERARCHY:	ACTIVITY SYSTEMS:	FORMAL REQUIREMENTS OF TEACHER INTERACTION:
I. School Administration: **School Director** **Deputy Directors:** - on Academic work - on Methodological work - on Pastoral work Social Pedagogue Social Analytic Psychologist	**School Pedagogical Council (*pedsovet*)**	**By Order No272, 2007** A *pedsovet* is the highest level of collegial school collective decision-making body, represented by all the teachers and chaired by a School Director and mandated to have four meetings per year. The main objectives for a *pedsovet* are: to unite the efforts of the collective implementation of the State Program for the Development of Education; to improve the pedagogical quality of the teaching staff and the educational process of educational organisations; implement new developments in science and teaching excellence; and deal with issues of students' mobility and students' graduation.
II. Middle Management: **Heads of the Subject Methodological Units** **III. Pedagogical staff:** **Subject Teachers**	**Subject Methodological Unit (SMU)** - Young Teacher Mentoring; - Subject Decades; - Open Lessons; - Teacher professional development; - Teacher Competitions; - Student Olympiads; - Methodological Publications	**By Order No 583, 2007** An SMU is an association of subject teachers. **SMUs are required to have plans for:** - Novice teacher mentoring; - Conducting Subject Decades (10 days) in which teachers are required to demonstrate Open Lessons with the aim to exchange experiences and prepare for the Teacher Attestation; - Prepare and send teachers to Teacher Competitions; oversee Teacher Professional Development; - Prepare and send students to Student Olympiads.
	Teacher Attestation System	**By Order No 83, 2016** Teacher attestation is a procedure carried out periodically according to a set of criteria to determine the level of a teacher's professional qualification.

Figure 3.2: Rule-governed activity systems requiring teacher interaction within the school organisational hierarchy in Kazakhstani schools

However, while the cultural perspective helped me to stay focused during the data-collection phase of my fieldwork, it turned out to be a restricted and simplistic view when the data-analysis was actually conducted. The main restriction was that it did not take into account the dilemmas and challenges involved in a school-collective beyond the rule-governed activity system requiring collaboration and teacher interaction. Moreover, I was aware of the researchers' (Blasé, 1991; Hargreaves, 1991; Achtinstein, 2002) warning that the theoretical and methodological emphasis on what is shared in the organisation from the organisational culture perspective might exaggerate the consensus-based aspects of teacher interaction and collaboration. In other words, the conception ignores the complexities, conflicts, tensions and diversities in a teacher professional community, which emerged as being vital if I was to generate an understanding about Kazakhstani teachers' values, beliefs and attitudes in relation to collaboration for professional learning.

Thus, during the data analysis, I adopted the micropolitical perspective (Blasé, 1991; Hargreaves, 1994; Ball, 1987), as an additional lens through which I could analyse the data collected. The key concern of the micropolitical perspective is 'the ways that some individuals and groups realise their values at the expenses of others, or have the power and influence to shape others' values in the image of their own' (Hargreaves, 1991, p.50). On the one hand, adopting the micropolitical perspective helped me to examine power relationships (between policy-makers and teachers and school leadership and teachers) and their impact on teacher decision-making regarding with whom, on what, how and why to collaborate or not to collaborate to achieve preferred outcomes in education settings. On the other hand, this perspective also allowed me to look at teachers' ways of working collectively and collaboratively as something that was implicit rather than explicit, outside rather than inside formal structures and procedures, and something which draws on informal resources of influence (Blasé, 1991, p.8, in reference to Hoyle, 1986, p.127).

Since I needed a rich description of the settings in which the case study was conducted, it was not enough to stay within the boundaries of the school organisational culture (the *cultural perspective*) and school-level politics (the *micropolitical perspective*). The reason for this is that analysis of the data collected showed that in most areas of the Kazakhstani school system the attitudes of the Soviet education system still prevail, a system in which teachers were expected to act as builders of communism, i.e. society as a whole. Moreover, being a product of the Soviet time and having been exposed to the notion of the *kollektive* for the greater part of their lives, many experienced teachers struggled to adapt and adopt the changes. While the notion *kollektive* was helpful to explain teachers' beliefs, practice and attitudes towards interaction, sharing and collaboration for professional learning, its meaning could not be fully understood without considering it within the broader sociocultural and historical context. This required me to step beyond the insiders' reported views, adding another dimension to consider teacher-collaboration. In this regard, I found the sociocultural perspective as an appropriate complementary strategy to the cultural and micropolitical perspectives that I adopted for this study, as shown in Figure 3.3.

As suggested by the proponents of sociocultural theory, all human understanding of social situations has its source in the historically and socially conditioned consciousness of individuals and groups. Moreover, the sociocultural perspective recognises the dynamic interactions between teachers and their environments across the broad range of influences, from their immediate work conditions to their wider social context. Once the sociocultural perspective was adopted, it allowed for the assessment of the influence of the community on schools and teachers, as well as the teacher's choice of collaborative partner based on their role in society (e.g. the collectivist view, teacher proximity to the community).

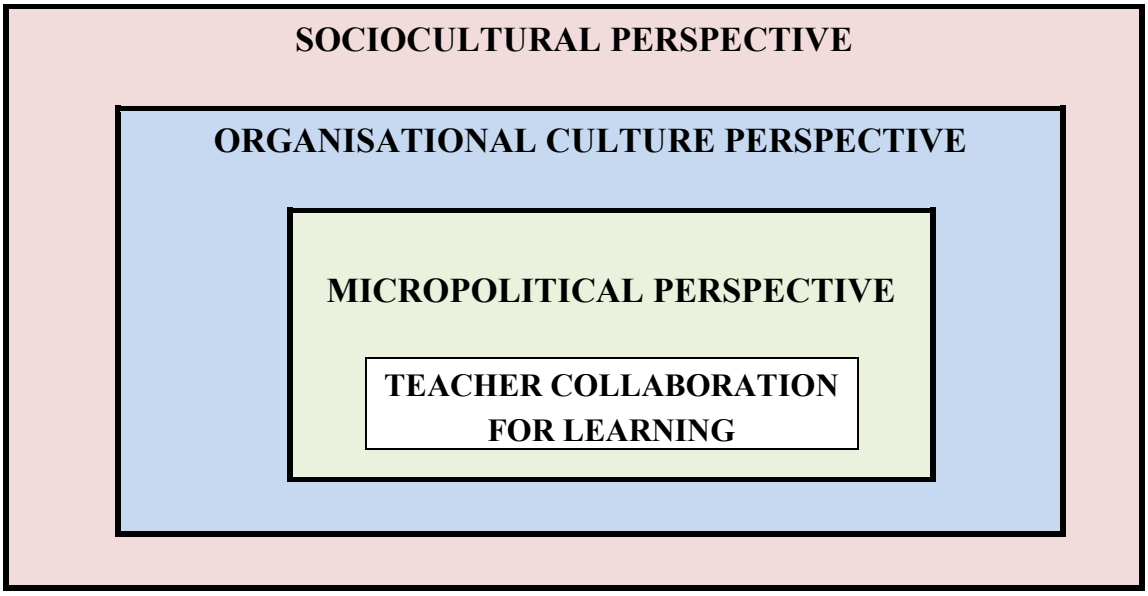


Figure 3.3: Three-fold conceptual framework for studying teacher collaboration in multiple and embedded settings and contexts

3.2.1. Choice of the case-study schools

In order to identify the factors that would provide me with a proposition regarding how to sample case-study schools for my study, I conducted a more generic investigation based on data available from the Ministry of Education. The results showed that secondary education in Kazakhstan is provided in 7,307 (Ministry of Education, 2014) state-owned day schools across the following types of schools: multi-grade schools (MGS[11]); comprehensive schools; gymnasiums; lyceums; and autonomous schools. In terms of their localities, all the autonomous schools were located in big regional cities only; gymnasiums and lyceums could be found in regional cities and district towns; and comprehensive schools could be found in regional cities, district towns and rural areas. Further analysis showed that there was an observable difference in the quality of education provided between schools in rural areas, district towns and in regional cities. According to 2013 UNT results,

[11] I did not consider sampling the MGSs for my study as these are special types of schools which do not have enough pupils to give each year-group its own classes and so different age-groups are taught together in one class by teachers specializing in two or more subjects. According to 2014 statistics, of 7307 state owned day-time schools 3639 (50 percent) were MGSs, though they cater for just 11 percent of the student population and employ 25 percent of teachers.

students in rural schools achieved on average 66.50 points against in urban schools 76.16 points (Ministry of Education, 2013). Thus, UNT results in the context of a rural/urban breakdown shows that the average score of rural graduates is 8.74 points lower (IAC, 2014, p.67). As a result, it was decided to select three schools representing three different types of school in different locations: A) a comprehensive school in a rural area; B) a gymnasium in a district town; and C) an autonomous school located in a regional city. This is all shown in Table 3.2. The following pseudonyms were used in place of the actual names of the schools: the comprehensive school Auyl[12], the gymnasium Audan[13], and the autonomous school Aimak[14].

Table 3.2: Main characteristics of the selected case-study schools

Pseudonyms: / **School Characteristics:**	**A**	**B**	**C**
	Auyl Comprehensive School	**Audan Gymnasium**	**Aimak Autonomous School**
Location:	Rural Area	District Town	Regional City
Established:	In 1960	In 1923	In 2013
Type of school:	State-owned Comprehensive school	State-owned Gymnasium	State-owned Autonomous school
Managed by:	District Department of Education (*Raiono*)	District Department of Education (*Raiono*)	Managing Company and Board of Trustees
School level:	Pre- Primary to High school (age 6-17) No selection	Pre- Primary to High school (age 6- 17) Gymnasium classes are selective	Middle and High school (age 11- 17) Highly selective
Financial resources:	Local Budget	Local + Republican Budget	Republican Budget
Platform for the experiments:	No pilots	Serves as a platform for three pilot initiatives	Pilot school for curriculum innovations
The UNT results for 2013 in comparison to country's average of 74.5% (93 points out of 125) and country's average for rural schools of 66.50 points	Low 60% (75 points out of 125) in 2013	High 82% (102,5 points out of 125) in 2013	Did not have any results on school leaving tests, since it was a newly established school

[12] Auyl from Kazakh means Village.
[13] Audan from Kazakh means District.
[14] Aimak from Kazakh means Region.

Aimak autonomous school (Table 3.2. column C) was established in 2012 to operate across Middle and High schools, i.e. grades 7-12 (age 11-18). It is highly selective as regards both students and teaching staff. Aimak enjoys extensive financing and located in a newly constructed building, equipped with state-of-the-art technology and laboratories. While the more favourable conditions are found in Aimak, rendering its experience somewhat separate from and unrepresentative of Kazakhstan as a whole, its inclusion here was seen as valuable, as this school is mandated to act as a test-bed for innovations. The Aimak students did not have any school leaving-test results since it did not have any graduates at the time that my study was conducted.

Audan gymnasium (Table 3.2. column B) is a big comprehensive school established in 1923. It obtained the status of gymnasium school in 2004, hence certain students can be selected to follow more advanced curricula and have more opportunities for in-depth study of one or more subjects (e.g. mathematics, sciences, languages). The school operates across all grades from pre-school (age 6) and grades 1-11 (age 7 to 17). It is mainly financed from the local budget. Audan does not have the privileges of Aimak in terms of resourcing. However, as one of the high-performing schools in the district, it was chosen to serve as a test-bed for piloting some of the new innovations initiated by the Ministry of Education and thus was eligible for additional financing from the national budget. In 2013, the Audan was ranked as the second-best school in the region with results in the UNT of 82 percent compared to the country's average of 74.47 percent.

By contrast, the Auyl comprehensive school (Table 3.2. column A) established in 1960 and located in a relatively poor rural area and does not have any of the privileges of either the Aimak or the Audan. Similar to the Audan the school Auyl operates across all grades from pre-school (age 6) and grades 1-11 (age 7 to 17). It does not select students, as it is the only school located in the village. The material state of the school is typical of those in the village schools in the region. It is financed from the local budget only. The school was ranked as the worst

preforming school in the region according to the UNT for 2012-2013, making its average 60 points out of 125 against the country's rural school average of 66.50 points.

3.2.2. Obtaining access to schools

I used the known-sponsor model to gain access to the Aimak. That is, my insider role as part of the managing company governing the network of autonomous schools allowed me to obtain easy access to the school setting without any written permission. It should be pointed out that no written rule existed at that time regarding granting access to schools within this network. However, I allowed enough time to explain and discuss with the Director of Aimak my proposal to conduct fieldwork in his school, something to which he responded positively. I admit that my role in the hierarchy of the managing company had a certain degree of impact on my data, since I had a previous working relationship with the Director and one of his deputies. On the one hand, the impact was very positive since we all had a shared understanding of the value of teacher collaboration and a community of professional practice. On the other hand, they were apprehensive about how the findings of the research study might impact the school. I tried to eliminate their fears by ensuring the anonymity and confidentiality of the participants. I do acknowledge, however, that it is difficult to prevent the school from being identified.

One of the positive outcomes from all the discussions with the Aimak about research ethics and protecting teachers' and the school's identity, as I reported back to the school, was that, with my role in the managing company, I helped design and adopt a rule and a procedure for researchers to obtain formal permission to conduct their studies in any of the autonomous schools. Moreover, with the help of my PhD advisor (Professor David Bridges), we were able to develop a Code of Research Ethics to follow for all researchers conducting data collections in autonomous schools. This was adopted by the managing company of the

autonomous schools and shared with the Kazakhstan Education Research Association (KERA).

While it was comparatively easy and straightforward to obtain access to Aimak, obtaining access to Audan and Auyl was challenging. Unfortunately, there was no official policy regulating how to gain access to school sites to conduct fieldwork in Kazakhstani schools. I therefore sent an official letter to the Ministry of Education requesting access to these schools (see Appendix C); and at the same time I approached the Directors of the selected schools to consult on the best way of a researcher accessing a school site. Both the Directors of the Auyl and the Audan asked me to bring a letter of permission from the *Raiono* (District Department of Education) or the *Oblono* (Regional Division of Education) or at least generate a phone call from them. The whole process of gaining access to these schools took two-and-half months (60 working days), as displayed in Table 3.3.

Table 3.3: Process of obtaining access to case-study schools and actual period of fieldwork

Process of obtaining permission to access the case-study schools	
July 18, 2013	A letter requesting permission for access to the selected schools was sent to the Ministry of Education
August 12, 2013 September 20, 2013	Three visits to the Ministry of Education
September 23, 2013	Received a Letter from the PSSED addressed to the *Oblono,* the *Raiono* and to the selected schools
September 26, 2013	A visit to the *Oblono* and hand-delivered the letter from the PSSED of the Ministry of Education
September 26, 2013	A visit to the *Raiono* and hand-delivered the letter from the PSSED of the Ministry of Education
September 26, 2013	First visit to the Audan, organised by the Head of the *Raiono*
September 27, 2013	First visit to the Auyl, organised by the Head of the *Raiono*
Actual fieldwork period (October 1, 2013 – April 15, 2014)	
Oct 1-Dec 23, 2013	Fieldwork in Auyl comprehensive school
Jan 13-Feb 22, 2014	Fieldwork in Audan gymnasium
Feb24-Apr 15, 2014	Fieldwork in Aimak autonomous school

The letter to the Ministry of Education was sent on July 18, 2013 in order for me to get an access to the school sites effective from September 1, 2013 (which is the starting date of the school year for all secondary schools). However, my letter was not processed until I made personal contact with a staff member at the Pre-school and Secondary School Education Department (PSSED) of the Ministry of Education in mid-August. On September 23, 2013, after my third visit to the PSSED, I received a letter addressed to the *Oblono,* the *Raiono* and to selected schools for them to consider granting access to the school sites. Appendix D contains the letter in Russian.

Instead of waiting for this letter to be processed by the *Oblono*, I managed to get an appointment to meet with the Head of the *Oblono* on September 25, 2013. During the meeting, I explained to her the purpose of my research and the urgent need to obtain permission to access the schools. There was no official written permission provided on behalf of the *Oblono,* as again there was no formal process of granting access to schools for research purposes. Instead, the Head of the *Oblono* called the Head of the *Raiono* and instructed him to grant me access to the selected schools. I managed to get an appointment with the Head of the *Raiono* for the next day, September 26, 2013.

The *Raiono* did not provide me with written permission to access the schools either. Instead the Head of the *Raiono* instructed the Head of the Methodological Department of the *Raiono* to escort me to the Auyl and the Audan and introduce me to the Directors and inform them about permission being granted, which she did. I now understand that both school Directors were under immense pressure when I arrived at the school with the Head of the Methodological Department of the *Raiono.* However I allowed enough time with both Directors at the start of the fieldwork for discussion and explanation of the issues surrounding confidentiality and anonymity. I also conducted at least two knowledge-sharing sessions with teaching staff in each of the case-study schools, details of which are discussed in subsection 3.3.1.

3.3. Fieldwork

Fieldwork was conducted during a six-month period, between October 1, 2013 and April 15, 2014. Each case-study school was covered during a six to seven-week period. The first seven weeks I spent in Auyl comprehensive school; followed by six weeks in Audan gymnasium; with the final six weeks in Aimak autonomous school. Table 3.4 shows the breakdown of the Kazakhstani school-year and the period of time spent in each school conducting fieldwork.

Table 3.4: Breakdown of the Kazakhstan school year and period of time spent in each case-study school carrying out fieldwork

School year: September 01, 2013 - May 25, 2014									
Month:	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
Field Work		**School Auyl**		H	**Gymnasium Audan**		**Autonomous school Aimak**		
Terms	I -Term		H*	II-Term	H	III-Term	H	IV-Term	H

H* - End-of-term holiday, which usually lasts from seven to ten days.

During the fieldwork, I adopted a researcher position following the logically sequenced research-design timetable reproduced in Appendix F.

3.3.1. Knowledge-sharing session

The fieldwork in all three schools started with the knowledge-sharing sessions on the first day of my arrival. At this session, I presented an outline of my research and addressed ethical issues (see Appendix G). I also organised the second knowledge-sharing session which I designed as more informal and open to anyone interested in knowing more about my research. The issues that I addressed in this session were more about the teachers' right to refuse to participate at any point by simply saying so; and the way anonymity and confidentiality would be ensured.

The first formal knowledge-sharing session conducted in Auyl comprehensive school was very passive, with one-way speaking. No question was asked during or after the session. The second informal session was more popular than I expected. Out of 43 staff members, 27 came to see me and asked various questions; but still many were reluctant to participate in my research. At times, I feared not getting enough teachers to participate in the study. However there were a few very experienced teachers who expressed a willingness to help me with my research and participate in one-to-one interviews. A few days later, other teachers expressed their willingness to be interviewed. However, some of them were honest and informed me that it was the school administration that had asked them to take part in the research. As promised in the knowledge-sharing session, I let them choose not to be part of the study.

In contrast, both the formal and informal knowledge-sharing sessions in the Audan gymnasium showed much engagement and a lot of questions were asked. The informal knowledge-sharing session was very demanding given the number of teachers approaching me and asking me questions. The longest knowledge-sharing session was conducted in the Aimak autonomous school. Teachers in Aimak were more interested in the potential benefits for them if they participated in my research. Interested participants agreed with me acting as a critical friend when observing their lessons, as suggested by me as one of the benefits of participating in my research. I was confident that I could serve as a critical friend as I had been involved in developing a new skill-based curriculum that Aimak was testing. It is evident to me that starting the fieldwork with knowledge-sharing sessions at different hierarchical levels and in different formats (formal and informal) and exhibiting openness in explaining the ethics related to my research helped me to gain trust and build a rapport with participants.

3.3.2. Profile of the teacher-participants across all three case-study schools

In my study, considering the set of personal and professional characteristics of the participants was important, since they had a significant part to play in understanding the participants' position in relation to professional learning and collaboration. The characteristics were: their education level; age; years of experience; professional qualification category and successful completion of the CoE course. Table 3.5 demonstrates the participants' profile summary across all three schools in relation to each of the characteristics. The categories chosen to characterise the respondents are well represented across all three schools.

Table 3.5: Profile of the teacher-participants across all three case-study schools

Schools: / **Participants' profile characteristics:**		**A**	**B**	**C**
		Comprehensive School Auyl	**Gymnasium Audan**	**Autonomous School Aimak**
		25 participants out of 43 teachers	32 participants out of 119 teachers	31 participants out of 102 teachers
By Higher Ed completed	Full-Time study	- 8 participants	- 22 participants	- 29 participants
	Zaočnoe study	-17 participants	- 10 participants	- 2 participants
By age category	more than 51 years	– 7 participants	– 4 participants	– 6 participants
	41-50 years	– 3 participants	– 11 participants	– 10 participants
	31-40 years	– 11 participants	– 12 participants	– 9 participants
	20-30 years	– 4 participants	– 5 participants	– 6 participants
By gender	Male	- 3 participants	- 3 participants	- 5 participants
	Female	- 40 participants	- 29 participants	- 26 participants
By years of experience	more than 30 years	- 3 participants	- 3 participants	- 3 participants
	21-30 years	- 6 participants	- 7 participants	- 8 participants
	9-20 years	- 9 participants	- 15 participants	- 11 participants
	8 years or less	- 7 participants	- 7 participants	- 9 participants
By professional qualification category	Highest category	- 4 participants	- 10 participants	- 17 participants
	First category	- 9 participants	- 13 participants	- 7 participants
	Second category	- 7 participants	- 7 participants	- 2 participants
	No category	- 5 participants	- 2 participants	- 5 participants
By CoE course attended	1-level (Advanced)	– No	– 2 teachers	– No
	2-level (Intermediary)	– No	– 1 teacher	- No
	3 level (Basic)	– No	– 10 teachers	– 20 teachers

Before discussing the characteristics of the participants in each school, it should be noted that number of participants in Auyl is the highest (58%). In Aimak every third teacher (30%) and in the Audan every fourth teacher (27%) participated in the study. In all the case-study schools, gender imbalance is particularly apparent, with more than 86 percent being female teachers in both Auyl and the Audan and 73 percent in Aimak.

Teacher-education level, years of experience, professional-qualification category and successful completion of the CoE courses emerged as important characteristics to take into consideration in the study. For example, it was crucial to look at the teacher-participants' education level across full-time study and part-time study (referred to below as *zaočnoe* study), as it was confirmed by the findings of my study that teachers who had studied full-time were better prepared in terms of their theoretical knowledge about pedagogy and psychology than teachers in *zaočnoe* study. They also had better skills in approaching their colleagues for a help and advice than the teachers with *zaočnoe* study, which I thought was crucial in terms of teacher-collaboration for learning.

The findings of the pilot phase also demonstrated that the teacher-attestation system is one of the important factors that could constrain teachers sharing and learning from each other. Being aware about teachers' qualification level and their years of experience was therefore important in analysing the data. It was important for me to consider separately in the dataset those teachers who have successfully completed the CoE course, in order to compare and contrast their belief system and attitudes towards teacher collaborative learning with the beliefs of those teachers who had not had the chance to attend the CoE course.

Finally, detailed information about each participant in each case-study school is presented in Appendices K, L and M according to the sample example shown in Table 3.6. To make the references to participants consistent and easy to read, I used the following logic: Each of the case-study schools has been labeled by

alphabetical letter: letter 'A' was assigned to the Auyl comprehensive school; 'B' to the Audan gymnasium; and 'C' to Aimak autonomous school. Participants were organised by their position in the school organisational hierarchy, followed by the alphabetical letter assigned to a school they belong, and then the order number. For example, regarding the sample examples shown in Table 3.6: 'Deputy Director A3' means the Deputy Director of the Auyl comprehensive school; 'Head of the SMU B2' should be understood as the Head of the SMU of Audan gymnasium; and 'Teacher C19' should be read as teacher in the Aimak autonomous school. The numbers assigned to research-participants interviewed and observed enabled me to keep track of how much data was being used, as the case study was prepared.

Table 3.6: Sample examples illustrating the system for referring to research-participants

	Position	**Subject Speciality**	**Background Higher Education**	**Years of experience**	**CoE Course Level**	**Qualification Category**	**Age**	**Gen der**
I. School Administration:								
1.	Director A1	History	Distance	15	No	Highest	49	F
2.	…							
3.	Deputy Director A3	Primary	Distance	10	No	First	33	F
II. Heads of the Subject Methodological Units:								
4.	…							
5.	Head of SMU B2	English	Full time	20	3-level	Highest	48	F
III. Subject Teachers:								
31.	Teacher C19	Physics	Full time	1	NO	No	28	F

3.4. Data-gathering methods and characteristics of data collected

In my attempts to understand the multiple perspectives on teacher-collaboration for learning, I have adopted a multi-layered approach to the data-collection process. I have used a combination of four methods to collect data: i) semi-structured one-to-one interview; ii) focus-group discussion with three different levels in the school organisational hierarchy (school administration, middle management, and pedagogical staff); iii) observing events; and iv) reading documents. A particular strength of the data-collection process employed lies in the observation of events, meetings, lessons and the staffroom, all of which provided their particular insights into teachers' interaction within the workplace environment.

Table 3.7 presents characteristics of the kinds of data collected during the fieldwork in each case-study school. Copies of an Annual School Year plan; a School Pedagogical Council plan; selected Subject Methodological Units plans; a Plan for Teacher Attestation; selected Orders for Young Teacher Mentoring; and Lesson Plans were collected in each case-study school. Overall, 70 one-to-one interviews and ten focus-group discussions with 54 participants were conducted in all three schools. Altogether 24 lessons were observed, of which nine were open lessons and the remaining 15 daily lessons. Six meetings of the SMU and one *pedsovet* meeting were attended and observed. In addition, non-participant observation in staffrooms, libraries, hallways and school canteens was carried out in each school. This was complemented by observations carried out during school-wide events and regional events. I will discuss the quality of data collected in the following subsections.

Table 3.7: Characteristics of data collected in all three case-study schools

Schools: / Data characteristics:	A	B	C
	Comprehensive School Auyl	**Gymnasium Audan**	**Autonomous School Aimak**
i) Documents collected:			
School Pedagogical Council plan	✓	✓	✓
School academic year plan	✓	✓	✓
Subject Methodological Units plan	✓	✓	✓
Plan for Teacher Attestation	✓	✓	NA*
Young Teacher Mentoring Order	✓	✓	NA*
Lesson plans	✓	✓	✓
ii) One-to-one interviews:	**25 interviews:**	**29 interviews:**	**16 interviews:**
School Administrative team members	1-Director 3-Deputies	1-Director 5-Deputies	1-Director 2 –Deputies
Heads of the SMUs	4-Heads of SMU	7-Heads of SMU	1-Head of SMU
Subject Teachers	17-Teachers	16-Teachers	12-Teachers
iii) Focus Group interviews:	**4 focus group:**	**3 focus groups:**	**3 focus groups:**
School administrative team	3 participants	6 participants	4 participants
Heads of Methodological Units	4 participants	6 participants	8 participants
Subject Teachers	4 participants 6 participants	6 participants	7 participants
iv) Observations:			
Open lessons	3 lessons	6 lessons	NA**
Daily lessons	6 lessons	2 lessons	7 lessons
Staff Rooms	Four weeks	Four weeks	Four weeks
School Pedagogical Council	Not possible***	1 meeting	Not possible***
Subject Methodological Unit	2 meetings	2 meetings	1 meeting
Subject Decade	1 week	1 week	Not possible*
School-wide events	Not possible*	1 creative group	1 creative-group
Collegial meetings	Annual report of the Head of the *Raiono* with the participation of all 38 school Directors and the Heads of the kindergartens		Autonomous Schools' Directors' Council meeting

* Since the Autonomous School Aimak was officially opened in September 2012 (my filed started in March 2013), it was in the process of setting up the activity-systems regulated by the Ministry of Education and by the time of my fieldwork it did not have these documents in place yet.

** Aimak school leadership tended not to distinguish between Open and Daily lessons. Rather, teachers were encouraged to conduct each of the daily lesson as if it was an Open lesson. There was no requirement in place to hold Subject Decades and conduct Open lessons in Aimak.

***According to the School Annual Plan, there was no meeting planned during my fieldwork.

3.4.1. One-to-one interviews

A semi-structured one-to-one interview was the primary data-collection instrument for the study. Interview questions were prepared before leaving for the field research, and piloted with eleven different teachers. The semi-structured questions (see Box 3.1) were developed. They are also presented in Appendix H within the Letter of Invitation that I used to invite teachers for the interview.

Box 3.1: Semi-structured questions used during the one-to-one interview

- What is your role in the school?
- Where did you study and what is your background?
- Do you attend the School Pedagogical Council meeting/ Subject Methodological Unit meetings?
- What do you usually discuss at the School Pedagogical meetings/ Subject Methodological Unit meetings?
- Do you have an opportunity to talk to your colleagues during the working day? If yes, what do you usually talk about or discuss?
- How often do you attend professional development courses? Do you keep in touch with colleagues outside of your own school?
- Do you have opportunities to participate in Republican/Regional/District seminars/workshops and conferences outside Kazakhstan?

The length of the interviews varied depending on participants' responses, but did not exceed one hour. Audio-recording was possible, allowing me to concentrate and 'attend to the direction' (Bassey, 1999; Cohen, Manion, & Morrison, 2011) of the conversation. I also took some notes during and after the interviews in order to capture my reflections on the interview and the interviewee. The advantage of using the one-to-one interview technique was that it ensured a confidential atmosphere in which interviewees could share detailed information about their personal experiences, views and attitudes in a real-life context without being

influenced by peers' experience or ways of explaining. This approach supported very effectively the main goal of this study, which was to obtain access to the interviewee's viewpoint in the broadest sense, thus identifying areas that needed to be further addressed in the next stage of the research data-gathering processes: the focus group and observation.

However, as discussed in the previous section, it should be acknowledged that, in some cases, instead of teachers volunteering to be interviewed, the school administration pushed them to come for the interview. I therefore took enough time to explain to participants the nature of the study and the process of ensuring the anonymity and confidentiality of the individual and the school. Some teachers opted not to be audio-recorded. Some were surprised to see the consent letter that I provided to them along with the Letter of Invitation to the interview (see Appendix H); and doubted if I was going to keep my word not to discuss the interview results with the school administration. A few teachers decided to leave the interview after hearing their rights and reading the consent letter.

As can be seen in Table 3.8, it was possible in all three schools for me to interview members of the school administrative team; the middle-management (i.e. Head of the SMUs); and pedagogical staff. In the Auyl, one-to-one interviews were conducted with 25 participants, including four representatives of the School Administration, five Heads of the SMUs and 16 subject teachers. In the Audan, one-to-one interviews were possible with 29 participants, including six representatives of the School Administration; eight Heads of the SMUs; and 15 subject teachers. In Aimak, I interviewed 16 participants: three representatives of the School Administration; only one Head of the SMU; and 12 subject teachers. Ninety percent of the interviews were conducted in Kazakh, with the remaining ten percent in Russian. Recordings were transcribed soon after the interviews were completed in the language in which the interview was conducted. Only citations used for writing up the dissertation were translated into English.

Table 3.8: One-to-one interview data across all three case-study schools

Schools: / Data characteristics:	A	B	C
	Auyl comprehensive school	**Audan gymnasium**	**Aimak autonomous school**
One-to-one interviews:	**25 interviews:**	**29 interviews:**	**16 interviews:**
School Administrative team members	1-Director 3-Deputy Directors	1-Director 5-Deputy Directors	1-Director 2 –Deputy Directors
Heads of SMUs	4-Heads of SMU	7-Heads of SMU	1-Head of SMU
Subject Teachers	17-Teachers	16-Teachers	12-Teachers

3.4.2. Focus-group discussion

The focus group is a collectivist rather than an individualistic research method where 'the researchers explore attitudes and perceptions, feelings and ideas about the research topic' (Denscombe, 2003, p.168). Thus, the focus-group interview was used to reveal consensual views and generate richer responses from participants in collecting data about the teacher interaction and collaboration for learning. It was also used to verify responses and ideas arising from data gained through the one-to-one interviews. However, as with any methodological technique, the use of focus groups has its limitations. 'It should be recognised that there is a possibility that participants will be reluctant to disclose thoughts on sensitive, personal, political or emotional matters in the company of others' (Denscombe, 2003, p.169).

In order to get closer to the participants, I approached each participant individually to explain the nature of the focus-group interview and shared a sample table that I developed based on the results of the one-to-one interviews (see Table 3.9). The table set out all the possible posts existing in a case-study school; and posed four main questions that I thought would provide teachers with enough preparation for the focus-group discussion.

Table 3.9: Sample table used to guide research-participants in focus-group discussion

Subject: _____ Professional Qualification Category:_____ Position (if you are holding any position other than teaching): _____			
1) With which of the following do you interact?	**2) What do you discuss?**	**3)Where do you usually meet?**	**4)How often do you meet?**
School Director			
Deputy Director for Academic Matters			
Deputy Director for Methodological Matters			
Deputy Director for Pastoral Matters			
Head of the Subject Methodological Unit (*you may include as many Heads of SMUs as you want* and *you may write which subject SMUs you interact with*)			
…			
Psychologist			
Social Analyst			
Sociologist			
Librarian			
Teachers (*you may include as many teachers as you want* and *you may write their names*)			
…			
Colleagues from other schools in Kazakhstan (*you may write the name of the school your colleague is from*)			
…			
Colleagues from other schools outside Kazakhstan (*you may include as many teachers as you want* and *you may write the name of the country your colleague is from*)			
…			

Appendix J includes the cover letter, a sample table for the focus-group interview and the consent letter which I gave to the participants beforehand. Teachers who chose to participate in the focus-group sessions were mainly those who participated in the one-to-one interviews and those whose Open lesson I observed.

I conducted four focus-group discussions in the Auyl, whereas in both the Audan and the Aimak I held three focus-group discussions. The number of participants in the focus groups ranged from three to seven people. The focus groups were organised by the participants' work role. Thus, the first focus group was conducted with the school administration, consisting of the school Director and Deputy Directors; the second with the Heads of the SMUs; and the third (and the fourth in the case of Auyl) with the subject teachers. All sessions were audio-recorded and transcribed. Arranging focus-group sessions in three groups based on their similarity of work role helped minimise limitations related to reluctance; and developed rapport giving rise to meaningful data collection. Table 3.10 displays the number of participants joined the focus-group discussion across all three schools.

Table 3.10: Focus-group data characteristics across three case-study schools

Schools: / **Data characteristics:**	**A**	**B**	**C**
	Comprehensive School Auyl	**Gymnasium Audan**	**Autonomous School Aimak**
Focus Group interviews:	**4 focus group:**	**3 focus groups:**	**3 focus groups:**
School Administrative Team members	3 participants	6 participants	4 participants
Heads of the SMUs	4 participants	6 participants	8 participants
Subject Teachers	4 participants 6 participants	6 participants	7 participants

3.4.3. Observation

Observation as a research method 'offers an investigator an opportunity to gather 'live' data from naturally occurring social situations' (Cohen *et al*., 2011, p.396). The reason for conducting observation for this study was to provide a background against which I could interpret one-to-one interviews and focus-group discussions. In other words, I sought 'to provide some knowledge of the real-life context and behaviour' (Merriam, 1998, p.96), i.e. to find evidence of the forms of collaboration claimed by participants to exist.

A structured, non-participant observation approach was selected for the purpose of this data-gathering process. This approach to observation allowed me to have an agenda of issues and gather data to address those issues in systematic manner. In other words, data gathering was restricted to group discussions; meetings; event preparation; lesson-observation events; and teacher-to-teacher interaction in the staff room. Based on the outcomes of the one-to-one interviews, I developed a structured template of what to observe, as presented in Appendix I. Non-participant and structured observation can be criticised as being subjective and biased, because the researcher decides 'on the focus rather than allowing the focus to emerge' (Bell, 1999). However if a structured observation is considered with other research methods, such as interview or focus-group discussion, it can achieve a high level of trustworthiness. One-to-one interview and focus-group discussions helped to bring clarity to the categories and the information collected through observation.

The main observation for the study took place in the staffrooms of the case-study schools. The focus in the staffroom observation was the teachers' interaction with each other and the subject matter they discussed, which ranged from discussing a lesson plan to completing documents and filling in the class journals[15] to planning

[15] The class journal is the main state document for registering attendance and recording grades in all types of secondary schools in Kazakhstan. The maintenance of a separate journal for each class or group by each teacher is mandatory. Guidance on how to fill in and maintain a class journal is regulated by Order No531 of 29.08.2016 of the Ministry of Education and Sciences of the Republic of Kazakhstan.

holiday time. I have used for my data analysis 17 completed forms from staffroom observation: five forms from Auyl; seven forms from Audan; and another five forms from Aimak (see Table 3.9).

It was possible for me to observe a *pedsovet* meeting only in Audan. A *pedsovet* is the highest body at school level which makes collective decisions. Additionally, I attended various schoolwide events to mark the 90th Anniversary of Audan (1923-2013). Moreover, two district-level events were held during my fieldwork in Audan: a workshop conducted for the Directors of all 38 schools in the district by the teachers of Audan who had completed the CoE course; and an annual collegial meeting held by the Head of the *Raiono* to deliver his annual report with the participation of all the school Directors and Heads of kindergartens.

In all three case-study schools, I also had an opportunity to observe two SMU meetings. The SMU meetings are meetings planned throughout the school year. Usually they are held at the end and at the start of a term, mainly to analyse student results for the past term; to prepare for holding a subject decade; and to prepare for schoolwide events or school inspection. In Auyl l, it was possible for me to observe Subject decades organised by the SMU of pre-school and primary-school teachers and the SMU of teachers of languages. In Audan, I also observed a subject decade held by the teachers of Physical Education and Basic Military Service Preparation. Table 3.11 summarises data collected through observation in each case-study school.

Table 3.11: Data collected through observation across all three case-study schools

Schools: / Data characteristics:	A	B	C
	Comprehensive School Auyl	**Gymnasium Audan**	**Autonomous School Aimak**
Observations:			
Staffrooms	5 forms	7 forms	5 forms
Pedsovet	Not possible*	1 meeting	Not possible*
Subject Decade	1 week	1 week	Not possible*
Subject Methodological Unit	2 meetings	2 meetings	1 meeting
School-wide events	Not possible*	1 event 1 creative-group	2 events 1 creative-group
Seminar/Exchange of experiences	*Raiono* seminar for 38 School Directors		Methodological Day
Collegial meetings	Annual report of the Head of the *Raiono* with the participation of all 38 school Directors and the Heads of the kindergartens		Autonomous Schools' Directors' Council meeting

*According to the School Annual Plan, there was no meeting planned during my fieldwork.

Open lessons held as the part of the subject decades were observed in both Auyl and Audan. An Open lesson is a type of planned lesson that can be attended by any teacher or member of the school administration. Teachers attending an Open lesson are expected to discuss the lesson and provide feedback to the teacher. Open lessons provided me with a great opportunity to observe the nature of interaction between teachers and the school administration. Aimak did not have the culture of holding subject decades: instead it had a Methodological Day, which was conducted every Thursday as a platform for the exchange of experiences within one SMU or across different SMUs. It was possible for me to attend a creative-group discussion in the frame of a Methodological Day. Table 3.12 summarises the characteristics of the open lessons and daily lessons observed across three case-study schools.

Table 3.12: Characteristics of the open lessons and daily lessons observed across all three case-study schools

	Lessons observed	Type of lesson observed	Teacher delivering the lesson
Auyl comprehensive school:			
1.	Mother tongue- Grade 4	Subject decade/ Open lesson	Teacher A3/ Experienced/ Mentor teacher
2.	World cognition- Grade 3	Subject decade/ Open lesson	Head of the SMU A2/ Experienced teacher
3.	Mathematics- Grade 8	Daily lesson	Teacher A2/ Experienced/ Mentor teacher
4.	Physics- Grade 10	Daily lesson	Head of the SMU A3/ Experienced teacher
5.	Biology- Grade 6	Daily lesson	Teacher A12/ Young teacher
6.	English- Grade 5	Daily lesson	Teacher A15/ Young teacher
7.	Kazakh- Grade 5	Daily lesson	Teacher A6/ Experienced teacher
8.	Kazakh- Grade10	Open lesson	Teacher A5/ Experienced teacher
9.	Russian- Grade 7	Daily lesson	Teacher 17/ Young teacher
Audan gymnasium:			
10.	Kazakh - Grade 7	Open lesson	Teacher B9/ Experienced teacher/ Level 2 CoE course
11.	Mathematics - Grade 11	Daily lesson	Head of the SMU B1/ Experienced/mentor teacher
12.	History- Grade 6	Open lesson	Teacher B17/ Young teacher/ Level 3 CoE course
13.	Kazakh- Grade 8	Open lesson	Teacher B13/ Experienced teacher Level 3 CoE course
14.	Kazakh- Grade 6	Open lesson	Teacher B15/ Experienced teacher/ Level 3 CoE course
15.	History- Grade 7	Open lesson	Teacher B7/ Male / Experienced teacher
16.	English- Grade 6	Daily lesson	Head of the SMU B2/ Level 3 CoE course
17.	Physical Education- Grade8	Subject decade/ Open lesson	Head of the SMU B7
Aimak autonomous school:			
18.	Kazakh - Grade 7	Daily lesson	Teacher C11/ Experienced teacher/ Level 3 CoE course
19.	Kazakh - Grade 9	Daily lesson	Teacher C12/ Experienced teacher/ Level 3 CoE course
20.	History- Grade 7	Daily lesson	Teacher C1/ Experienced teacher/ Level 3 CoE course
21.	Biology - Grade 7	Daily lesson	Teacher C16/ Young teacher
22.	Preparation for Basic Military Service - Grade 9	Daily lesson	Teacher 13/ Experienced teacher/ Level 3 CoE course
23.	Physical Education- Grade 8	Daily lesson	Head of the SMU C1/ Experienced Teacher/ Level 3 CoE course
24.	English- Grade 9	Daily lesson	Teacher C18/ Young teacher/ Level 1-2-3 CoE course trainer

Additionally, in both the Audan and in Aimak, I observed creative-group discussions and daily lessons conducted by teachers who had successfully completed the CoE course. I was particularly interested in teachers who completed the CoE courses and their experiences in implementing the ideas from the CoE course. That is, creating conditions for exchanging and learning from each others one they are back to their schools, as it was specified by Shamshidinova (2012), the chairperson of the AEO, when speaking to the media, formulated the intention of building professional communities of practice based on teacher collaboration as the result of the CoE courses.

Finally, it was possible to have free access to informal settings in each case-study school. This included hallways, canteens, departments and school grounds, where naturally occurring informal interactions could be observed. Photos were taken throughout the observation by obtaining permission from the concerned people. They were only used during the data analysis to help me to remind me of the sense of place and the participants. No photos are included in this dissertation in order to preserve anonymity and confidentiality.

3.4.4. Document analysis

Documents are a ready-made source of data and easy to access. They include a range of written, visual and physical materials relevant to the study (Merriam, 1998, p.112). The documentation-analysis method was selected to supplement the interview, observation and focus-group-discussion methods of data collection. The relevant materials to be studied were identified based on one-to-one interviews and focus-group discussions with the participants in my study. Many of the official documents mentioned by participants or identified as important to the study were those that I discuss in section 3.3. (in Appendix B and displayed in Box 3.2); and which were earlier used to select fit-for-purpose rule-governed activity-systems to serve as units of analysis for my study.

Box 3.2: List of official documents identified for analysis:

- Law of the Republic of Kazakhstan 'On Education', 27 July 2007;
- Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Teacher Attestation', No323 of August 07, 2013; replaced by Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Teacher Attestation', No83 of January 27, 2016;
- Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Pedagogical Council', No272, 16 May 2007;
- Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Subject Methodological Unit', No583, 29 November 2007;
- Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Young Teacher Mentoring'.

Additionally, copies of the Annual School Year plan; the School Pedagogical Council plan; selected Subject Methodological Units plans; a Plan for Teacher Attestation; selected Orders for Young Teacher Mentoring; and lesson Plans were obtained in each case-study school. Table 3.13 displays the school-specific documents collected in each case-study school.

Table 3.13: Documents collected across all three case-study schools

Schools: / Data characteristics:	A	B	C
	Comprehensive School Auyl	**Gymnasium Audan**	**Autonomous School Aimak**
Documents collected:			
School Pedagogical Council plan	✓	✓	NA*
School academic-year plan	✓	✓	✓
Subject Methodological Units plan	✓	✓	✓
Plan for Teacher Attestation	✓	✓	NA*
Young Teacher Mentoring Order	✓	✓	NA*
Lesson plans	✓	✓	✓

*Since the Autonomous School Aimak was officially opened in September 2012 (my filed started in March 2013), it was in the process of setting up the activity-systems regulated by the Ministry of Education and by the time of my fieldwork it did not have these documents in place yet.

3.5. Data analysis approach

In examining the prospects of the development of case studies, I considered a Straussian approach in pursuing grounded theory as a form of data analysis as opposed to a Glaserian approach. Grounded theory was jointly developed by Glaser and Strauss in 1967. However, there is a divergence between the two original authors' later works (Strauss & Corbin, 1990; Glaser, 1992). Specifically, Glaser (1992) asserts that 'there is a need not to review any of the literature in the substantive area under study' (p.31), so as to avoid constructing prior assumptions and beliefs that might unconsciously bias the researcher. Glaser supposes that the research questions are only discovered once coding begins and the research question in a grounded theory study is not a statement that identifies the phenomenon to be studied. In contrast, Strauss and Corbin (1990) state that there should be some survey of the literature before the fieldwork commences. They also state that 'the research question is a grounded theory … tells you what you specifically want to focus on and what you want to know about the subject' (Strauss and Corbin, 1990). According to them the literature directs the theoretical sampling and can be used as a method of supplementary validation. That is, the researcher can compare research findings and acknowledge how it differs from previous literature or includes common findings.

Hence, in the case of my study, the literature was examined before the fieldwork commenced; and I entered the research area with some knowledge of the phenomenon studied. Having a general idea of where to begin allowed me to focus on what I wanted to know about the subject and design the research questions. Having said that, it should be acknowledged that I was not limited by the literature - I rather embraced the flexibility of accepting emergent ideas during the fieldwork and the process of data analysis. In other words, the application of a Straussian approach allowed me use an inductive-deductive approach to the analysis of the data. That is, the deductive approach allowed me to have a preconceived hypothesis; and the inductive approach enabled new concepts to emerge from the

data (Strauss & Corbin, 1990). For this reason, Glaser (1994) claims that Strauss and Corbin's (1990) approach can only be considered as a method providing techniques for data analysis, not a methodology. The classical form of grounded theory, as Glaser (2004) argues, focuses on conceptual analysis by concentrating on conceptualisation and abstraction of data; and generates a conceptual hypothesis that can be applied to any relevant times, places and peoples. In this regard, as discussed in section 3.2, my study was designed to be a case study, which uses grounded-theory data as a form of data analysis.

During the fieldwork, I used a reflexive process and remained flexible. By remaining flexible, it should be understood that I was flexible in moving from one form of data-gathering method to another based on the choice, readiness and availability of participants and the accessibility of events, meetings and lessons for me to observe. By reflexive process, it should be understood that the activities of gathering, recording and analysing data and identifying and increasing research credibility and trustworthiness were an active and ongoing process of critical reflexivity by continually challenging my own values, beliefs and assumptions through asking questions such as: 'What do I know?' and 'How do I know what I know?' I also kept a reflective diary, which was an excellent tool for aiding reflection and keeping track of my own thinking about the data during the data analysis.

The first stage of data analysis comprised open coding of all forms of data to identify key themes for each case, mostly conducted during the fieldwork. The themes were based on the questions asked during the one-to-one interview and focus-group discussions. The questions were: Who do you usually interact/collaborate with in your schools/ in your department/ outside your school? What do you discuss and talk about? How often do you interact with? Where do you usually interact with your colleagues/school administration/ Head of the SMU?

Table 3.14: Major themes derived from the data set

Data type:	Auyl comprehensive school	Audan gymnasium	Aimak autonomous school
Interview Question 1: Who do you usually interact/collaborate with in your schools/ in your department/ outside your school?			
One-to-One Interview Focus Group Discussion	Same subject teachers; Class lead teacher; Head of the SMU; School administration;	Same subject teachers; Mentor teacher; Mentee teacher; Head of the SMU; Class lead teacher; Psychologist; Deputy Directors; Director; Same subject teachers outside the school; Methodologist at *Raiono*	Director; Deputy Directors Head of the SMU; Curators Same subject teachers; Teachers within the school network; Teacher outside the school network; Teacher outside the country;
Interview Question 2: What do you discuss and talk about…?			
One-to-One Interview Focus-Group discussion	Lesson plan; Teacher attestation plan and preparation; Student Olympiads; School annual plan; SMU plan;	Student attainments and achievements; Subject Decades outcomes; Mentorship programme results; SMU plans and reports; School annual plan and reports for *pedsovet;*	Student attainment and regular reviews of each student progress;
Staffroom Observation	Discussion of the Subject Decade events;	Discussion of the Open lessons; Discussions of the preparation for the seminar across the different subjects; Discussion about the filling in the electronic journal;	Discussion of the lessons and students' attainments; Discussion about team-teaching/ lesson plans/ resources exchange;
Lesson Observation	Structure of the lesson; Teaching approaches used; Assessment used;	Structure of the lesson; Teaching approaches used; Assessment used;	Student involvement; Purpose of the teaching methods used; Links between the lesson plan and students' level;
Pedsovet Meeting Observation	-	Followed the agenda set by the school administration;	-
Interview Question 3: Where do you usually interact with your colleagues/school administration/ Head of the SMU?			
One-to-One Interview Focus Group Discussion	*Pedsovet* meetings; SMU meetings; Subject decades; Open lesson observation; Staffroom; Deputy Directors' office At home;	*Pedsovet* meetings; SMU meetings; Subject decades; Open lesson observation; Directors' office; Deputy Directors' office; Creative group discussions; School cafeteria; By phone;	*Pedsovet* meetings; SMU staff rooms; Staff room of the international teachers; Methodological day (once a week); Library; School cafeteria; By phone; By email;
Document Analysis	Documents are in order with all the requirements of the Ministry of Education with no documents produced at the level of the school administration;	Documents are in order with all the requirements of the Ministry of Education and more detailed rules to follow in place produced by the school administration and in line with practices;	There was only a Strategy for School Network development with indicators for Aimak autonomous school to achieve.
Staffroom observation	Heads of the SMUs' discussion;	Same subject teachers' interaction; Creative group members' meeting; Discussion between two teachers;	Same subject teachers' interaction; Discussion between two teachers;
Lesson observation	No rule was in place for lesson observation by observers.	Strict rules for lesson observation and feedback session was used by observers;	Feedback sessions after the lessons are chaotic with no rules to follow and with a lot of time spent on discussion;

Table 3.14 organises the data analysis by displaying the link between the questions asked and the major themes derived from the data. It was treated as more of a descriptive coding, which focused on identifying and labeling what was in the data related to the main research question. Further analytical coding was employed through a process of constant comparison and abstraction to interpret, interconnect and conceptualise the data across the three case studies.

Throughout the analysis, memoing was done along with coding. 'Memoing is the theorising write-up of ideas about codes and their relationships as they strike the analyst while coding' (Glaser, 1978, p.83-84). For example, the three-fold conceptual framework became an outcome of the memoing. Hence, the coding was the more systematic and disciplined part of the analysis, whereas memoing was the more creative and speculative part of the developing work. Detailed case studies constructed for each setting were then subjected to comparative analysis to generate concepts, themes and meanings inductively from each social setting.

As discussed earlier in this section, I chose fit-for-purpose units of analysis, i.e. I collected the data which would answer the research questions at the level of rule-governed activity systems that require teachers' interaction and collaboration. Completing open coding using the rule-governed activity systems reported by research-participants to be the platform for teacher interaction and collaboration for learning was useful, not only in order to draw an illustrative picture of the research-participants' answers in relation to their belief system about teacher collaboration for learning and what they actually perform within the rule-governed activity systems, but also because it 'allowed comparison between responses' (Miles & Huberman, 2014, p.128) across the case-study schools' activity-systems.

As such, the findings from all three case-study schools were organised around the four major rule-governed activity systems that were reported by research-participants as requiring teacher interaction and collaboration for exchange of experiences and for learning: 1) *pedsovet;* 2) Subject Methodological Units' work,

including 3) holding Open lessons during the subject decades and 4) organising young teacher mentoring.

To organise the activity-systems identified and analyse the data generated, I used the cultural-historical activity theory analytical tool, sometimes referred to as activity systems analysis. According to scholars (Engeström, 1987; Kaptelinin, 2005; Yamagata-Lynch, 2010), activity systems analysis is designed to enhance the understanding of human activity situated in a collective context, as well as individual activity in relation to its context and how individual activity and context affect one another. In other words, by using activity systems analysis I was able to examine the micropolitics within the cultural and organisational context of each case-study school as well as the influence of broader sociocultural factors on teacher collaboration for learning. It thus fits with the three-fold conceptual framework that I adopted for the study. An activity system is represented by the triangular model developed by Engeström (1987), shown in Figure 3.4.

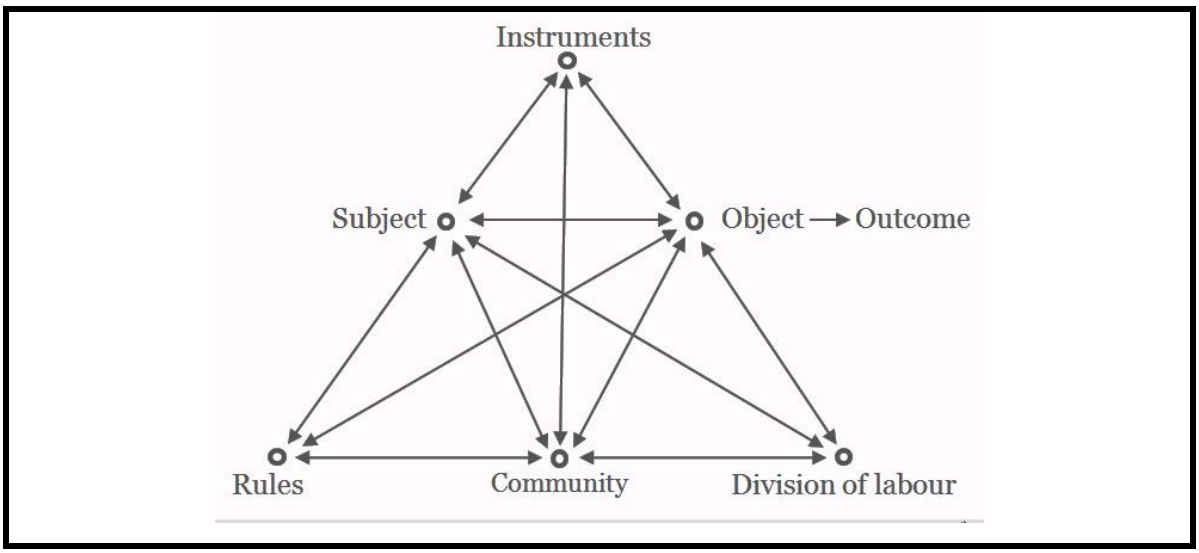


Figure 3.4: Engeström's activity system (1987)

The *subject* in this graphic is the individual or individuals (as a collective) engaged in the activity. The *object* is the motive of the activity. The *mediating instruments* include tools, artefacts, social others, and prior knowledge that act as resources for

the subject in the activity. The *rules* are any formal and informal regulations that in varying degrees can affect how the activity takes place. The *community* is the social group that the subject belongs to while engaged in an activity. The *division of labour* refers to how the tasks are shared among the community. The *outcome* of the activity system is the end result of the activity.

This theory embraces the belief that real-world activities cannot be isolated into variables. Moreover, it helps organise the qualitative thematic analysis in a systematic way and to understand the systemic contradictions and tensions that influence practice by bringing pressures that can encourage development, stunt development, or become the reason for changing the nature of an activity (Engeström, 1993). Finally, activity systems analysis provides a framework for researchers to not only conduct their analysis, but as a method of communicating the results of their analysis (Yamagata-Lynch, 2010, p.8).

Theorists of cultural-historical activity (Leont'ev, 1981; Wertsch, 1998) refer to this process of adopting a tool when working on an object as 'appropriation'. They argue that the level at which the tool is appropriated often depends upon how closely the subject's values, experiences and goals are aligned with those of more experienced subjects in the environment (Cole, 1996). Appropriation is particularly important, as, through this process, subjects 'reconstruct the knowledge they are internalising, thus transforming both their conception of knowledge and in turn, that knowledge as it is constructed and used by others' (Grossman, Smagorinsky, Valencia 1999, p.15). Mediation and tools/instruments/artefacts thus become central in analysing the rule-governed activity system identified.

On the other hand, activity-systems analysis helps to understand the contradictions and tensions as well as the factors hindering genuine collaboration for the purpose of learning among teachers. This is the case when the meditational tools/instruments/artefacts are considered in full along with the rules in place; the communities of interest; and the division of labour. The approach described above

is used to analyse all four rule-governed activity systems and sub-activity systems across all three case-study schools and will be presented in Chapters Five, Six and Seven, where I present the findings for the case study of teacher collaborative learning.

3.6. Ethical considerations

Before I give a full account of the ethical consideration, it is important for me to note that, although a plethora of scholarly works have been conducted using a case-study methodology in academic institutions outside of Kazakhstan by Kazakhstani students, it is not a legitimate research methodology for academic purposes in my own country. While there is no scholarly work to be found which addresses this methodological issue in the Kazakhstani context, I found a few studies by Russian scholars (Balaskii, 2006; Varganova, 2006; Sorokina, 2011; Sorokina & Rogova, 2012), that confirm a lack of scholarly discourse about the validity and credibility of the 'case-study' methodology (interchangeably used as a method and a technique[16]) in pedagogical science (p.20). Therefore, my attempts to discuss the applicability of the case-study methodology with established academic scholars in Kazakhstan have been constantly challenged. My choice of research design was criticised mainly for the absence of quantitative measures and non-representable sample size, without which my study could not be counted as scientifically rigorous in the context of my own country's pedagogical sciences. In this regard, I mainly relied on western scholars' view (Yin, 2003; Bridges, 2017; Stake, 2006; Merriam, 1998) to present my justification of how research trustworthiness along with the observance of ethical principles (BERA, 2011) was fulfilled.

[16] Sorkina (2011), in her article 'Case study as a method of pedagogical research', provides several aletrnative literal translations of the term 'case study' from English into Russian: *'issledovanie edinichnogo slučaya', 'situatsionnoe issledovanie', 'issledovanie slučaya'*, '*issledovanie situaszii* (p.8). She admits that while there is no agreed position among scholars in Russia about which term has preference over others, her own preference lies in the transcription of English into Russian, that is *'keis stadi' (кейс стади)*.

In the case-study, the issues of trustworthiness and offering proper interpretation are important. First, I was fully aware that, in the case-study approach, the researcher becomes the primary instrument of data collection and analysis and seeks to develop expected and unexpected patterns from the data gathered. Hence, this required me, as a researcher, to play the role of evaluator and interpreter by analysing and synthesising the data obtained in order to construct the case narrative. In other words, as Simons (1980) asserts: 'whatever procedures are adopted to document the process of the study and check for bias and control, there is much in the techniques of data gathering, observing and reporting in case study that is left to the judgement of the evaluator' (pp.6-7). On the other hand, as Merriam (1998, p.30) maintains, qualitative case studies can be characterised as being heuristic, meaning that case studies illuminate the reader's understanding of the phenomenon under study, enabling discovery of new meaning, extending the reader's experience, or confirming what is known.

Thus, by giving a full account of my role as the primary instrument of this case study, I tried to ensure that appropriate approaches and fit-for-purpose research instruments were employed to answer the research questions. Specifically, by choosing to use different data collection strategies and different data sources I was able to collect teachers' views to obtain a better understanding of the phenomenon. That is, I adopted different angles from which to examine teacher collaboration for learning. More importantly, all the way through my field research and interaction with research-participants, I tried to listen to and hear their voices more than my own judgement, which is derived mainly from the literature review, since I had little practical experience in the field.

Thirdly, there was the concern related to the importance of critically reflecting on my own position as an insider-researcher; and thinking through the ways in which this identity could influence and shape the research processes and findings. My position as an insider-researcher was related to my managerial role as a Deputy Chairperson in the hierarchy of the AEO. Also, more specifically, due to the

absence of infrastructure (hotels and regular transport) in districts and rural areas in Kazakhstan, I had to choose school localities where my relatives welcomed me to stay for the duration of my fieldwork. I therefore used a purposeful sampling of schools for the study and the localities of the schools were also selected purposefully.

Hence, on the one hand, as Hockey (1993) asserts, my position as an insider-researcher, provided me with a certain degree of social proximity and, therefore, confidence in building enhanced rapport and communication with participants, making it possible 'to gauge the honesty and accuracy of responses' (p.199). On the other hand, I was conscious of the particular vulnerability that respondents experienced when sharing research-relevant information. Therefore, in order to negotiate my position, as discussed earlier, I conducted a knowledge session about my research; and the possible benefits for teachers if they chose to be a part of this research. Some teachers were keen for me to serve as a critical friend, especially those who completed the CoE course. It should be said at this point that the lessons observed at the request of teachers who wished me to act as critical friend were not included as data in this study.

Finally, 'good educational research is only possible if there is mutual respect and confidence between investigator and participants' (Faculty of Education, 2012). Thus, issues relating to confidentiality and anonymity were clarified and communicated to all the participants during the knowledge-sharing sessions as well as in one-to-one discussions. Participation in the one-to-one interviews and focus-group discussions were based on teachers' and school administration members' interests and their availability. As mentioned earlier, teachers made to participate in the study by the school administration were allowed to leave the interview and the focus-group discussion if they wished to do so after having explained to them the research ethics and my position as a researcher. Observation of practice was also dependent on teachers' interests and availability of opportunities for me to participate in formal settings (e.g. *pedsovet* meetings, SMUs meetings and District

Division of Education collegial meetings). The permission to observe planned events was sought beforehand from the school administration and the Head of the SMUs.

All teachers interested in participating in the research were briefed about the research goals, including why their participation was necessary, how it was going to be used and how and to whom it would be reported (BERA, 2011, section 11). Voluntary informed consent was the condition under which teachers understood and agreed to participate in the research; and there was a section that allowed teachers to withdraw at any point from the research, if they so wished (see Appendices H & F). This helped me to some degree to clarify teachers' predisposition to relate my presence as a researcher to my managerial role in the AEO.

The confidentiality and anonymity of teacher-participants' data was observed by ensuring the separation of research findings from identifiable schools and individuals as much as possible. However, I recognise - and this was communicated to schools and participants in the first instance - their rights to be identified with any publication of their original works or other inputs, if they so wished (BERA, 2011, section 25). At the same time, the participants were informed that, within the local context of the case study, it may be impossible to guarantee 100 percent confidentiality as regards their identity.

Chapter 4: Sociocultural context of the case-study schools

This chapter aims to provide the sociocultural context for the case study about teachers' collaborative learning. It describes and discusses the policy environment in which the case-study schools operate, that is: the institutional features of the education system; the leadership characteristics and the school socioeconomic factors. The various contextual forces will be explained and discussed. These factors and forces frame schools' and teachers' work in ways that both confirm and extend the adoption of sociocultural and cultural perspectives for this study. This chapter allows me to set the boundaries for the case. Moreover, it informs the findings about collaborative teacher professional learning from the data collected across all three case-study schools that I am going to discuss in Chapters Five, Six and Seven.

In this chapter, I will be drawing on primary evidence from available research studies and reports of international and national organisations, as well as an examination of official education-policy documents, including Decrees of the Government of the Republic of Kazakhstan, the Orders of the Ministry of Education, and official statistical data. Additionally, it will be supplemented by quotations from my research data as gathered in all three case-study schools, wherever appropriate.

4.1. A new wave of debates between the 'good old Soviet' and the 'unknown new'

As discussed at the beginning of the Introductory Chapter, national and international observers and scholars (OECD, 2014, p.97; Shamshidinova, Ayubayeva & Bridges, 2014) argue that awarding educational freedom and autonomy to the AEO to experiment by establishing a network of twenty NIS schools opened up new possibilities for radical changes in the Kazakhstani

secondary-education system. Educational freedom and autonomy allowed the AEO to conceive teachers' inherent epistemological position as a socio-constructivist one. Thus, teachers' professional-development courses were designed based on the belief that teaching should be an intellectual enterprise, rather than a technical one; and that learning should be the construction of understanding, rather than the acceptance of facts and rules written in textbooks (Nazarbayev, 2008). The constructivist approach was used in implementing various projects and contributed to changing NIS teachers' beliefs about learning. This in turn allowed them be more active in trying out new ways of teaching and learning; seeking feedback from colleagues; learning about the role of the critical friend; understanding the value of sharing and professional collaboration; and contributing to a knowledge base. As a result, the importance of teachers' agency and their collective role in the current reform agenda has been actively pursued by the AEO within the process of dissemination of the NIS schools' practice into the mainstream schools:

> 'Establishing a new school in the modern world is a very complex task. It should be a holistic process that integrates changes in education content; the system of evaluation and assessment; school management and governance; teacher development; and cooperation with parents and the local community. However, the hardest part of this work is both changing the structure and the culture of an educational organisation, at the heart of which is a teacher and their beliefs' (Shamshidinova, 2015a, www.nis.edu.kz).

The discussion about providing teachers with agency and a more active role in the reform process brought a new wave of debates between the 'good old Soviet' and the 'unknown new' among various stakeholders. An additional factor that facilitated such a debate was the language used in policy documents (SPED-2020, 2011; Government of the RK, 2010). In these documents, it is stated that the NIS schools are to serve as a platform for the modernisation of the secondary-education system by developing an education programme that combines the best traditions of

Kazakhstani education [i.e. Soviet education] and international best practice. Hence, 'a teacher is a mirror of society' and 'schools are a reflection of our society' became statements interchangeably used by officials, educators and practitioners in Kazakhstan in speeches, whether they were defending 'the good old Soviet education system' (Kussianov, 2013; Erğaža, 2016) or the 'democratisation and internationalisation of the education system' (Zhumagulov, 2012; Ruby & Sarinzhipov, 2014; Shamshidinova, 2015; Dzhadrina, 2010).

The first statement, that 'a teacher is a mirror of society', resonates with the declaration made by Lunacharskii, the first Commissioner of Education of the USSR, that 'A state can be cultured only to the degree that it is pedagogically highly cultivated' (Grant, 1975, p.383, referring to Lunacharskii, 1958, p.49). This statement can be understood in the context of an independent Kazakhstan by examining the history of the country's secondary-education system, in which teachers were builders of communism and thus society as a whole. Unfortunately, however, the current debate does not take account of the point that Soviet teachers were restricted in their ability to think for themselves and 'teachers were permitted little voice in basic educational policy decision' (Chabe, 1971, p.527). These and other aspects of the Soviet legacy will be discussed in later subsections of this chapter.

Consequently, although progressive education systems, such as those of Finland, Singapore, and England, have a strong influence on current educational thinking in Kazakhstan, some officials are resistant to outside ideas. For example, while the new curriculum and the CoE course strive to make teachers more autonomous by making an informed choice about what and how to teach, the message from on high, such as in these words from a member of the Parliament of the Republic of Kazakhstan, directly contradicts that idea:

> 'We need to return to our good old and very well-known Soviet system, where each subject had only one textbook and there was no need to kid

around' (Nazarbayeva, Vice-Speaker of the *Mäžilis* of the Parliament of the Republic of Kazakhstan, October 25, 2014, www.zakon.kz).

The second statement, that 'schools are a reflection of our society', is very much in line with Durkheim's argument that the educational system 'is only the image and reflection of society. It imitates and reproduces the latter… it does not create it' (Durkheim, 1897/1951, p.372-373). This claim is often made by educational observers (Seisembayev, 2016; Bazhenova & Dzhaidakpaeva, 2015; Akhmetzhan, 2016; Bozaev, 2011) in their attempts to stop officials and parents blaming schools and teachers for the failing education system. Rather, they try to turn officials' attention to overall social and economic issues in the country.

In other words, their positions are in line with some of international scholars (Sahlberg, 2013; 2015; OECD, 2014), who argue that teachers can influence only about 30 percent of students' learning, with the other 70 percent attributable to external factors out of schools' control. For example, according to an OECD report (2010), one of the contributing factors that made Finnish schools among the best in the world was the link between the development of the Finnish welfare state and the national push for much greater social and economic equality (p.121). That is, as the Finnish scholar Sahlberg (2012) points out, when trying to understand Finnish schools' success it is good to keep in mind that Finland scores highly in many other international comparisons besides education. As an example, Table 4.1 demonstrates Kazakhstan's level of achievements in social, educational and economic indicators in many of the international rankings available globally in comparison with Finland's level of achievements.

Table 4.1: Kazakhstan's place in international rankings compared to Finland

Indicators	Kazakhstan ranks	Finland ranks	Organisation
Global Competitiveness Index:	50	4	World Economic Forum (2014) 'The Global Competitiveness Report 2014-2015' provides an overview of the competitiveness performance of 144 economics
Innovation and sophistication factor	89	3	
Healthcare and primary education	96	1	
Higher education and training	62	1	
Motherhood Index	58	2	Save the Children (2015) 'State of the World's Mothers' Report 2015 compares 179 countries
Level of child poverty	Not available	4 %	UNICEF Report (2012) 'Measuring child poverty 2012' compares 35 developed countries
Child wellbeing	Not available	4	OECD (2009) 'Comparative Child Well-being across the 30 OECD countries'
Happiness Index	54	5	World Happiness Report 2016 across 106 countries (Helliwell, Layard &Sachs, 2016)
Corruption Perception Index	123	2	Transparency International (2015) 'Corruption Perception Index 2015' across 167 countries
PISA 2012:			OECD (2014a) The Programme for International Student Assessment, compares 65 countries
Mathematical literacy	49	6	
Reading and literacy	63	3	
Scientific literacy	52	2	
TIMSS 2015:			(IEA, 2015) Trends in International Mathematics and Science Study, compares 57 countries
Primary mathematics Secondary mathematics	12 7	17 -*	
Primary science Secondary science	8 9	7 -*	
*Finland's 14-year-olds were not entered in TIMSS			

In general, Kazakhstan has experienced relatively steady economic growth since 2000 and moved to the upper-middle income group in 2006 (IMF, 2014). However nearly half of the country is considered to be in the low-income category, in spite of a decline in the poverty rate by more than 50 percent between 1999 and 2014 (UNDP, 2016, p.6). There remain sustainable regional disparities in the concentration of poverty across the country (IMF, 2014, p.4), for example, 1.7

percent in the capital city Astana to over 10 percent in south Kazakhstan. Kazakhstan ranked 58 among 179 countries in the world with favourable conditions for motherhood (Save the Children, 2015). Also, according to the Transparency International (2015), Kazakhstan is the 123rd least-corrupt beginning the nation out of 175 countries.

As such, activists and observers trying to justify why 'schools are a reflection of our society', argue that, until Kazakhstan officials tackle the disparity between rural and urban incomes; the poverty rate; the high rate of corruption; and the low rate of health provision, it will be difficult to ask schools and teachers to provide quality education on a par with more economically advanced countries and achieve better results in international comparative studies, such as PISA and TIMSS. In my study, these factors ranked highly with teacher-participants - especially in the rural area – in terms of making the decision not to stay in the school for an entire working day but only for teaching time, which usually varies from three to five lessons per day. They therefore leave no opportunity to collaborate with other teachers. The impact of these and other aspects of the Kazakhstani socioeconomic situation on teachers' work and their learning will be described and discussed in the later sections and subsections in this Chapter.

Yet others (OECD, 2014; Bartlett, 2012; Kipr, 2015) rightly argue, as was mentioned in the Introductory Chapter, that what the NIS project was apparently allowed in terms of financial investment and the way in which it was governed and supported is currently not replicable in any of the mainstreams schools in the country. According to the latest OECD report prepared by the group of experts (OECD, 2015) the network of twenty NIS schools is funded at levels considerably higher than mainstream schools:

> 'If all schools in Kazakhstan could be resourced at the same level as the NIS, the current budget for general education would increase by more than 300%. While this inequity has little overall effect on the allocation of

> resources across the system, it limits the validity of NIS schools as innovation labs because the conditions in these schools are so much better than in the rest of the network.' (OECD, 2015, p.108).

In order to generate a better understanding of the new wave of debates between the 'good old Soviet' and the 'unknown new', let me now examine some of the historical factors relevant to the secondary education system in Kazakhstan and its post-Soviet aspirations for reform.

4.2. Post-Soviet aspirations for reform in Kazakhstani secondary education

After the 1991 dissolution of the USSR, Kazakhstan chose the path of democratisation, with the introduction of a market economy and integration into the global economy as the Republic of Kazakhstan (Nazarbayev, 1991). The disintegration of the USSR brought an opportunity to revive the national identity, culture and language. The implications of these opportunities and changes were profound for secondary education. There was an aspiration to 'nationalise' the curriculum to reflect the cultural and ethnic history of Kazakhstan, while simultaneously 'internationalising' it to enable the country to be competitive in the world economy (Yakavets, 2014, p.11, in reference to Chapman et al., 2005, p.522). However it is widely acknowledged that the national system lacked any experience or knowledge of how to make system-wide changes. Here is how Shayakhmentov, the first Minister of Education of the independent Republic of Kazakhstan, summed up the historical importance of creating an independent education system, writes Kussainov, the first President of the Academy of National Academy of the independent Kazakhstan:

> 'During the period of the Soviet Union, to open a department we needed permission from the centre [Moscow]. We were highly dependent on the centre, and virtually no decision was made by us. Now everything has

> changed. We have to develop the entire education system by ourselves. But we have no such experience. There has been no time. Despite all the difficulties, we must not only ensure the development of the education system but also create a basis for it to be one of the best in the world' (Kussainov, 2011, www.elibrary.kz).

During the first decade of its independence, due to the socio-political situation and economic hardship and recession, the Kazakhstan leadership could not adequately address issues relating to the new values and challenges in schooling (Saitimova, 2011). The education sector - as with all other sectors of the country's economy - lacked professional capacity and skills in policy-making and legislation on issues of governance, curriculum development and textbook production (Shamshidinova et al. 2014, p.72; Niyozov & Shamtov, 2006, p.807; Niyozov, 2001; Shamatov, 2006). Moreover, as scholars agree (Asanova, 2007, p.75, in reference to DeYoung & Suzhukova, 1997), there was a lack of consensus at official level regarding the direction and organisation of public schooling. On the one hand, there was an aspiration to build an education system in compliance with 'international standards'; and, on the other, a desire to recapture the Soviet level of achievements. Thus, the involvement of international donor organisations for over a decade (during the 1990s and 2000s) to help the country to develop education policy brought a clash between neoliberal ideas and local traditions and practices.

A number of studies (Rumer, 2005; Silova, 2005; Silova, 2011a; 2011b; Asanova, 2006) undertaken to examine the impact of external assistance claim that, although Kazakhstani officialdom borrowed the language of reform from external assistance, little was implemented in schools. For example, according to Silova and Steiner-Khamsi (2008), so-called 'traveling' and 'borrowed' approaches, mainly based on Western educational values (such as student-centreed learning; the decentralisation of education, finance and governance; the standardisation of student assessment; and the liberalisation of textbook publishing) became a part of the political rhetoric and did not changed teachers' practice in post-Soviet

secondary education. Moreover, as Fimyar (2014a) argues, with the introduction of the CoE course, 'the advance of neoliberalism in education and educational governance, the far-reaching and irreversible consequences is celebrated and takes unprecedented forms in the way in which education is conceptualised in Kazakhstan' (p.316).

For example, Nazarbayev (2012), the President of the Republic of Kazakhstan, in his Annual Address to the Nation declared the development of 'human capital' through the process of modernisation and internationalisation of the education system to be one of the priorities of the long-term 'Kazakhstan 2050 Strategy', which aims to bring the country into the ranks of the thirty most developed economies in the world by mid-century. As a result, the SPED-2020, the foundation document driving education reform in the country, states that: 'by 2020 the education system of the Republic of Kazakhstan will correspond to the *models of developed countries* in its structure, content, management and financial mechanism, which will result in high-quality education and high level of human capital development which will be confirmed by *international indicators'* (SPED, 2010; 2016). Although, in all these political declarations and official rhetoric there is an acknowledgement of the centrality of teachers and their role in achieving these ambitious aims, there is in general a lack of vision about their role in the process. In other words, while educational change continues to focus on remaking the architecture of education systems, almost no reports or pieces of research mention the role that is played, or that could be played, by the main agents who operate within this policy space. That is to say, 'the teaching profession in Kazakhstan suffers from loss of status and prestige' (OECD, 2014b, p.19).
Akhmetzhan (2016), an activist teacher, in his recent article on teachers' status, posed a question: Who shall we blame for the declining status of the teacher in Kazakhstan? The answer to the question from his perspective was as follows:

> 'First, we can blame the system [officials]: that is the easy one; the next, society; and finally the teacher. Why blame the system? Because it lacks a

> vision about the teacher's role, their status and prestige in society. Why society? Because of its ignorance regarding the fate of the teacher - 'who we say is a mirror of a society'. Finally, I blame teachers. Because nowadays the best teacher is someone who keeps 'quiet'; who has his/her paperwork in order; and who can demonstrate the best lesson. The best teacher is someone who chooses to lie, rather than tell the truth during the inspection. Hence, we [teachers] worry more about passing an inspection than about our children's future' (Akhmetzhan, 2016, www.kzbilim.kz).

This article was shared on a social-network group entitled 'Teachers of Kazakhstan' which has more than 8 000 members[17]. It received many 'likes', which I interpreted as an indication that teachers shared Akhmetzhan's views. However there was not much discussion, debate or evidence of questions. Does this prove Akhmetzhan's assertion that 'Kazakhstani teachers choose to keep quiet rather than to tell the truth'? In order to understand why, one should look at the history of the secondary school system in Kazakhstan and the history of the teaching profession, i.e. the Soviet legacy, which I am going to do next.

[17] Many public groups were set up for and by teachers in social networks. One of them is the 'Kazakhstani teachers' on Facebook. It has been active since 2013 and has more than 8000 members, making it one of the largest public groups set up by a group of teachers. It states on the group's page that its main aim is to share and discuss issues in secondary education and to attract all teachers to join the community (retrieved from Facebook on January 6, 2017).

4.3. The Soviet legacy in secondary education and nostalgia for Soviet schooling

Historically, Kazakhstan's secondary education system was established under the Soviet regime. During the Soviet period, Kazakhs, along with all other Soviet citizens, were granted access to education; and, whatever the distortions in the teaching of history and culture, there was the possibility of attaining a world-class education in maths and the sciences and many branches of the humanities as well (Mynbayeva & Pogosian, 2014; Khrapchenkov & Khrapchenkov, 1998). During this period, education policy in Kazakhstan was determined centrally, from Moscow. The authorities in Kazakhstan mainly duplicated documents produced by the Soviet government and the Communist Party (Khrapchenkov & Khrapchenkov, 1998). As in every Soviet republic, all educational institutions were state-owned and controlled and offered education free of charge (Pogosian, 2012, p. 302).

Taking the most positive interpretation, Soviet education created populations that were and continue to be largely literate and often multilingual (Johnson, 2004, p.32). The Soviet teacher had 'a more clearly defined status, role and duties' (Zajda, 1980, p.67); and 'guaranteed material status, which in turn was vitally connected to their identity as respected figures (notables) in local communities' (Eklof & Seregny, 2005, p.199). However, as Johnson (1996) notes, the Soviet authorities were able to restrict the ability of teachers to develop a separate professional identity, controlling the degree to which teachers could influence the nature of such issues as teacher education, educational research, and the type of professional associations in which teachers could participate (p.37). Soviet teachers felt a sense of unity with their colleagues across the country by virtue of the fact that they all worked within a highly centralised and controlled system, in which the experience of teachers was remarkably common from one end of the USSR to the other (Webber, 2000, p.88). Despite these close ties, however, there was relatively little communication between teachers on a national basis. For most teachers, the circle of professional communication comprised colleagues in their school and

district, along with the staff from their town whom they would meet during in-service training. Apart from this, there were few channels through which the teacher could engage in dialogue with their counterparts in other regions and republics (ibid, p.88).

However, in contrast to the above assertions, some scholars (Webber, 2000, p 40: Kerr, 2005) point out that, while everything was standardised and centralised in the Soviet school, the delivery of the curriculum remained in the hands of individual teachers who were, consciously or unconsciously, practicing different methods of teaching, including differentiation and active learning. In many studies, it has been termed the 'hidden' curriculum. Evidence for this was the formation in 1988 of the Creative Union of Teachers; and the 'pedagogical innovators', who as 'a group became the main catalyst for the introduction of differentiation and decentralisation as a core concept of *perestroika* in education' (Eklof & Seregny, 2005, p.207). A large number of teachers from across the USSR attended seminars and workshops held by the 'pedagogical innovators' in various locations. Unfortunately, the movement did not have any considerable impact on Kazakhstani secondary education. Only a small group of teachers from Kazakhstan attended the pedagogical innovators' courses before the collapse of the USSR in 1991.

In the three case-study schools, the only teacher among all those interviewed who had attended one of the pedagogical innovators' courses was the Director of the Audan. The latter provided me with the impression that, at that time, after completing the course, teachers worked in isolation in their own classrooms and that the pedagogical innovators' work actually did not have any impact on teachers' practice:

> 'In 1980, I was lucky to attend teacher-innovators' course. We had a great lecturer - Gureevich from Belorussia. That was the first time I heard and learned about active methods of teaching. Back then, we also used to read the work of Amonashvilli, one of the teacher-innovators in the USSR. His

> approach was called the pedagogy of cooperation (*pedagogika sotrudničestva)*. I still use the method of working in pairs … however, a lot of things that I learned were not implemented in my practice' (Director B1).

At the present time, we may observe that the Kazakhstani school system in general has preserved the achievements of the Soviet era, including its literacy rate. Kazakhstan ranks first among 129 countries on UNESCO's 'Education for All Development Index -2009', achieving near-universal levels of primary education (99.0%), adult literacy (99.6%), and gender parity (99.3%). This achievement can perhaps be attributed to the teachers brought up and educated in the Soviet system. Primarily teachers in the Soviet system were those who chose to enter the profession as ideological workers to help the state achieve its social goals, i.e. building communism (DeYoung, 2011; Niyozov, 2011). Their experiences in the communist-controlled system formed their collective values, beliefs and attitudes. Thus, I would support Naimova's (2006) argument that teachers who stayed in the profession after the collapse of the USSR and continued teaching children despite the political, economic and social upheavals believed that it was their moral duty to support the state in its nation-building (p.139).

For example, a primary school teachers admitted that teachers in Auyl are expected to take care not only children's learning but also their upbringing while their parents are busy earning to support their families:

> 'Many parents in my class are busy on farming or working in the city to earn income to support their families. Thus, many of my students stay with their grandparents. When I go to talk to the family about student's problems, attainments and behavioural issues, they say, especially elderly people, that I know what is better for a child. They expect me to fix a problem by myself.' (Teacher A1).

From this and many other teachers' account, it can be assumed that elderly peoples' perspective on what it means to be a teacher is shaped by their experience of Soviet collectivist culture, in which the 'teacher's duty was not only to educate young minds but also to influence all the people [in a community] and explain the new ideas to society' (Shimoniak, 1970, p.134). In other words, the community still sees teachers as 'a mirror of their community'.

Many scholarly articles (Sahadeo & Zanca, 2007, p.6; Silova, 2011) suggest that the Soviet legacy continues to have strong impact on everyday life in Kazakhstan, and by extension on schooling. Also, it is not surprising people are nostalgic for the Soviet past, which has been the subject of many studies in different post-Soviet countries. For example, as Yurchak (2005) argues: 'an undeniable constitutive part of today's phenomenon of 'post-Soviet nostalgia', which is a complex post-Soviet construct, is the longing for the very real humane values, ethics, friendships, and creative possibilities that the reality of socialism afforded - often in spite of the state's proclaimed goals - and that were as irreducibly part of the every-day life of socialism as were the feelings of dullness and alienation' (p.8).

Similar findings were reported by McMann (2007), – in her study 'The Shrinking of the Welfare State: Central Asians' Assessments of Soviet and post-Soviet Governance' conducted in Central Asia. McMann highlights a Kazakh man who, despite successfully making a living as an independent farmer, regret the loss of the social services they once enjoyed in the Soviet era: the state-funded village school and hospital; and where the profit from collective farming went to other services, such as free home repairs, subsidised daycare and a village club that housed a library and offered free concerts. She argues that the Soviet 'nanny state' that met people's essential needs was far more important in the everyday life of Central Asian than the Soviet 'evil empire' that restricted freedom of speech; the practice of religion; free movement; and the expression of ethnic identity. Even the fact that the changing role of the state has created opportunities for many to study, travel and work abroad are less important than essentials. McMann concludes that,

while people in Central Asian have gradually adapted to these new conditions, they remember the role of the Soviet state in everyday life with fondness and assess their current state's responsiveness as inadequate.

Thus, in most areas of the Kazakhstani school system that historically had reflected the values and beliefs of a collectivist Soviet socialist society, the views of the Soviet education system still prevail, even after more than twenty years of transition. As products of the Soviet period (both as students and teachers) and having had the notion of the 'collective' inculcated in them for the greater part of their lives, many teachers struggle to adapt to and adopt the changes. Hence, as asserted by Dzhadrina (2012), if teachers are asked, they prefer to teach in a Soviet school; and will argue that at least the Soviet system guaranteed a fundamental grounding in knowledge. For the most part, this is for the reasons I have highlighted in the previous subsection: social and economic hardship; and the lack of knowledge and capacity on a policy level to run an independent education system. In addition, issues contributing to teachers' willingness to return to the Soviet system were the uncertainties, conflicts and tensions created and generated by the reform process and change mainly dictated from the top (Fimyar, 2014a; Kurakbayev & Fimyar, 2016). The following section will discuss those tensions and contradictions, that I called the contextual forces.

4.4. Contextual forces

In this section I will outline and discuss the contextual forces that impact on teacher collaboration for learning, as mentioned above. Those forces are explained and discussed in the following order: i) the State Compulsory Standard for Secondary Education (State Standard), subject programmes, textbooks and assessment system; ii) the overall idea of education democratisation; iii) the impact of financial decentralisation; iv) teacher salary; v) teacher attestation (teacher appraisal); vi) the role of the school leadership; vii) the wider cultural values concerning human interrelationships; vii) the school-ranking system based on the

school-leaving exam - the UNT; and xi) a teachers' voice and an 'exit option' from the profession.

4.4.1. State Compulsory Standard for Secondary Education, subject programmes, textbooks and assessments

Despite the widespread rhetoric about the democratisation and decentralisation of the secondary education system in Kazakhstan, it has turned out to be too static to move on from the Soviet system. As such, according to UNESCO's expert assessment, the current State Compulsory Standard for Secondary Education (State Standard) still follows the former prescriptive [Soviet] model of content regulation in a significant number of learning areas across 13 to 23 study subjects (UNESCO, 2010/11) depending on grade. Moreover, a so-called new generation of textbooks aimed at developing students' outcome-based competences (Mynbayeva & Pogosian, 2014, p.167) remained descriptive in their approach and follow a lesson-by-lesson subject programme, serving as the only source of information for teachers and students. Finally, the UNT, introduced in 2004 to serve as both the school-leaving exam and the entrance examination for higher-education institutions, was designed to test information-retrieval based on the textbooks and within the context of the specific subject programme. It requires students to answer 125 multiple-choice questions on five different subjects (three compulsory and two by choice). If a test question in the UNT appears to be from a source outside the subject programme and the textbook, it is always widely debated by parents and students. Teachers therefore do not feel obliged to encourage students to think critically and creatively, to write their opinions or to think for themselves.

This is in line with Burkhalter and Shengebayev's (2010) conclusion, which was arrived at after conducting a survey to examine Kazakhstani teachers' understanding and use of critical thinking in their classrooms as mandated by the Ministry of Education. The survey was conducted among a total of 111 teachers. It suggested that, while 90 percent of respondents reported that they encouraged

students to think creatively and to think for themselves, this result was not reflected in practice. In practice, 87 percent of respondents preferred drills and reviewing homework in class; 78 percent reported memorisation as an important goal; and an average of 72 percent used multiple-choice tests and fill-in-the-blank formats. Burkhalter and Shengebayev (2010) therefore concluded that developing critical-thinking skills was more of a stated desire than something Kazakhstani teachers practised on a day-to-day basis. In other words, high-stakes assessment in the form of the UNT is the most powerful determinant of the priorities of pupils, teachers and their parents. Thus, if the examination system does not properly reflect key educational values and principles, most of the other efforts, such as making the development of critical thinking mandatory at national level, will be in vain (Sagintayeva et al., 2014, p.7).

Moreover, using a single high-stakes measure to assess student attainment both for the purpose of a school-leaving test and at the same time as a test of ability to enter higher education has caused parents to look for additional paid-for tutoring for their children. This has caused two problems. First, the best teachers, especially those who have many years of experience, left the school system to work as tutors, earning much more than teachers do. Second, some teachers started providing paid after-school classes, some of them at the request of parents, others by purposely missing out a theme in the subject programme. Scholars (ESP, 2006; Silova, 2010; Silova, 2009) argue that private tutoring has become an effective solution to the problems teachers faced during the transformation period, counterbalancing their economic hardship and, in some ways, restoring their professional legitimacy.

On the other hand, according to Niyozov and Shamatov (2010), this form of survival on the part of teachers has not been easy and has consequences: 'the spectrum of effects [range] from shame, guilt and betrayal to apathy and indifference, to new learning, feelings and empowerment and material well-being and right into independence, wealth and restoration of status' (p.170). In other words, by being educated and brought up with the 'socialist morality' of group

responsibility and commitment to the work and code of conduct that Makarenko (1949, 1953, 1959) laid out for the collective (Bronfenbrenner, 1962), teachers' experience of school transformation during the transitional period has been characterised by a struggle between the forces of progress towards 'democracy, pluralism, individualism' and the forces of a reactionary past under the heading of 'collectivism'. Nevertheless, according to a study by Silova (2009) 39.6 percent of students in Kazakhstan were tutored by their class teachers; 8.8 percent by another teacher from their school; and 22 percent by a teacher from another school (p.88). In both Auyl and Audan, many experienced teachers were engaged in tutoring their students. Since there are fewer teachers in Auyl experienced in preparing students for the UNT and since those teachers are normally allocated the task of mentoring young teachers, many of them were providing tutoring at the cost of their mentoring work:

> 'I do not get any support from my mentor. She does not have much time. She has 28 hours to teach, and she also prepares students for the UNT' (Teacher A17).

In Aimak, however, teachers were not allowed to engage in tutoring or give extra classes for payment. It was clearly stated that working with underachievers or extra-curricular supervision was part of a teacher's job. This has been clearly specified in teachers contract with Aimak.

Another issue with the UNT exam is that there is no trust in the questions and the way in which it is conducted. For many years, parents and teachers argued over the idea that the probability of a high-achieving student scoring very low in the UNT is as high as the probability of an underachieving student scoring high by chance. Thus, many high-achieving students, their parents and teachers take opportunities to participate in international Student Olympiads, since a certificate of participation in an Olympiad on its own allows a student to be exempted from the UNT and obtain priority funded places at universities (Winter, Rimini, Soltabnebkova &

Tynybayeva, 2014, p.135). Researchers (Steiner-Khamsi, Silova, Johnson 2006, p.231) have criticised the high value attached to student-competition events, as this encourages teachers to focus on the best-performing students who have the potential to score high in the Olympiads and neglect the other students in the class (Steiner-Khamsi, Harris-Van Keuren, 2008, p. 29; OECD, 2015, p.95). Furthermore, a winning place in any student Olympiad has value for the teacher, as it is one of the requirements of teacher attestation, which in turn leads to increased salary. Teacher attestation will be discussed in more detail in a later subsection.

The most concerning consequence arising from the high value attached to student Olympiads, as I learned from a Grade-11 student in Audan, was that it can lead to malpractice. The desire of her parents and teachers to get a winning place at one of the international Olympiads at any cost dragged the student into this decision:

> 'My parents moved me from the city school to this school [Audan], so that I can participate in the International Olympiad in Moscow as a student from a rural area. To this end, my parents bought me a project written by a university professor. Now, my teacher will sign it for me to submit. If my work is accepted, then I do not need to sit the UNT test' (Student X).

As discussed in the Introductory Chapter, while developing teachers' capacity to reflect on their practices constructively is important, central to the implementation or the reality of achieving this is the way the State Standard, subject programmes, textbooks and assessment system integrate and reflect the sort of intellectual capacities that they wish to develop in students (Sagintayeva, et al., 2015). Similarly, it is important to recognise how damaging it is to the system if teachers talk one talk but do not walk to walk. In other words, if there is no coherence between the official declaration and teachers' day-to-day practice, the whole system loses. The following example illustrates this point. One of the teachers working in the Aimak confessed that the teachers in the mainstream school where she had previously worked were instructed to tell the same story to the inspectors

and copy reports from each other to make sure there was coherence. Her biggest regret, however, as she conceded, was that she transferred the habit of copying to her students:

> ‘I used to encourage underachievers to copy essays from their classmates believing that at least they learn something while copying the text. It was something I did to pass school inspection myself. I used to copy reports from my colleagues. However, since joining this school [Aimak], I have learned how to fight back against plagiarism and understand the value of that for students' development’ (Teacher C12).

In general, as Keriebayeva (2014) writes, ‘naturally, children are not afraid to make mistakes, they are ready to take risks, but they grow up trying to avoid mistakes because our education system [in Kazakhstan] does not tolerate mistakes, there is no forgiveness of mistakes’ (Kereibayeva, 2014). I argue that by extension the same holds true for both school leadership and teachers. To develop the argument for this contention, I am going to consider how the culture of compliance within both administrative and financial decentralisation limits and constrains teachers’ collective activities and individual actions; and thus their role in the system as a whole.

4.4.2. Administrative decentralisation and a culture of compliance

Secondary education in Kazakhstan is regulated by Education Law (N319-III of 2007). This law determines national education policy; the objectives and principles of education; the administrative structure; and the system of public and private schools. It also ratified the administrative and financial decentralisation of education institutions (SABER, 2013, p.2). Despite this ratification, the recent OECD review (2015) of the functions and organisation of the Ministry of Education concluded that the latter maintains a highly centralised top-down system, permitting little political, administrative or fiscal authority to the lower levels of what is a clearly delineated hierarchy. In this structure, the *Äkímats* (local authorities) are assigned the primary responsibility of financing schools by ensuring the required minimum budget which is centrally set by the Ministry of Education. They also act as the employer for teaching staff and staff members of Local Departments of Education (Regional Division of Education - *Oblono*; District Departments of Education- *Raiono* and City Departments of Education - *Gorono*), previously employed directly by the Ministry of Education.

In this hierarchical structure, the *Oblono/Raiono/Gorono* are accountable for the establishment, organisation and management of secondary schools; the provision of material and technical resources; the appointment of the heads of schools; financing of schools from the local budget; and enforcing the State Standard (UNESCO, 2010/11). All state-financed comprehensive schools report directly to the Ministry of Education and its subordinate organisations (the National Academy of Education (NAE); the Department of Pre-School and Secondary Education (DPSSE); the Information Analytical Centre (IAC); the Centre for Textbooks (CoT)) on the results of new initiatives, while being accountable to the *Oblono/Raiono/Gorono* for day-to-day operations and methodological work, teacher attestation and student Olympiads etc. Autonomous schools, however, are accountable to their Board of Trustees and report the results of new initiatives to the DPSSE only. Table 4.1 below shows the structural hierarchy of the school

accountability system.

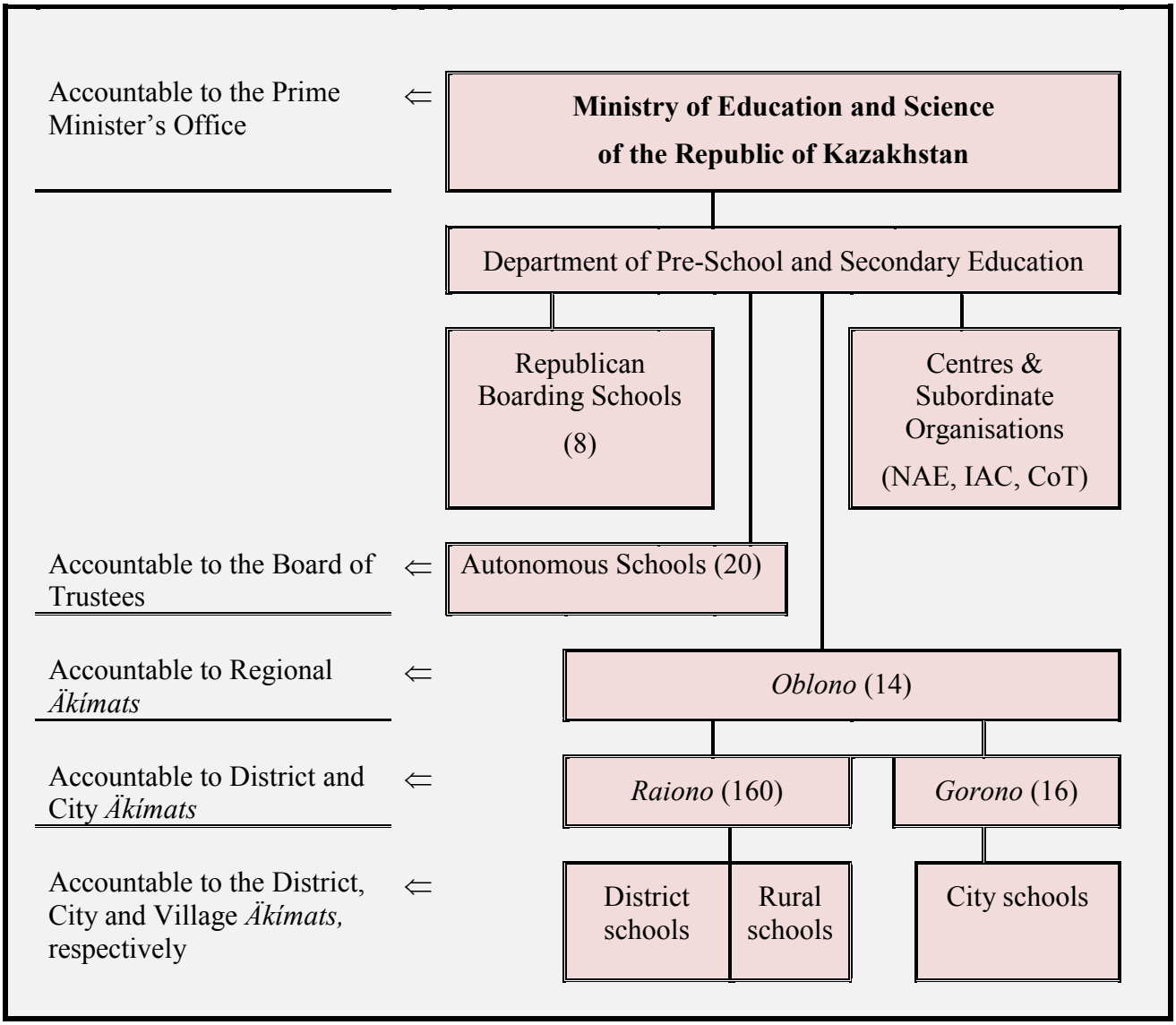


Figure 4.1: Structural hierarchy and accountability system within Kazakhstani secondary system

In general, this resembles the former Soviet model of organisational structure, in which the different administrative levels are subordinate to higher levels, both in their decision-making structure and in their budgeting process (OECD, 2015, p.56). Moreover, the Ministry of Education inherited and retained two key features of the education-governance system from Soviet times: extensive central planning; and a detailed list of norms with which every educational institution must comply

(ibid, p.17). OCED experts argue that keeping everything regulated from the top provides clear direction for the sector, policy continuity and enables monitoring of progress towards the achievement of policy goals as set in strategic documents.

On the other hand, they also state that a culture of compliance, imposed upon schools by government decrees and the Orders of the Ministry of Education, constrains the ability of *Äkímats*, *Oblono/Raiono/Gorono* and schools to match resources to their specific needs, taking into consideration their conditions and context. For example, regions are unable to raise teachers' salaries because the latter are set by central government. Even if they pay bonuses for teachers' service, procedures for allocating them are defined by national norms (OECD, 2015, p.70): acting otherwise is punishable by sanctions. Schools and *Oblono/Raiono/Gorono* are thus held accountable for their compliance with the norms, rather than for what they can achieve locally. I will be examining financial decentralisation and its impact on teachers' work conditions and the school environment in the next subsection.

Because of this, education specialists in *Äkímats* and methodologists in the *Oblono/Raiono/Gorono* are kept busy checking up and reporting on whether or not schools are complying with the rules and norms, instead of providing schools with methodological support for improving teaching and learning. The capacity of the *Oblono/Raiono/Gorono* was questioned at the Annual Conference of the Ministry of Education by Shamshidinova (2015c) on the basis of a survey conducted among teachers in Kazakhstan:

> 'The *Oblono/Raiono/Gorono* pretend to be managing schools; and the Directors of schools pretend to be managed. How, otherwise, can one explain the results of the survey, with half of the respondents from the *Oblono/Raiono/Gorono* asserting that they provide schools with methodological materials and other recommendations to improve teaching

> and learning, and 86 percent of schools responding that they rarely or never get support from them?' (Shamshidionva, 2015c, www.informburo.kz).

The same was confirmed in the case of my case-study schools. The *Raiono* to which Auyl and Audan are accountable employs eleven subject-area specialist-methodologists, whose main responsibilities are to support teachers in improving teaching; analyse the quality of education; and support teacher professional development and attestation. However, teachers from both Auyl and the Audan said that there was a lack of methodological support from the *Raiono*.

For example, while the Auyl teachers viewed the specialist-methodologist's visit to the school as an inspection:

> 'You never get support from the *Raiono's* methodologists. If they visit the school, they visit to inspect us, but not to support us.' (Teacher A11).

The Audan teachers, on the other hand, complained that the specialist-methodologists, used the Audan teachers to do extra work outside their immediate responsibilities:

> 'The *Raiono's* methodologists work directly with experienced teachers they know very well and trust. They ask them to join the school-inspection commission and to serve as a member of the Student Olympiad committee as necessary. Whenever they ask us to help or advise in subject-methodological work, we are there to support and help them.' (Head of MU B1).

In this hierarchy, the role and the agency of school leadership and teachers are not specified in any of the policy and strategic documents, except the job description specified in Order (No338 of 2009). OECD experts (2014b) point out that the policies in support of school principals are considerably more limited, despite an

anticipated increase in responsibilities for principals in connection with the education reform and administrative and financial decentralisation process. In other words, the culture of compliance imposed by the very top-down hierarchical system has generated a culture of obedience on the part of school leadership towards the authority at the cost of strategic planning and development of their schools and teaching staff.

Before I turn to the school director's role and the teacher's role and responsibilities, it is important to discuss the financial aspect of decentralisation: how schools are resourced and supported; and why being an experimental platform is financed from the republican budget and how it impacts on the wellbeing of the overall system and the status of the teacher. In the following subsection I examine and describe the current system of secondary education financing, which in the OECD (2014b) report was specified as being 'culture of favouring high performers'.

4.4.3. Financial decentralisation and the culture of favouring high performers

In general, Kazakhstan has invested substantially in human development by growing its education spending 9.5 times over the past 15 years (Ashikbayev, 2014). However, as discussed in the Introduction chapter, the share of GDP devoted to school education, two percent, is considerably below the OECD average of 3.6 percent. In addition, expenditure per pupil in Kazakhstan is equivalent to 11.7 percent of GDP per capita, much lower than that of PISA top-performers like Poland (23.9%), Japan (22.8%), Switzerland (27.1%) and Estonia (25.8%). Other upper-middle-income countries with similar economic development indicators, such as Chile (15.3%) and Malaysia (19.1%), also devote more national resources than Kazakhstan to education (World Bank, 2013, p.15). Moreover, as the result of the decentralisation of secondary education financing that started in 2003, there is a variance in per-student expenditure across regions in Kazakhstan, indicating

considerable spending disparities, ranging from KZT 170 000 (USD 557) to KZT 373 000 (USD 1243) per year. These disparities occur because most regions in Kazakhstan receive subventions as their spending exceeds their potential reviews. Thus, it is not always possible for the subsidised regions to allocate budget for school financing above the minimum set by the Ministry of Education as the norm. In 2011, 13 out of 16 regions received budget subventions (Ministry of Economy and Budget Planning, 2011). In 2013, the local-budget financing of school education accounted for about 74 percent of all education expenditures or 1.8 percent of GDP. According to the official statistics, a huge proportion of a school's budget is usually assigned to staff salaries, between 80-93 percent depending on school size.

In my study, Audan allocates 75 percent of its budget to cover teacher salary, whereas the rural school Auyl spends 87 percent on wages. Both of these schools are located in subsidised regions. Thus, there is little or no opportunity for them to get budget above the minimum.

However there is a possibility for any school in any region to receive additional financing directly from the central budget by serving as a base for piloting and testing innovations. Schools and teachers involved in pilots are usually provided with opportunities to attend targeted PDC and have more opportunities for the exchange of experiences within and outside of their schools. However underachieving schools are not chosen for such pilots.

Auyl, for example, has no opportunity to be a centre for piloting as it is among the lowest-achieving schools. It cannot therefore benefit from 'transfers' from the central budget. On the contrary, Audan, which is now the second-best school in the district, is participating in three pilots: testing an e-learning system; piloting 12-year education; and introducing the Board of Trustees into school management. The Director of Audan contended that participation in the pilots allowed her to pay an extra wage to teachers and better equip the school:

> ‘By allowing the school to serve as a base for pilots, I can get some additional financing from the central-government budget or equipment. As a centre for piloting e-learning, our school was equipped with modern ICT classrooms. As a gymnasium I am allowed to divide classes into subgroups to allow teachers to work with smaller number of students allowing them to earn some extra salary’ (Director B).

In their analysis of school financing in Kazakhstan, the OECD researchers (2014b) concluded that the budget distributed from national level is somewhat biased in favour of new programmes; and facilities often contribute to the promotion of academic excellence and the constitution of an elite among students. The Aimak is a good example of the OECD experts' assertion. As a special base for testing the new education curriculum, Aimak is entirely financed directly from the national budget.

While the best-performing schools enjoy the privilege of working with selected students in a resourceful school environment, it is widespread practice for teachers in underachieving schools to contribute their own money in compensation for underfunding. In general, based on expert assessments (Sange, 2008), rural teachers across the country contribute out of their own pockets four percent of the annual secondary-education budget (Soros Foundation, 2009, p.91). A survey conducted by Sange (2008) among 60 schools in four regions revealed that 32 percent of directors working in urban areas and 43 percent of directors in rural schools spent out-of-pocket expenses to cover the budget deficit. The average amount spent ranged between 5 000 to 50 000 *tenge* (17 USD -167 USD) on the following items: housekeeping needs; organising school-wide events; purchase of methodological literature; preparing didactic materials; organising city/village event celebrations; attending professional training; subscriptions for newspapers and magazines; and photocopying services etc. (Sange, 2008, p.38).

In both the Auyl and the Audan, teachers reported that they all contributed out-of-pocket expenses to buy stationery, visual aids and supplies for their classes. In Auyl, however, the situation with essential supplies for physical-education classes and the science laboratories was in a state of flux:

> 'Since the *Äkímat* became responsible for the school requisition, it has been heavily cut back. Although I submit a list of the required items within the allocated budget, so to speak, they never procure them. What can we do? We buy balls to play volleyball, basketball and football out of our pockets' (Teacher A17).

In addition, at the focus-group discussion in Auyl, teachers complained that all of them are mandated to subscribe to national, regional and local newspapers out of their own pockets. While the experienced teachers expressed their support for mandated subscription, saying that at least by reading newspapers they kept themselves up-to-date on what was happening outside the village, the younger teachers were not happy with it, referring to the expected and unexpected additional expenses incurred by them during the education year, sometimes referred to as 'voluntary but compulsory contributions':

> 'We submit eight thousand *tenge*s every year, which is 'a voluntary but compulsory contribution', to host or if possible to stop inspection coming to our school. …. We do not question how the money is used. We hope it is used to stop some inspection visits to our school' (Teacher X[18]).

The approach described above of financing the best performers contributes towards widening the gap between the high-achieving and low-achieving schools, as well as exacerbating inequality across the rural-urban divide. In 2013, the average score in the UNT for students in rural schools was 66.50 points while for students in

[18] A Teacher choosing to be called Teacher X asking me that no further reference should be made to her in relation to school inspection.

urban schools it was 76.16 (OECD, 2014b). Thus, from the point of view of a rural/urban breakdown, UNT results reveal that the average score for rural graduates is 8.74 points lower (IAC, 2014, p.67). The gap is even wider between Auyl, with its average score of 60 points, and Audan, the second-best school in the region with 81 points. The gap between these two schools is considerable - 21 points. It is not possible to compare Aimak*'s* results, as its students do not sit the UNT test. Instead, they are trialling a new form of examinations based on criteria–based assessment. Responsibility for the efficient use of resources is reduced by the paucity of local and school autonomy and the existence of extensive norms; or, as discussed above, a culture of compliance coupled with a culture of favouring high performers, both dictated from the top

In the following section, I argue that not only do low teacher salaries and poor working conditions create a disparity between high and low-achieving schools; but that in addition the depressed socio-economic situation across all the rural areas and regions serves as a contributing factor in the declining status of the teacher in Kazakhstan.

4.4.4. Salaries and declining teacher status

According to the Decree (No1400 of 2007) of the Government of RK, the remuneration of teachers follows a *stavka* (teaching load) system, which means that teachers are paid per unit of workload measured in hours (OECD, 2014b, p.183). The standard *stavka* of primary and secondary education teachers is 18 hours of teaching time per week. Additional responsibilities are taken on by teachers which allow them to earn more on top of their basic salary. These duties include: managing a class; marking students' work; being responsible for a science laboratory; the temporary fulfilment of other duties; and working under challenging conditions, such as in rural areas and high-radiation-risk regions. However time spent on preparing lessons is not paid for separately. For example, I

asked the Physics teacher in Audan to explain how her salary is calculated. Table 4.2 illustrates this calculation, which we carried out together.

Table 4.2: Calculation of salary of Physics teacher in Audan gymnaiusm

Description of individual components of salary	**Calculation**
Approved Basic Minimum Salary (BMS) in Kazakhstan for the 2013-2014 academic year is 17697 *tenge* (59 USD)	
She has ten years of experience, which, according to the approved norm, equates to a coefficient multiplier of 2.68	
She has 1.0 *stavka, i.e.* 18 teaching hours. Thus 17 697 *tenge*s (BMS) should be multiplied by the coefficient of 2.68 to calculate the payment for 1.0 *stavka*	47 428 *tenges* (158 USD)
She is a First-Category teacher, which gives her 50% of BMS	8 849 *tenges* (30 USD)
She works as a lead class teacher, which accounts for a monthly compensation of 4 500 *tenge*	4 500 *tenges* (15 USD)
She also works with disabled children at home, which accounts for 7 000 *tenges* per month	7 000 *tenge*s (23 USD)
Compensation for working in a rural area is 25% of BMS	4 244 *tenges* (14 USD)
Total Net Salary:	72 021 *tenges* (240 USD)
Total Gross Salary (after deduction of up to 10% for taxes and social security payment)	**65 819 *tenge*s** (220 USD)

As Steiner-Khamsi, Harris-Van Keuren (2008) note, the current fragmented salary structure in the region [the former Soviet Republics] reflects cultural understanding of the teacher's role. They argue that using compensation for grading assignments or commenting on students' work makes these activities something that is outside of the teaching profession, thereby reducing the teacher's role literally to standing in front of the class and teaching. It is therefore not surprising that many teachers do not feel obliged to stay in the school beyond their agreed teaching hours, thus reducing their professional interaction.

In Auyl, the majority of teachers believed that extra work and preparation for lessons could be done at home. In addition, since many of them were engaged in farm work as an additional source of revenue, it was favourable for them to leave the school as soon as they delivered the lessons. For some, unfortunately, the

teaching profession was instead an additional source of revenue:

> 'Teaching is for me is an additional source of revenue, especially in winter. My primary means of supporting my family is farming' (Teacher, A12).

In the absence of ways to raise the base salary, there has been a substantial decline in teachers' status, leading in turn to a reduction in the recruitment of high-quality students to teacher-education institutions. In 2011, the average UNT score required to obtain government sponsorship to study at a teacher-education institution was 79 points out of 125, whereas self-funding students could be admitted to the same course for full-time and *zaočnoe* [19] study with the UNT score of 50 points (Zhumagulov, 2012). While the quality of school graduates entering teacher training through the government-sponsorship route is higher, following graduation many of them pursue better-paid jobs in other areas of the economy (ibid). This situation therefore creates a so-called 'double-negative loop', i.e. where high-school graduates applying to teacher-education institutions have low scores on average; and teaching graduates being employed by schools are also low achievers.

Additionally, while official statistics do not show the proportion of teachers with a *zaočnoe* diploma, it has been one of the main factors contributing to the further decline of the prestige of the teaching profession in society. For example, many teachers in Auyl identified *zaočnoe* study as a huge barrier to achieving quality education, as this form of study allows teachers not to attend classes:

> 'I am on *zaočnoe* study currently. I do not attend classes at the institution. It is useless. I work instead and earn money to pay for my exams [bribe

[19] *Zaočnoe* – distance learning, sometimes translated as blended learning or part-time study. During the Soviet period, this type of learning was offered to the specialist working in their specialised area with some self-study and some face-to-face study, with an exam at the end. It was acknowledged by Soviet scholars that the enormous expansion of distance education proceeded at the expense of its quality: 'In their resolution from September 10th, 1966, the CPSU central committee and the USSR's Council of Ministers listed the distance-education system among the problems which have been solved insufficiently so far' (Zawacki-Richter & Kourotchkina, 2012, in reference to Peters, 1967, p.11). Despite efforts to prevent distance-education institutions from becoming second-class schools (e.g. open appointments to professorships), the general problem of the lack of quality within distance education could not be solved.

examiners]. Instead, I find paid training courses on maths more useful. I have attended a few training sessions in the city; but again they cost money' (Teacher A16).

Analysis of teachers' level of education in all three case-study schools indicates that the proportion of teachers holding a diploma from a higher-education institution is comparable with the national level of 87 percent. However a very large proportion, 77 percent, of teachers in Auyl gained their teacher education through *zaočnoe* study against 33 percent[20] in Audan and eight percent in Aimak. This is shown in Table 4.3.

Table 4.3: Distribution of teachers in case-study schools' by level and type of education compared to national level

Ed. level	**National (2013)**	**Auyl (2013)**	**Audan (2013)**	**Aimak (2013)**
	294 897 teachers	43 teachers	119 teachers	103 teachers
Higher Education	87%	88%	96%	100%
VET	11.9%	12%	4%	-
Incomplete Higher Education	0.8%	-	-	-
General Secondary Education	0.3%	-	-	-
Zaočnoe type of education	No data	77.0%	33.0%	8%

Despite the fact that the first point of tension about teachers' preparedness to join a school starts with the their educational level, it is difficult to eliminate *zaočnoe* study: many schools in rural areas are experiencing a shortage of teachers mainly due to the poor socio-economic situation and the increasing trend towards urbanisation (IAC, 2014).

[20] The majority of teachers working in the *Audan* gymnasium who graduated from teacher-education institutions by means of the *zaočnoe* method are those who are full-time graduates in a specialist area (eg. chemists, engineers, architects, etc.), some with extensive experience of work in that area, and who enter the teaching profession at a later stage in their career by applying for *zaočnoe* study to teacher-education institutions.

The village where Auyl is located is no exception. Over the last ten years or so, according to statistics, twenty percent of the people in villages moved to the cities (Committee for Statistics, 2013); and more people, among them teachers, had plans to do so in the future. The main reason for teachers moving to the city was the lack of access to basic infrastructure, such as public transport; post offices; a basic healthcare service; cash machines; a library; mobile-phone and internet connections service; and a lack of job opportunities for their grown-up and educated offspring. There is no access to banking services in the village. Teachers therefore travel to the nearest town, 60 kilometres from the village, to collect their salaries:

> 'It is some three or four years since we [teachers] were all made to have a bank account with a card into which our salary is paid. The nearest ATM is located in the town. Today I collected all the bankcards belonging to my colleagues and had this piece of paper (she shows me the paper) with their pin codes and the sum of money each one wanted me to withdraw from their bank accounts. I withdrew whatever the sum was and brought it all back' (Teacher A4).

In spite of all the social and economic difficulties, it can be concluded that there is a high level of trust among village people. It can in all likelihood be explained as a mutual survival strategy. How this survival strategy affects teacher learning and collaboration will be elaborated on in Chapter Five.

While the teachers in the Audan are in a better position regarding access to basic infrastructure in the district town, they also lack access to a good healthcare service and job prospects for teachers' family members. Thus, in the same way as the teachers in Auyl, many teachers, especially the very experienced ones in the Audan, had plans to move to the city:

> 'My family has already moved to the city because my son and a daughter-

in-law have both got jobs in the city. I am going to work for a term and leave the school' (Teacher B21).

According to Order (No83 of 2016) of the Ministry of Education, teachers are mandated to upgrade their qualification every five years to one of three categories: Second Category, First Category and the Highest Category. This allows teachers to earn, respectively, an additional 30, 50 or 100 percent of the Basic Minimum Salary[21]; or stay in the same category by providing evidence. However, it there is no empirical study which studied the impact of teacher qualification on student outcome.

Nevertheless, according to the OECD survey, when Kazakhstani teachers were asked about the reasons associated with students' low results, about 69 percent gave as a reason inadequate qualifications on the part of the teacher (OECD, 2014b; NCESA, 2012). Moreover, an assessment by the Ministry of Education (2013) of the academic performance of students in grades 9 and 11 concluded that, in the majority of regions, students tended to score highly if they had a high proportion of teachers holding the Highest Qualification Category. However, as the OECD noted, there was no explanation offered as to why this assumption did not hold true for three regions: South Kazakhstan; and the cities of Astana and Almaty. In addition, according to the official statistics, on average across all regions, the percentage of teachers belonging to the highest-qualification category is two to three times greater in urban than in rural areas (OECD, 2014b, p161). This imbalance points to an important equity issue: it indicates that the students who most need better-quality teachers are not very likely to be taught by them.

In the following subsection, I examine the teacher-attestation system in order to develop an understanding of how the teacher-qualification categories are awarded;

[21] Approved Basic Minimum Salaryin Kazakhstan for the 2013-2014 academic year is 17697 *tenge* (59 USD)

what it means to be a qualified teacher from the point of view of the policy; and the policy's impact on teacher learning.

4.4.5. Teacher attestation and a culture of competition

The analysis of the distribution of the teachers in all three case-study schools by their years of experience (Table 4.4) and qualifications (Table 4.5) shows that teachers in high-achieving schools have better opportunities to pass the teacher attestation than those who are from low-achieving schools.

For example, the Audan has 18.6 percent more teachers with the highest qualification category compared to the national average (see Table 4.4); and 70 percent of teachers with between nine and 20 years' experience (see Table 4.3). In contrast, Auyl has 11 percent more teachers with less than eight years of experience than the national average (see Table 4.5); and a very low percentage of teachers with a Highest and First Qualification Categories (see Table 4.4). Aimak employs an equal number of teachers across the age range (see Table.4.4); and the highest percentage of teachers with the Highest Qualification Category (see Table 4.5). However it also started applying a new system of teacher-qualification appraisal in 2014, requiring teachers to qualify in one of six categories: Teacher-Intern; Teacher; Teacher- Moderator; Teacher-researcher; and Teacher-Expert.

Table 4.4: Distribution of the case-study schools' teaching staff by years of experience compared with the national level

Years of Experience	National (2013)		Auyl (2013)	Audan (2013)	Aimak (2013)
	Teachers No:	**294 897**	43	119	102
	Students No:	**2 500 000**	275	1125	575
	T/S Raito:	**1/8**	1/6	1/9.5	1/6
	School level:	**P/M/H**	Primary/Middle/High		Middle/Highs
20 years <		**33%**	28.6%	24.0%	31.0%
9-20 years		**35%**	28.6%	46.0%	35.0%
8 years and >		**32%**	42.8%	30.0%	33.0%

Table 4.5: Distribution of the case-study schools' teachers by Qualification Category compared to the national level

Existing Qualification Categories	National (2013)	Auyl (2013)	Audan (2013)	Aimak (2013)	Experimental qualification categories applicable only in Aimak (2016)	
	294 897 teachers	43 teachers	119 teachers	102 teachers		
Highest	**10.4%**	12.0%	29.0%	45.0%	0%	T-Expert
First	**31.4%**	23.8%	30.0%	12.0%	0%	T-Researcher
Second	**31.3%**	31.0%	20.0%	10.0%	0%	T- Expert
					02.0%	T-Moderator
No	**26.9%**	33.2%	21/0%	33.0%	85.0%	Teacher (T)
					13.0%	Teacher-Intern

According to the Auyl teachers, while it was easy for them to fulfil the requirements to obtain a Second Qualification Category, it was next to impossible to gain the Highest Category:

> 'It is no impossible for us to gain the Highest Category. A teacher who applies for this category must have high UNT-subject results; a student who is an Olympiad winner; participate in teacher competitions and succeed in winning; and have publications. We [rural teachers] can never have an Olympiad winner, because, everything is settled before the competition starts' (FG, Auyl Teachers).

To understand the concerns of the Auyl teachers, it is necessary to examine the teacher-attestation system itself that is regulated by the Order (No323 of 2013) of the Ministry of Education. According to this Order, collegiality, openness, consistency, transparency and objectivity are the declared principles of teacher attestation. The primary objectives of the teacher attestations are: i) ensuring high-quality teaching staff, ii) advancing the personal and professional preparedness of teachers to implement State education policy, and iii) promoting continuing teacher learning. The attestation process involves an analysis of the pedagogical activity of

teachers against criteria which are commensurate with their level of qualification as shown in Table 4.6.

Table 4.6: List of documents to submit to the attestation commission by an applicant to obtain or upgrade a qualification category

List of documents	Second Category	First Category	Highest Category
ID, Diploma, Employment Record Book, Certificate of teacher qualification category previously obtained	✓	✓	✓
i) Information summarising teaching experience (such as essays, creative reports, self-evaluation); UNT results.	✓	✓	✓
ii) Description of the teacher's performance in their professional activities for the previous three years.	✓	✓	✓
iii) Mandatory Professional Development 72-hour course certificate awarded by the Republican Institute of Professional Development	✓	✓	✓
iv) Results of independent evaluations of professional competence by employer and of lesson observation;	✓	✓	✓
v) Feedback by students and results of student survey;	✓	✓	✓
vi) Documents proving research and methodological work, participation in scientific conferences, creative competitions, roundtables and educational readings at various levels;		✓	✓
vii) Results of student participation in Olympiads and competitions;		✓	✓
viii) Copies of scientific and educational materials published in the media;			✓
ix) Results of teacher participation in teacher competitions.			✓

According to the attestation procedure, the Second Category is awarded by the school - which is quite straightforward if all the required documents are submitted to the school-based expert group; Open lessons are observed by the school management; and the *pedsovet* votes to support the category upgrade. Open lessons are exemplar lessons to which a teacher invites the school management and colleagues for two purposes: to share best practice; and to obtain written feedback to apply for teacher attestation.

A First Category is awarded by the *Raiono*; and a teacher is required to submit a portfolio and a reference from the school's Director for consideration by an expert group at the district level. Additionally, at this level, a teacher is required to show her achievements in various teacher competitions as well as the achievements of her students, which include the UNT results and winners of student Olympiads. Therefore, as discussed above, not only the system but also the teachers prefer to work with high-performing students and ignore the low achievers. The OECD review team came to the conclusion that the biggest problem Kazakhstan has to solve is the lack of knowledge about and concern for under-achievers among education stakeholders. They stated in their report that none of the Kazakh stakeholders at national level and in the regions showed an awareness of the importance of addressing the needs of academic strugglers. (OECD, 2014b, p.79).

As shown in Table 4.6, each level of qualification requires the teacher to hold a certificate of attendance for the mandatory 72-hour professional-development course (PDC) delivered exclusively by the National Centre for Teacher Professional Development 'Örleu' (NCTPD 'Örleu'), the cost of which is covered by the local budget. However teachers are allowed access to this mandatory professional development only once every five years, which does not adequately meet teachers' needs. Additionally, during the attestation process, a teacher is in a better position if he/she possesses as many certificates as possible showing participation in short-term PDC that a teacher herself/himself has chosen to attend at her/his own expense.

However, the practice that I witnessed in Auyl and Audan about sending teachers for short-term PDC did not reflect any choice on the teachers' part. One evening, when I was about to leave the school, the Deputy Director for Academic Work in Auyl entered the staffroom and informed five teachers about their being included in a one-day PDC which was due to take place next morning in the town located 60 kilometres from the village. Teachers were asked to have 2000 *tenge* ready to pay for the course as well as additional money to cover their travel and any additional

expenses. The list of teachers attending the course was sent by the *Raiono*. The Director therefore had no choice but to release the teachers to attend the course, despite the fact that no cover for their lessons had been arranged. Here is what one of the teachers said after returning from the course:

> 'The course was not applicable for my subject. We all know why the *Raiono* sent us to join the course. They think it is a win-win situation. The trainer has his payment in cash and we have our certificate, which we need for our attestation' (Teacher Y[22]).

Finally, to obtain the Highest Category, a teacher needs to submit the same list of documents and proofs of his/her achievement but to an expert group at the *Oblono*. At this level, in addition to all the documents required for the Second and First Categories, a teacher is required to demonstrate her/his individual innovation in the form of methodological workbooks, and publications in magazines and journals.

According to SPED-2020 as adopted in 2011, a new indicator to bring the percentage of teachers holding the First and Highest qualifications in each region to an average of 52 percent was introduced as one of the measures to improve the quality of education. The decision was based, as discussed earlier, on the basis of an assessment conducted by the Ministry of Education, in which they found that students tend to score highly on the UNT tests if they had a high proportion of teachers holding the highest qualification category (OECD, 2014b, p.146). In the same year, the Government made the results of the UNT one of the indicators for ranking *Äkímats,* with the aim of increasing the responsibility for methodological support and encouraging better financing of schools from the local budget. This measure, however, has created both positive but also some negative interdependence between schools, the *Oblono*/ *Raiono*/*Gorono* and *Äkímats.*

[22] A teacher choosing to be called Teacher Y asked me to make no further reference to her in relation to the PDC.

For example, Auyl had no teacher holding the Highest Category until the above-mentioned new indicator and ranking system was introduced. However, the Auyl administrative team admitted that they had been instructed to catch up with the rest of the system by increasing the number of teachers holding the highest and first categories as required by SPED-2020:

> 'Until 2012, no teacher held the Highest Category in our school. I applied for this category myself first because, according to SPED-2020, schools have to increase the number of teachers with the highest and first categories. However, many of our teachers struggle to achieve Olympiad winners and get their work published. I am encouraging my teachers to apply for the Highest Category, and I am trying to make arrangements to have their work published in newspapers' (Director A).

The comments made by the Auyl administration and teachers who had achieved the highest category were very worrying, as achieving categories had been possible only through particular arrangements. For example, while the Auyl Director says that it is easier to get the *Raiono's* help to get teachers' articles published in local journals and newspapers, the Deputy Director admits that teachers pay people outside the school to get their articles written and published.

> 'Of course, to be published in a newspaper or academic journal, we pay someone to write it for us, and then we pay to get it published' (Deputy Director A4).

It seems that it is also a widely accepted belief among teachers that participation in an Olympiad is not worthwhile if one cannot make arrangements to gain a winning place:

> ‘The *Raiono* helps us to negotiate the Olympiad winners at district level. However we cannot ask for regional-level Olympiad winners. It is much more complicated’ (Head of SMU A2).

One specialist at the *Raiono* called this kind of support by her institution and teachers’ acceptance of such support as the approach of ‘comrades in misfortune’ (*tovarišči po nesčast’ju*). This is because the ultimate aim of this cooperation is not about genuine methodological support, as expected from the *Raiono*, but ways of avoiding the rules and cheating the system for the sake of ordinary teachers to meet the SPED-2020 indicator. Moreover, although one of the declared principles of the attestation system is collegiality, in practice teachers are required to demonstrate individual achievements, hence fostering a culture of competition among teachers and allowing little or no opportunity for sharing and collaboration. This aspect of the case-study schools' teachers' practice is analysed and discussed in more detail in chapters Five, Six and Seven.

In this hierarchy, the role and the agency of school leadership and teachers are not specified in any of the policy and strategic documents, except the job description specified in Order (No338 of 2009) of the Ministry of Education. OECD experts (2014) point out that the policies in support of school principals are considerably more limited, despite an anticipated increase in responsibilities for principals in connection with the education reform and administrative and financial decentralisation process. In other words, the culture of compliance imposed by the very top-down hierarchical system has generated ‘a culture of obedience’ on the part of school leadership towards the authority at the cost of strategic planning and development of their schools and teaching staff, which I discuss next.

4.4.6. School leadership and a culture of obedience

According to Order (No338 of 2009) of the Ministry of Education, a school director's role and responsibilities include the appointment and dismissal of teaching and auxiliary staff; appointing his/her deputies upon approval of the *Oblono/Raiono*/*Gorono*; appointing Heads of the Subject Methodological Units (SMUs); managing school resources including the teaching body; and organising student learning in consultation with his/her deputies. He/she is also responsible for chairing the School Pedagogical Council (*pedsovet*), the highest level of collegial school self-government and the school's top decision-making body. In the current decentralised hierarchical system, a school director is appointed by the head of the *Oblono/Raiono/Gorono* with the *Äkímat's* approval according to the requirements set by the Ministry of Education (years of experience; knowledge of a series of legislation acts; basics of pedagogy and psychology; and recent achievements in the area of pedagogical science and practice). Unfortunately, the process of selection and nomination of a director takes place with no participation on the part of either the community served by the school or of the school collective itself.

Recently, this practice has been challenged by activist teachers and education observers (Shakhanov, 2015; Sagidullayeva, 2015; 2016; Mamashuly, 2015). Many of them argue that the current situation regarding the appointment of school directors not only ensures that the school leadership will follow the *Äkímat*'s rules but also make the *Oblono/Raiono*/*Gorono* feel obliged to fulfil the personal requests of officials, which leads towards corrupted practices, and will at times ignore teachers' opinion. They argue that during the era of Soviet centralised financing, when the school director was an employee of the Ministry of Education, a school collective and the *Oblono/Raiono/ Gorono* were protected from the pressure of the *Äkímats*.

The Head of the *Raiono*, whom I visited to receive official permission for my fieldwork, knew all about this practice. He tried to persuade me to choose another school instead of the one specified in the letter from the Ministry of Education, contending that the school Director was appointed by 'patronage'; and that the school was not doing well in school-leaving tests:

> 'I wanted to release the [Auyl] Director from her position last year, but I could not. I was stopped by 'a call from a high official'. She knows that her contract will not be extended if the school fails to deliver better results this year' (Head of the *Raiono*).

In 2011, under pressure from activists, the Ministry of Education introduced a centralised school quality-assurance system. This was decentralised within the devolution process and was part of the responsibility of the *Oblono/Raiono*/*Gorono* under the strict guidance of the *Äkímats*. The main reason for centralising this process was that the *Oblono/Raiono*/*Gorono* were performing two conflicting tasks: ensuring the provision of quality education and reporting on quality failures. Thus, it was very rare for inspectors to report schools that were performing inadequately (OECD, 2014b; Irsaliyev, 2013). In the first six months of the new centralised quality-assurance system, the external inspectors found that 20-25 per cent of schools were non-compliant; much more than the 0.8 per cent found to be non-compliant under the previous regional inspection system (ibid p.143).

Moreover, the inspection results identified a number of cases in which school directors had been appointed by 'patronage', which was made public:

> 'The director of a rural school, who was identified as the Head of the *Äkíms's* brother, employed his relatives in his school: his brother works as a teacher of Basic Military Preparation, his wife as a deputy director and two of his sisters-in-law work as a teacher and a librarian' (www.zakon.kz, 2015).

The practice of getting things done by using personal and family connections is not unique to the appointment of school directors. Unfortunately, the prevalence of a collectivist culture in the community, combined with the importance of kinship or *'clan'* in traditional Kazakh families, raises concerns at different policy levels (Collins, 2006; Schatz, 2004) and among researchers (Minbaeva and Muratbekova-Touron, 2013; Masanov, 1998; Mukazhanova, 2012).

For example, as a researcher I had planned to take a neutral position in relation to the case-study schools and the teachers I interviewed. However, in practice, I was for the most part referred to as, or expected to be, '*bízdíkí*' (in Kazakh) or '*svoi'* (in Russian), i.e. 'one of us', based on my place in the family genealogy.. In this case, I was referred to as 'one of them' because according to my genealogical identification I belong to the clan living in the area. I have to admit that it provided me with a certain degree of social proximity and also confidence in building enhanced rapport and communication with participants. During the interviews and focus groups, I learned that this collectivistic social structure is heavily rooted in different spheres of teachers' professional life, making them search for the ways to get the job done. This was true whether the job was related to teacher attestation, school inspection, publications, participation in teacher competitions and Student Olympiads. Although this phenomenon of 'one of us' is under-researched in reference to the education system, consideration of it sheds light on some aspects of the teacher's role in society and their way of establishing professional interrelationships in the school collective and beyond. The next section explores this further.

4.4.7. The power of blood and the people of the circle

Traditional Kazakh society was divided into three *zhuz* (hordes) - the Greater, Middle, and Small. Every Kazakh man belonged (and still does) to one of three *zhuz's* divided into smaller clans; and he is obliged to know his genealogical kinship. Historically, this division helped fathers to transmit information (as something secret, only for 'one's own') and property from father to son, from son to grandson, and so on, fostering a clan-based identification of the individual's social space (Masanov, 1998). In the present day, all Kazakh families keep genealogical records for at least seven generations; and, by extension, the people are all related to one another, especially in rural areas (Sanck & Finke in Sahadeo & Zanca, 2007, p.174). Minbaeva and Muratbekova-Touron (2013) in their research related to human-resource management, mainly in terms of business structure, referred to using personal contacts in this way in Central Asia as *clanism*. In clans, as researchers (Schatz, 2004; Collins 2006; Minbaeva and Muratbekova-Touron, 2013) assert, individuals are connected by an extensive network of kin and fictive kin ties or perceived and imagined kinship relations, in which individuals feel responsibilities to all members of that identity network. The members of the clan elite are therefore expected to take care of non-elite clan members, be it in terms of politics or business.

Max Weber (1922), who defined clans as a historically common form of social organisation in the nomadic and semi-nomadic regions of Eurasia, the Middle East and parts of Africa, assumed that clans would disappear with the emergence of modern states and the rise of institutional politics. However, Collins (2006) sees clans as having relevance long after the pre-modern era: 'in fact, in many ways, clans are very modern organisations ... [and] exhibit the 'modernity of tradition' in their ability to adapt and persist from earlier to later political systems' (pp. 43–44). Hence, he argued that clans are 'the critical informal organisations that we must conceptualise and theorise in order to understand politics in Central Asia and similar developing states' (Collins 2006, p.7).

According to Roy (2000), these networks of power and relationships that existed before socialism in Central Asia remained unreconstructed during the Soviet era. Instead, as researchers have shown, these networks adapted themselves to the new forms of social organisation in the Soviet era. More broadly, it was replaced by the phenomenon of *'blat'*, which according to Ledneva (1998) was aimed at acquiring desired commodities, arranging jobs, and the outcomes of decisions, as well as solving all kind of everyday problems. Ledneva argued that '*blat'* became a persuasive part of public life in the Soviet period, dividing people into 'horizontal' and 'vertical' *blat* networks. Horizontal networks were composed of people of similar status, known as 'people of the circle' ('*svoii ljudi'*), whereas vertical networks were composed of people of different strata interested in each other's connections and linked by kin, personal contact or, most often, intermediaries known as 'useful people' ('*nužnye ljudi'*) (ibid, p.121).

In fact, my data from all three case-study schools were full of cases where teachers sought help and support from their kinship ties and 'horizontal' and 'vertical' *blat* networks. However, it should be pointed out that there was a huge difference between how these practices were used in all three case-study schools depending on the power and positionality of each school's director.

For example, Auyl is located in a very small village, where many of the residents belong to one '*clan'* and are related to one another; and thus the teachers too share close ties with the community. Almost all the teachers have a two-or-three-generation memory of people attending the school. In fact, there is the sense of teachers having a divided identity, split between being a teacher and being a member of the community:

> 'Many of my students are children of my relatives. They know me as a teacher, as an aunt and as a mother of their cousins. We visit each other's homes, and we share meals.' (Teacher A1).

Everyone in the village knew about the way the school director had been appointed by using her connections. When this practice was coupled with the very low students' achievements in school-leaving tests, residents started showing little trust in the education system overall, but never challenged the Director. Teachers do not discuss this issue amongst themselves and always avoided the subject when it was brought up during the interviews. The reason seems to be that there is a certain hesitation because of the kinship ties, as well as the limited geographical mobility for teachers in the country; and overall a fear of losing their jobs:

> 'I am lucky to get this job. You know that there is no other paid job in the village. I am going to apply for *zaočnoe* study at a pedagogical institute next year and become a maths teacher' (Teacher A14).

On the contrary, in the case of Audan, which is located in a district town, the school collective consists of a more diverse population of teachers belonging to various *'clans'*; and representing a range of ethnic groups. Interestingly, there was a generally accepted preconception about teachers' ability to be disciplined based on their ethnicities:

> 'There are many ethnic Russian teachers in the school. The Director is a German. You know that we [Kazakhs] sometime admit that German and Russian teachers are more disciplined than us [Kazakhs]' (Deputy Director B3).

Some teachers asserted that they work hard because of the high standard of discipline set by the school Director; and many believed that it would not be possible to maintain that kind of discipline if there were a Kazakh headship in the school. In doing so, they referred to the way in which the traditional system of doing favours works in the Kazakh communities:

> ‘Because we have a German Director, many parents and even officials cannot ask her to grant any favours when it comes to the placement of a child in our school or the appointment of a teacher. If we had a Kazakh director, I think the situation would be different’ (Deputy Director B4).

While teachers credited the Audan Director with all of the school’s achievements and praised her for being able to stand up against outside pressure, the Director herself admitted that lately she was finding it difficult to deal with unhealthy relationships based around the granting of favours which had become established between the *Raiono* specialists and teachers in her school:

> ‘Recently, the *Raiono* instructed me to send some teachers to the CoE course. I understand some of them are dear friends and some are family members. Even though I do not always agree with the *Raiono’s* choice of teachers to send on such a course, I let those teachers join the course’ (Director B).

Finally, in the case of the Aimak, the appearance of alternative and selective entrance procedure for teachers to get the teaching position in this school received a good deal of attention from the public, for and against. At the beginning, there was a little trust among parents; students and local teachers towards the new school competitive selection system said the Director. Here is how the teachers who went through the competitive selection shared their experience comparing it with their previous experiences:

> ‘I applied for a job, and actually, I was trying my luck. Because, we all know that if you want to get a job in very good school then some sort of arrangements though acquaintances should be done beforehand. I was very happy when I got the job’ (Teacher C5).

While there is belief and trust towards the selection process among the students and teachers who currently study and work in the Aimak, a lot of parents whose children failed to be admitted are sceptical about fairness of the system. However, the school Director hopes that time will prove they were wrong:

> 'I get a lot of calls from high officials and parents about students' admission. There were attempts to bribe and so called '*let's make an arrangement things'*. However, I have one answer to all, please go to the managing company. Because, I know that managing company does not care about officials and powerful parents in the region. It is autonomous. I hope, soon people in the region start understanding that you need to work hard to study or teach in our school' (Director C).

As such, the structural hierarchy within secondary education reflects the national and Soviet culture of the country, which has been described in a number of studies (Ardichvili 2001; Minbaeva and Muratbekova-Touron 2013; McLaughlin et al. 2014) as high power distance; high on uncertainty avoidance; higher on particularism; and rather high on context culture and dominated by collectivism. Thus, teachers acting in a highly regulated system with high distance from power and high respect for authority feel vulnerable in problematic situations, i.e. instead of looking for a solution in collaboration with others, discussion of the problem is avoided. As a result, they look for a solution in the traditional way: connecting to people they know well; usually outside of their own profession; and higher in their status, i.e. *'bízdíkí'* – the power of blood and the people of the circle.

Additionally, when all these characteristic are coupled by far most important external assessment in the secondary education system and one of the most widely used to measure and rank the performance of students, schools and *Oblono/Raiono*/*Gorono* and the *Äkímats* - the UNT - has created a so-called 'mistake-intolerant culture'. The aspects of which I am going to present and discuss in the following section.

4.4.8. UNT-based league-table ranking and a mistake-intolerant culture

For years, the UNT results have been used to evaluate teacher work, compare and rank the performance of schools and the *Oblono/Raiono/Gorono* and the *Äkímats*, all with the aim of increasing teachers' motivation; the *Oblono/Raiono/Gorono's* responsibility for methodological support; and to encourage better financing from the local budget. As a result, some *Äkímats* have decided to make education a priority by seeking partnership with teacher-preparation and teacher professional-development institutes; while others introduced motivational incentives for teachers by announcing such awards as 'Teacher of a Year', 'The Best Teacher' and 'The Best Veteran Teacher'. In different years, teachers were presented with a flat, a car and a financial reward as an appreciation for their services.

Alongside some positive signs of development, the ranking system gave rise to particularly worrying problems. In some regions, it allowed *Äkímats* to use their powers to blame schools for not delivering results, without proper analysis of the causes of the problem; and at times without providing schools with adequate financial, methodological and professional support to produce better results. This resulted in teachers and schools adopting practices that maximised the 'result' for their class/school, such as teachers focussing only on the learning outcomes that will be assessed in the UNT rather than the full range of competencies of the curriculum ('teaching to the test') (OECD, 2015b, p.183). Schools also started making underachieving students leave school after the completion of Grade 9 with a Certificate of Completion of the Middle School, which allows a student to enter the VET or college for further study; or look for a job. 'By eliminating underachievers at this stage, schools hope for better results at UNT later' (Mirazova, 2012).

This practice was confirmed both in Auyl and Audan. For example, the Audan psychologist states that they must at any cost get the parents of underachieving students to agree to the latter leaving school after they obtain their Certificate of

completion of the Basic School[23]:

> 'We visit underachieving Grade 9 students' parents home, invite them to school, chase them everywhere, but we get them to apply for VET as soon as they graduate from Grade 9. We also do everything to help them to get admission for further study' (Psychologist B1).

Moreover, using raw students' achievements based on the UNT to judge and compare the performance of individual teachers and schools brought more damage to the teaching profession and contributed towards growing corrupt and varied ways of cheating in the examination without considering these practices to be shameful or unlawful. For example, the Auyl administrative team and its teachers genuinely believed that their school was rated at the bottom of the ranking in the region because, as it was put by the school director, their students showed their actual knowledge whereas students from other schools were fortunate to get help from their teachers during the exam. Her concern was explained better by a teacher who escorted Auyl students to the UNT exam:

> 'The UNT always takes place in a gymnasium, accredited as an exam centre, in the district town. I escorted our students to sit the UNT exam two years in a row. Students in this gymnasium and from other schools had smartphones. So, they were able to scan exam papers and send them to their teachers and receive fully answered papers. Unfortunately, we do not have such phones. Although I asked them to come out of the exam room if they had the chance, they could not. Later, they said they were scared to come out and ask for help. As a result, they did not do well at the exam. I think that is not fair' (Teacher A7).

[23] Issuance of the 'Certificate of completion of the Basic School' is regulated by the Decree No175 dated March 15, 2006, of the Government of the Republic of Kazakhstan 'On the approval of types and forms (description) of State Documents on education and the Rules for their issuance'.

Schools and individual teachers failing to deliver the required results leads to sanctions in the form of school-budget cuts, dismissal of school principals and public shaming of teachers. For example, in the *Qyzylorda* region, as a result of the 2014 UNT[24], 27 school directors were fired for not delivering the expected results, an event which was widely discussed in the media. In the same year, *Shymkent* region fired two of its school directors. In September 2016, in *Aktöbe* region, an unprecedented event took place when eleven school directors left their jobs just a week after the school-year started (Sarsenbina, 2016).

In general, the kind of 'naming and shaming' was not avoided in all three case-study schools during the period of my research. One example comes from Audan, where a very experienced teacher shared her story of being shamed:

> 'Our system does not tolerate mistakes. One day you are 'a star' and the other day you might be 'named and shamed'. One of my students scored zero in Maths in the UNT test. I was shamed in front of all the directors, along with other teachers who shared my fate and the big collegial meeting. I have delivered high results consistently in all previous years. I even have a Medal for my services to education. …This one incident changed my reputation. It is even worse that it happened at the end of my career' (Head of the SMU B1).

As such, while officials (Ruby & Sarinzhipov, 2014; Irsaliyev, 2013) argue that the UNT served its purpose in eliminating corruption around entry to the higher-education institutions, it allowed the creation of a fear-based, authoritarian and 'mistake-intolerant' system. It therefore stopped teachers and schools building their capacity to analyse, reflect and understand the issues from inside. Rather, as the activist teacher Akhmetzhan (2016) asserted, it made them concentrate on how to comply with external requirements at the expense of children's futures. A group of international and national experts (Sagintayeva et al., 2014), in preparing a

[24] The region ranked 11 among 16 regions with the UNT average score of 73 out of 125.

Diagnostic Report for the Development of Strategic Directions for Education Reforms in Kazakhstan for years 2015-2020, has identified the UNT as a bottleneck for any innovation and changes in the system. The UNT test was called the most powerful but at the same time most dysfunctional system that would serve as a barrier for the dissemination of the NIS schools practices of 'action research' and 'teacher collaboration'.

Finally, in the next subsection I would like to explore on teachers' voices in Kazakhstani school context and 'exit option' from the profession.

4.4.9. Teacher voice and 'exit option' from the profession

It is not surprising that teachers in Kazakhstan are afraid of raising their voice, as officials at different levels keep contradicting their own rhetoric in which they declare that 'teachers are no longer all-knowing figures' but 'facilitators'; and 'we are not developing the sum of knowledge', but 'students' competencies and skills'. One such contradiction took place in the West Kazakhstan region when the *Äkím* on his official visit to a rural school decided to check a Geography teacher's knowledge - a test which the teacher failed. The catchy headline 'A Geography Teacher Fails the *Äkím's* Exam' was covered by the national channels and went viral. By reading and analysing the comments written by various commentators to this article, it can be said that, overall, Kazakhstani teachers are less trusted than officials.

Some activists (Shakhanov, 2015; Sagidullayeva, 2015; Mukhametkhali, 2015, Manashuly, 2015) contend that this is the price that the Ministry of Education is paying for neglecting the status and prestige of teachers as the result of the process of decentralisation. They contend that the *Äkímats* draw teachers into carrying out work outside of their professional responsibilities, sometimes at the cost of their lessons. They argue that, despite the fact that the Law on Education (article 51) stipulates that 'teaching staff should not be attracted to any work not related to

his/her professional responsibilities', teachers follow the order of the authorities from fear of being dismissed. Dismissal is usually carried out by the school director appointed by the *Oblono/Raiono/Gorono*. One governor of an *Äkímat* responded in the media to this criticism, as follows:

> 'If a teacher does not wish to carry out community works, he/she should change their job. …They [teachers] should understand that more than 60 percent of the local budget goes to schools. We [*Äkímats*] therefore do not have other people to use' (Mukhametkhali, 2015, www.jetysunews.kz).

Hence, while activists are demanding that the Ministry of Education return to the practice of teachers being directly employed by the Ministry and accountable to the central system, schools and teachers continue to follow the rules and orders of the *Äkímats* executed by the *Oblono/Raiono/Gorono* and school directors. For example, Sagidullayeva, an activist teacher who stood up against the *Äkímat's* demand for participation in *subbotniks*[25], contended in her interview with a newspaper that, on top of helping *Äkímats* to clean streets and garbage, teachers were also made to buy tickets for concerts in order to fill the concert hall with spectators; and subscribe to regional and local newspapers. In her interview, she explains at length the considerable number of reports teachers submit at the demand of the *Äkímat*, as well as the nature of the subjects with which they deal:

> 'We submit reports on the number of people living in the village [a certain number of houses is allocated to each teacher]; record the occupation of each individual in a household; the number of children attending the school; the number of youths called for military service; the number of horses, cows, sheep, chicken and ducks; and we are even asked to count the number of cucumbers and tomatoes planted. We are also obliged to ask if they keep

[25] *Subbotnik* - from Russian 'суббо́та' on Saturday. Saturday was a day of volunteer work following the October Revolution. The tradition continues in modern Russia and some other former Soviet Republics. Subbotniks are mostly organised in order to clean garbage from the streets; fix public amenities; collect recyclable material; and carry out other community services.

> any guns, how many houses they have, and what kind of car they drive, the number plate of which should be recorded for reporting purposes' (Sagidullayeva, 2015).

Teachers in Kazakhstan do not have a tradition of taking political action, because teacher unions have no power to protect their rights (Isa, 2016, in reference to Shynybekuly, 2016; Temirbekov, 2016). In the Soviet era, the teacher unions served largely as 'conveyor belts', transmitting the wishes of the authorities and enforcing discipline'. Thus, the very notion of adversarial negotiations, not to mention industrial action, was impossible for teachers to address via the teacher unions (Eklof, 2005, p.206). Teachers have therefore never perceived trade unions as a forum for professional or intellectual discussion. The union is rightly viewed as an agency more of control than collegiality (Kerr, 1991 p.340). As in Soviet times, dissatisfaction by teachers in Kazakhstan is expressed individually, with no support from the part of the trade unions, sometimes by choosing the 'exit option' - that is, flight from the profession.

For example, a teacher from Audan, who attended the CoE course but failed to pass the qualification exam, encountered problems from part of the system. Now, having overcome all the difficulties, she is thinking of quitting teaching, calling the system unfair:

> 'The school management did not want me to join the CoE course; but I knew that it was my right. So the school was not happy with me when I joined the CoE course. Then, at the end of the course, I failed to pass the qualification exam. Although I had a chance to repeat it, I was ashamed because it was a topic for everyone to discuss in our school. I passed the qualification exam successfully at my second attempt. Then, I had to fight the system to get my salary increased, because according to the rules the CoE course should have given me a 30% increase. It was a very lonely

> journey and I decided to quit teaching. It is a very unfair system' (Teacher B14).

We can see from all the above examples that teachers have not been provided with opportunities for viable democratic participation in school life in the periods both before and after Kazakhstan's independence. Nevertheless, official rhetoric continues to emphasise that current approaches to school reform focus on the development of democratic processes for school improvement. This is done by assigning new roles to teachers as 'agents of change', 'teachers of new formation' (Nurmuhanbetova, 2016), 'teacher-facilitator', 'teacher-researcher' etc. ('Örleu', CoE). These approaches are not clearly stated in any of the official documents; and so teachers in the case-study schools found it difficult to discuss this with me when asked.

In general, it was found out that what teachers do on a day-to-day basis was incompatible with the democratic process, i.e. they had no voice; and some did not want to have a voice in what, why and how changes should be adopted and implemented. In addition, there is also a deep-seated belief among school leadership and teachers that, in the education-system hierarchy, teachers are those who execute what is dictated from the top, not innovate or initiate changes per se. The following excerpt from an interview conducted in Audan provides an example of such an attitude:

> 'In the 1980s, when I started working in the school, subject programmes and textbooks did not change from year to year. Now, every year we have a new subject programme and new textbooks. Sometimes changes are introduced several times during a school year. In 2012, we were instructed to increase the number of hours for teaching the State Language [Kazakh]. Several months later, we received an instruction to cut the number of hours for the same subject. When we were about to finish the second term, we were instructed to add one hour of Kazakh back again. I hired additional

> teachers for additional hours; and then I fired; and again I had to look for teachers. However, for us, the Order is the Order! We are here to execute them, not discuss them (Director B, 2014).

Thus I argue that the remnants of the past - in this case, the legacy of the Soviet system, - are far more likely to survive within teachers and within the system as a whole if teachers are uncertain of the meaning of changes dictated from the top and do not feel part of the discussion. Confusion about the direction of the changes and the performance-based accountability system imposed on teachers by the policymakers both contribute to silencing teachers.

4.5 Summary

In this chapter, I have described the policy environment in which the case-study schools operate; and discussed the various contextual forces that have an impact on teacher collaboration for learning. The evidence collected from the various sources allowed me to reveal the complexities of the context in which teachers' work. The complexities cover a range of aspects: from the legacy of Soviet schooling; to the aspiration of the country to develop its independent educational system; and returning again to nostalgia about Soviet schooling. The contextual forces that can have an impact on teachers' way of working and interdependence, along with their possible impacts on teacher collaboration, were identified and discussed as follows: i) the changes in the State Standard, subject curriculums, textbooks and assessment system; ii) the overall idea of education democratisation and how it generated a culture of compliance; iii) the impact of financial decentralisation favouring high performers; iv) teacher salary and its impact on the declining status of the teacher; v) teacher attestation and how it creates a culture of competition; vi) the role of the school leadership and the culture of obedience created by the current system of appointing school leaders; vii) the wider cultural values concerning human interrelationships as based on the power of blood and the people of the circle; vii) the school-ranking system based on the school-leaving exam - the UNT

- which leads to a mistake-intolerant culture; and xi) the lack of a teachers' voice and an 'exit option' from the profession. As such, this chapter has outlined the boundaries for presenting and discussing the findings from the case-study schools which follow this chapter.

Preview of Chapters Five, Six and Seven

Informed by the sociocultural context of the schools explored and discussed in Chapter Four and keeping in mind the theoretical framework employed and my methodological stance, the following three Chapters (Five, Six and Seven) present and discuss the findings from the three case-study schools as a means of answering the following research questions:

- What is the nature of teacher collaboration for professional learning in the case-study schools?

  Sub-questions:
  - Is there any teacher collaboration for professional learning in case-study schools?
  - If, yes, what forms of teacher collaboration for professional learning are there in case-case study schools?
- What are the key factors that facilitate or hinder teacher-collaboration for learning in case-study schools?

The third, final research question about the implication of the findings for the development of a culture of collaboration for professional learning in Kazakhstani schools will be answered in the final Chapter Eight.

The following three Chapters (Five, Six and Seven) will be organised around three main themes identified during the data analysis: i) the schools' facilities, resources and leadership and their capacity; ii) teachers' professional characteristics and their role; iii) the school organisational culture and formal internal activity-systems in place that afford or constrain teacher collaboration for exchange and learning. All three chapters describing and discussing the findings from the case-study schools are therefore organised following the same logic.

Each chapter is divided into four main sections. The first section describes background information about the case-study school under consideration, including the school's location, facilities, environmental conditions and the school leadership. This is followed by a description of the findings about the teaching community characteristics (comprising of teaching experience, education level, professional qualification and their role and responsibilities within the school organisational structure). Next, I describe and discuss the findings concerning the organisational and structural conditions for teacher interaction and collaborative practices. This section consists of sub-subsections. Each sub-subsection reports on one of the rule-governed activity-systems and sub-activity-systems that were identified as platforms for learning and sharing in the case-study schools' settings, such as: *pedsovet,* SMU, young teacher mentoring, subject decades, and methodological day.

I use Engeström's (2005, p.31) concept of a mediational model of activity-system to illustrate each of the activity-systems by identifying the subject; their object; the outcomes expected; the rules in place to regulate it; the communities involved; and the distribution of labour, as illustrated in Chapter Three in data- analysis section 3.5 (Figure 3.4, p.88). Special attention will be paid to the mediating artefacts. In the context of presenting the findings artefacts will be interchangeably used with instruments and tools that are broadly defined as observable manifestations (norms/rules/products) created in the case-study school to achieve the desired outcomes from a particular activity or a sub-activity system.

The final section of each chapter summarises and synthesises the overall findings; offers answers to the research questions; and presents the main conclusions and implications for the specific case-study school under consideration.

Chapter 5: Teacher collaboration for learning in the Auyl comprehensive school

This chapter tells the story of the state-funded comprehensive school, Auyl, established in 1960; and located in a relatively poor rural area with a population of slightly more than 1,200 people, comprising mainly ethnic Kazakhs. Auyl operated across all grades, from pre-school (age 6) to grades 1-11 (age 7 to 17). The student population of 286 at the time of the study was homogeneous - all ethnic Kazakhs. The medium of instruction offered is Kazakh across all grades. The average class size was 22[26], with a minimum of 17 students and a maximum of 32. The student-to-teacher ratio was 6.7:1[27] and therefore one of the lowest in the country.

5.1 The Auyl comprehensive school facilities, resources and leadership

The Auyl is located in a two-storey building constructed in 1976, with a central entrance door and foyer. In the foyer, one finds the portrait and biography of the person after whom the school is named. The corridor walls were empty of anything but a laminated poster of the country's anthem; and an information display-board for announcements. It was expressly forbidden to put any posters, students' work or information up on the wall.

There are ten classrooms used for conducting classes. Despite the fact that there are enough classrooms for the school to operate in one shift, the school functioned in two shifts: from 08:30 to 13:35; and from 14:00 to 19:00. The classrooms are standardised, with enough space to accommodate 30 pupils and a teacher. Only two classrooms were equipped with computers, one of which was linked to an

[26] The average class size in Kazakhstan is 18.9 (OECD, 2014b, p.237).

[27] Class size and student-teacher ratios tend to be very low by international standards, especially in the more sparsely populated northern half of the country (national average in 2010: 9 students per teacher; OECD average in 2009:14 students per teacher in secondary education) (OECD, 2014b, p.236).

interactive whiteboard but without any connection to the internet. The only computer with a connection to the internet was located in the Director's office. Only five teachers had home internet connection. Mobile connection was brought to the village in 2008; but the signal was not reliable; and mobile phones were used for calls only. Teachers therefore had no opportunities to be involved in remote networking and learning from the resources available on the internet. Only a handful of teachers knew how to use email. Thus teachers preferred to travel to the district town (located 60 km from the village) to submit their reports to the *Raiono* specialists.

The staffroom located next to the Director's office contained a large round table with twelve chairs, a sofa, a mirror and three empty bookshelves. It served as the common space for teachers to use as a working area and also to relax. However observation of the staffroom during fieldwork indicated that only a few teachers used it as a working space. When I asked some of them why they did not use the staffroom space, the answer was that many of them preferred to stay in their classroom. Additionally, teachers in Auyl shared a common belief that there was no need to stay in school after delivering their lessons and that preparation for lessons could be done at home (see subsection 4.4.4, p.123). Otherwise, teachers on duty came to the staffroom when the bell rang to collect the class journal[28] for their next lesson and check the announcement board. The types of announcements put up on the board were mainly related to meetings of the school administrative team and Open lessons conducted by teachers as a part of the subject decades.

The school library was located on the first floor, at the far end of the corridor. It had no heating system; and so it stayed locked at all times during the winter. The main resources that one could find in the library were copies of textbooks and literature for student free-choice reading. All of them were purchased in

[28] A class journal is the main state document for registering attendance and recording grades in Kazakhstan that was preserved from the Soviet schooling. The maintenance of a separate journal for each class or group by each teacher is mandatory and regulated by the Order No502 of October 23, 2007 of the Ministry of Education 'On the approval of type of documents to be used for accountability purpose by educational organisations in the process of educational activities'.

compliance with the list approved by the Ministry of Education. The librarian feared keeping any unauthorised books in the library, due to the inspection system in place:

> 'We strictly follow the list of books approved by the Ministry to be purchased by schools. I cannot buy books at teaches' request. If a teacher wants to have journals related to their subjects and teaching methodologies, I can help them to get a subscription and teachers pay for a subscription out of their pockets.' (Librarian A).

There were therefore no newspapers or journals available in the library. Even teachers' own publications were not available there. In other words, the library served no role in the facilitation of teacher professional development or learning.

There was a spacious canteen on the ground floor. It served mainly pre-school, primary-school and some secondary-school students with free hot meals. School staff did not use the canteen at all, as everyone preferred to go home. The canteen was mainly used for conducting schoolwide events and celebrations. No drinking water was available in the school. The lavatories were located outside the school with no sewerage system. The school used coal to heat the school, which was used very economically to keep the inside temperature at around 18-20 degrees above freezing, while, during my fieldwork, the outside temperature stayed at around 17-22 degrees below.

In general, it can be said that Auyl teachers preferred to leave for home as soon as they were finished with lessons. This was because of the above factors relating to the environment within the school, coupled with wider socio-economic factors in the village. For example, many teachers had large families consisting of elderly members (grandparents) and more than one child to take care of, while their husbands were busy with farming (see sections 4.3, p.106-107).

The school's Director had had two years of experience working as a Director; and, before that, another two years of working as the Deputy Director. The Auyl Director was appointed by using her connection among the high officials and by putting a pressure on a Head of the *Raiono* (see subsection 4.4.6, p.136). Her appointment was followed by a decline in students' results in the school-leaving test – the UNT. There was therefore a tension within the teacher community concerning the ability of the Director to manage the school. However, the teaching community never challenged or discussed her ability to do her job for the reasons discussed in subsection 4.4.7 (p.140), that is the power of blood and kinship.

On the other hand, everyone interviewed for my study stated that her choice of appointing a new Deputy Director for Academic Affairs was going to make a difference in the coming exams. The teacher-participants in the focus-group discussion admitted that the new Deputy Director putting forward lots of new ideas for analysing student data. However, the new Deputy Director saw that analysing student data was not enough to achieve better results; and instead she said she needed more focused PDC for her teachers by criticising the externally provided teacher professional development courses:

> 'The PDC provided by the regional centre for teachers does focus on issues we have. They rather lecture us on what they know well. Never mind what we need. I would prefer to have more focused PDC for my teachers' (Deputy Director A2).

Auyl was financed from the local budget only. Auyl did not serve as a platform for any innovations or pilots; and thus could not rely on any additional source of financing (see subsection 4.4.3, p.119). One of the reasons for not receiving any additional funding was the school performance and the very weak leadership record of the Director of the school.

From the above description, it can unfortunately be said that the Auyl community did not use the potential of the school facilities (the library; the staff room; the open space; the canteen; and the focused schedules) to promote continuous teacher professional development, as there was a lack of vision on the part of the school leadership and the facilities were not valued by the teaching community. Nevertheless, in general, it can be said that there was a strong sense of unity among Auyl teachers in identifying themselves as a part of a school *kollektive*. However, research-participants' beliefs in the possibility of delivering student results by cheating the system through using people of the circle and useful people, as discussed in section 4.4.8 (pp.144-145), can be considered as a lack of trust in education policy.

In the following subsection, I will be looking at the role of the Auyl teacher community and its place in the school oganisational structure and the school decision-making process. I also describe the make-up of the Auyl teaching staff, as measured by their level of their education, years of experience and qualifications in order to develop an understanding of how those characteristics and the assigned roles shape and impact the research participants' beliefs about continuous professional development and collaborative learning.

5.2 The Auyl comprehensive school teacher community

Auyl's teaching staff of 43, including the school administrative team, was predominantly female (86%). In Auyl, teachers at different levels are represented in the school *pedsovet,* where they can have an input into the decision-making process regarding different aspects of school life (see Figure 5.1). Teachers were also grouped into Subject Methodological Units according to their subject areas. There were five SMUs in Auyl, each managed by a Head appointed by the Director: i.e. 1) SMU for pre and primary school; 2) SMU for Mathematics and Sciences; 3) SMU for Humanities; 4) SMU for Languages; and 5) SMU for Music, Technology, Art, Physical Education (PE) and Preparation for Basic Military

Service (PBMS). The Ayul administrative team was represented by the Director and three Deputy Directors, the latter being responsible for: 1) Academic Affairs; 2) Scientific and Methodological Matters and 3) Pastoral Matters. The Deputy Director for Pastoral Matters had three assistants: a psychologist, a social pedagogue and a social analyst[29].

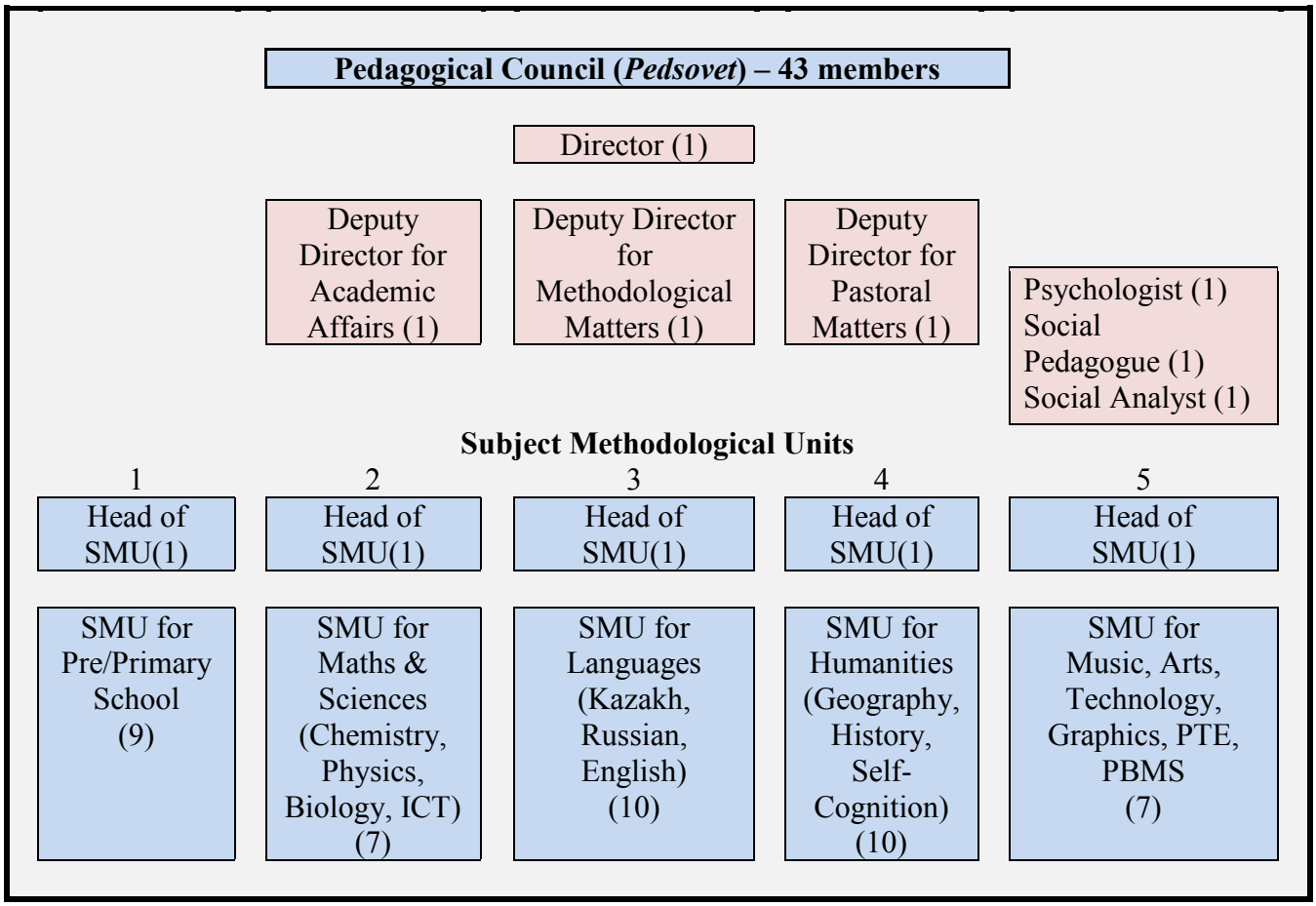


Figure 5.1*:* Auyl comprehensive school organisational hierarchy and structure

The Auyl teachers were highly homogenous, all being ethnic Kazakhs. The teachers at Auyl shared close ties with the community. More than 26 percent of the teachers had attended the school; and 100 percent had family members who had attended the school. This certainly had a considerable impact on the school's

[29] A social pedagogue and a social analyst, both of these positions were introduced in Kazakhstanis comprehensive schools recently to work with the students from a poor family, orphans, children with disabilities and to organise home study.

organisational culture. For example, while it is universally the case that novice teachers occupy a rather low standing in the status scale (Huberman, 1989; 1993), in Auyl it was coupled with the expectation that young teachers should show respect to and obey without question their more experienced colleagues. Moreover, there was also an unwritten rule that the school administrative team should be respected and obeyed.

Auyl employed a very high proportion (77%) of teachers who had studied through the *zaočnoe* route (see Table 5.1). The *zaočnoe* route has become one of the main factors contributing towards a substantial decline in the status of teachers in Kazakhstan as a whole (see subsection 4.4.4, pp.124-125).

Table 5.1: Auyl school teaching staff: distribution by years of experience and levels of qualification compared to the national figures

By Years of Experience				By Qualification Category		
	National	**Auyl School**			**National**	**Auyl School**
More than 20 years	33%	**28.6%**		**Highest**	10.4%	**12.0%**
9-20 years	35%	**28.6%**		**First**	31.4%	**23.8%**
Less than 8 years	32%	**42.8%**		**Second**	31.3%	**31.0%**
				No	26.9%	**33.2%**

The distribution of Auyl teachers by age indicates that 28.6 percent of teachers with more than 20 years of experience are graduates of the Soviet period; and another 28.6 percent with between 9 and 20 years of experience are those who attended Soviet schools but graduated from higher education during the post-Soviet period. In other words, these are the teachers whom I term the 'Soviet generation'. A more distinctive characteristic of 'the Soviet generation' was that at the heart of their work was the idea of '*kollektivism*' or '*kollektive'*. They were ready to protect the school's collective image against all the odds, of which they were well aware. In other words, as one of the representatives of this generation explained, her generation of teachers 'never bites the hand that feeds them':

> ‘We [the Soviet generation] were brought up with the values of our own community [Kazakh] and also of the Soviet ideology. In short, it is best explained by saying – ‘*Su íšken qudyqqa tukírme’*[30] [that is, ‘Do not spit into the well – it may provide you with water to drink’] (Teacher A13).

By contrast, teachers born in the last decade of the Soviet era (i.e. in the 1980s) and in an independent Kazakhstan (after 1990s), whom I call here the ‘independent generation’, seemed more open to a stranger like myself. They put self-interest above the school *kollektive* and personal rights before collective responsibility. In other words, they seem hold more individualistic values compared to the Soviet generation. For example, a young teacher aspired to gain experience in Auyl while she was pursuing her diploma in pedagogy through z*aočnoe* study, and then move to the city, where she thought she would have better opportunities for self-development:

> ‘I find paid math training courses that I attended in the city more useful than my z*aočnoe* study. My plan is to get some experience in the village school before I get my diploma from the pedagogical institute, and then to move to the city’ (Teacher A16).

At least five teachers were expected to retire within five years in Auyl. Those were secondary teachers of Mathematics, Physics and Music as well as three primary teachers. During the time when I was conducting my fieldwork, Auyl was already experiencing a shortage of teachers in Mathematics, Physics, Chemistry and English, whereas it had a surplus of teachers in History, Physical Education and the Kazakh and Russian languages. One of the peculiarities of the school was that, while it operates across all grades, its student population of 286 meant that it had only one class for each grade, with a minimum of 17 and maximum of 32 students

[30] Teacher A13 also mentioned me that there is an equivalent of this saying in Russian by reminding me of its exact translation, that is ‘*Ne pljui v kolodetc, - prigoditsja vody napit’sja’ (transcript in Russian)* - both sayings may be directly translated into English as ‘do not spit into the well – it may provide you with water to drink’ or ‘never bite the hand that feeds you’.

in a class. Thus, out of 19 subjects taught across the secondary grades, 11 subjects had to recruit only one teacher, therefore making it difficult to find a replacement if the teacher decided to leave or retired.

For example, the only Biology teacher working in the school, who was yet to finish her study at the pedagogical institute, was under immense pressure, owing to the school administrative team's lack of foresight in preparing her properly for teaching the subject when there was an experienced teacher available to mentor her:

> 'An experienced biology teacher retired last year. When she was around, I was never asked to try to teach. This year I was asked to start teaching biology. I am now struggling with my teaching. I have no prior teaching experience' (Teacher 12).

This feature of a single teacher teaching a subject seemed to contribute to teacher isolation. Additionally, there was a shared belief among the teaching staff in Auyl that they could only learn from teachers specialising in the same subject area as themselves; or by attending the externally organised subject-specific PDC. This belief may be based on how the subject curriculum set out, based as the latter is on lesson-by-lesson planning in exact accordance with the textbook.

For example, the only English teacher believed that teaching English could only be learnt from teachers of English and by attending PDC delivered by external experts; but not from other subject teachers in her own school:

> 'I have no-one to learn from in our school. I found the regional seminar [conducted by the external experts] for English teachers useful. I also came across a teacher in one of the district town schools who spoke English for the entire lesson. I am bit worried that I cannot do it, but I do my best' (Teacher A15).

When I observed her lesson the next day, she spoke only English in her lesson with fifth-grade students[31], a group who hardly understood a word of English. It was therefore rather concerning that the main priority for her in terms of learning and teaching appeared to be her own mastery of English. She herself linked this with her desire to leave teaching and become a translator.

> 'I am in this school because there is no other teacher of English. Once the school gets someone to teach, I probably leave to a city and look for a job of a translator. I want to master my English' (Teacher A15).

In general, the characteristics of the Auyl teaching community were comparable with the characteristics of the teaching community on a national level, as demonstrated in Table 5.1 (p.160). However, concern should be raised around the predictable qualification-upgrade requirements that the Auyl teachers followed in order to fulfil the mandated requirements of SPED-2020, raising the number of teachers with the highest and the first qualification categories quickly and at any cost (see subsection 4.4.5, p.132-133). The comments made by the Auyl teachers who had achieved the highest professional category were very worrying, as achieving categories had been possible only through particular arrangements. It was not possible for me to assess the quality and the content of the articles written by teachers who qualified to obtain the highest qualification category, because none of them were kept in the library and no teacher had a willingness to share their articles with me.

Informed by the Auyl teachers' belief about teacher learning and its value for their practice, I would now like to examine the interrelationship of the teaching staff and their collaborative practice within the Auyl's structural activity-systems (*pedsovet* meetings, SMUs, young teacher mentoring and subject decades) reported by research-participants as being the main platforms for their interdependence and

[31] According to the State Compulsory Educational Standard, students in all state-funded schools - except streamed schools such as gymnasiums, lyceums and schools for gifted and talented children - start learning English beginning in Grade 5.

learning. To reiterate, I employ Engeström's (1987) concept of a mediational model of activity-system to illustrate each of the activity-systems (see Figure 3.4, p.89). Attention will be paid to the level at which the tools/instruments/artefacts are appropriated by Auyl teaching community to achieve the required outcomes from the activity-systems.

5.3 Collaborative practices in the Auyl comprehensive school

The Auyl teaching staff, including the school administrative team and middle management, reported that they interacted with each other on multiple levels: 1) in *pedsovet* meetings; 2) as a member of the SMUs; 3) as a mentor and a mentee; and 4) in the subject decades. In general, these are all rule-governed activity-systems that were initially set up as part of the Soviet schooling system in order to control the delivery of a centralised curriculum. The current set of official documents analysed also identified that teacher input into decision-making can occur at the school level through participation in the *pedsovet* and through the Subject Methodological Units (SMU)[32], young teacher mentoring and subject decades. In the following subsections, therefore, I analyse the responses of the Auyl teachers; the school administrative team; and the school's middle-management regarding how they used these rule-governed activity systems to collaborate for learning.

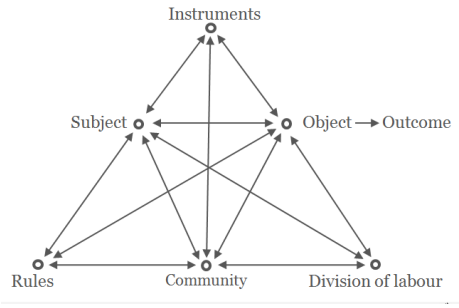
[32] According to the Law of the Republic of Kazakhstan 'on Education', dated July 27, 2007, educational organisations can establish a collegial management body: 'Forms of collegial management of organisation of education may be council (academic council) of the organisation of education, board of trustees, pedagogical, methodological (teaching and methodical, scientific and methodological) councils and other forms. Model rules for to establish a body, including election procedure, is approved by the competent authority in education (item 9).

5.3.1 The *pedsovet* activity-system in the Auyl comprehensive school

According to the Order (No272, 2007) of the Ministry of Education, the *pedsovet* is the school level collegial decision-making body. It deals with the fundamental aspects of school life: adopts the school Charter; makes decisions about the improvement of the educational and pastoral processes; teaching methods; considers teachers' qualification upgrades; approves students' final grades; and cooperates with the parents' committee. It is chaired by the Director and represents all the members of the teaching staff. At least five *pedsovet* meetings should be held during the school year, as mandated, and others held as necessary. Its reports and procedures are checked during the school inspection. The main artefacts and tools that were available in Auyl included: the *pedsovet* plan; the *pedsovet* meetings agenda; and *pedsovet* minutes and decisions as illustrated in Figure 5.2.

Mediating Instruments/Artefacts/Tools:
Pedsovet plan
Pedsovet meeting agendas
Pedsovet minutes and decisions

Subject:
School collective



Object:
Collective decision-making

Outcome:
Improve teaching and students' pastoral care

Rules:
Order of the Ministry on *pedsovet*
Order of the School Director to set up a school *pedsovet*

Community:
School community
Parent committee
Local Departments of Education
Department of Quality Control of the Ministry of Education.

Division of labour:
Director's role
School collective's role

Figure 5.2: The *pedsovet* activity-system and mediating artefacts as used in Auyl comprehensive school

Analysis of the Auyl's *pedsovet* plan indicates that, in many respects, the structures and procedures associated with the *pedsovet* are constructed in such a way as to conform to the framework provided in the policy documents. Appendix O displays a copy of the school *pedsovet* plan for school year 2013-2014. In accordance with the plan, there were six *pedsovet* meetings planned by Auyl for 2013-2014. Each meeting has an agenda consisting of three to six items to be discussed at the *pedsovet*. The responsibility for preparing each of the *pedsovet* meetings is assigned to the members of the school administrative team, dependant on the issues to be discussed. There was no opportunity for me to attend the *pedsovet* meeting in Auyl, as there were no scheduled *pedsovet* meeting during the period of my fieldwork.

As I wanted to learn about the degree of collegiality (*kollegial'nost*[33]) and collaboration in the Auyl *pedsovet,* I asked questions in one-to-one interviews about the teachers' views of the *pedsovet.* I also looked for an answer in the focus-group discussions. The analysis of the data showed that perceptions about collegiality in terms of the *pedsovet* differed across the focus groups, mainly based on each group's position in terms of power and the role they played in the school organisational structure. That is, while the school administrative team contended that it provided space for teaching staff to participate in drawing up an annual plan, including what to discuss in *pedsovet* meetings, teaching staff said that they would agree with whatever was proposed by the school management team.

For example, a focus group held with the school administrative team reported that a *pedsovet* yearly plan had been drawn up in consultation with all the Heads of the SMUs and individual teachers wishing to contribute:

[33] In this study, I will use the term 'collegiality' as a management principle aimed at overcoming the subjectivity and authoritarianism inherent in managing a holistic pedagogical process (education and upbringing); and also as a way of uniting the whole school collective in achieving a common goal by sharing responsibility for the collective decision as defined by Slastenin, Issaev, Mushenko and Shiznov (1997) in their textbook on pedagogy. In Kazakhstani schools, this principle is implemented through the *pedsovet*. The term *pedsovet* is part of the legacy from Soviet schooling, where collective pedagogical thought is concentrated; the constant exchange of experience take place (Serebrykov, 1959, p.23); and collective responsibility is shared.

> ‘Every year we develop a *pedsovet* plan in collaboration with my Deputies. First I listen to them. They bring their own plans, and they talk me through their plans, which they draw up together with the SMUs and individual teachers. As the result we have a plan, which is then discussed at the *pedsovet*.’ (FG, Director A).

In contrast, the data from the focus group held with the Heads of the SMUs indicated that the *pedsovet* plan was taken care of by the school administrative team, while the responsibility of the Heads of the SMUs was to take care of the SMU’s annual plans. Nevertheless, all the participants confirmed that there had been a change in how *pedsovet* meetings were held, following the appointment of the new Deputy Director:

> ‘The new Deputy Director provides us with the *pedsovet* agenda beforehand. Recently all the Heads of the SMUs were asked to prepare reports and an analysis of the first term’s results. Previously, we used to listen to the school administrative team’s prepared speech: now we bring real issues and discuss real concerns’ (FG, Head of SMU A5).

When I asked the same Head of the SMU during a one-to-one interview if there was room for teachers’ questions at the *pedsovet*, her answer was as follows:

> ‘Teachers do not ask questions at the *pedsovet*, because nobody wants to look like ‘a white crow’/ *belaja vorona*[34]/. …However, there is some positive change in the way *pedsovets* conducted with the appointment of a new Deputy Director’ (Head of SMU5).

The above account corroborates with the accounts from the focus-group discussion with teachers, which showed that the *pedsovet* platform was still used to make

[34] *Belaja vorona* /a white crow/ – idiomatic expression for someone who stands out from a group by looking or behaving differently.

formal speeches and reports by the school administrative team with little or no participation on teachers' part:

> 'Usually, the Deputy Director for Academic Affairs makes a speech (*dolklad*[35]). She talks about the term's results. She tells us what is wrong and what is good about our work' (FG, Teacher A6).

While the minute of the *pedsovet* confirms that the Director did formally discuss issues with the whole staff at the *pedsovet,* from the teachers' account it was clear that the decision-making responsibility continued to rest unambiguously with the Director and her administrative staff:

> 'Usually, it is the Director and the Deputy Directors who tell us what we should do and we get it done' (Teacher A5).

As such, there was little indication that the Auyl *pedsovet* served as a collective decision-making platform or platform for collaboration. It can be stated that, in this case, the way the collective responsibility had been used by the school leadership, probably unknowingly, leading to unchallenged compliance with rules and regulations dictated from the top. However, despite this fact, there were signs of teachers' willingness to take responsibility and collaborate on what might be called 'real' issues - discussing issues of teaching and learning; and sharing experiences to improve students' results - when they were exposed to different ways of working initiated by the newly appointed Deputy Director.

Let me now turn to the analysis of the Subject Methodological Units, described by one of the teacher-participants as 'a platform for teachers who have relevant specialist subject-teaching knowledge and practice, allowing more opportunity for the exchange of ideas and learning' (Teacher A6).

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[35] *Doklad* – formal speech prepared beforehand which highlights data in a mainly positive way.

5.3.2 The Subject Methodological Units activity-system in the Auyl comprehensive school

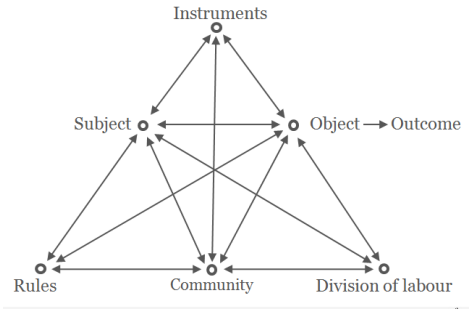
According to the Order (No583, 2007) of the Ministry of Education, a Subject Methodological Unit is an association of subject teachers established to develop suggestions and recommendations for the implementation of educational curricula in various subject areas, with the aim of improving student achievement and for the purpose of their pastoral care. Usually the Heads of SMUs are experienced teachers appointed by the director and they represent the school's middle management. The number of heads varies depending on the size of the school. Schools are allowed to create an SMU if there are more than three teachers in one subject area. If fewer, then schools are advised to create methodological units uniting different subject teachers. Usually, the Deputy Director for Academic Affairs is assigned to oversee the work of the SMUs. However the Heads of the SMUs interact with the school administrative team as a whole, represented by the Director and his/her Deputies, on matters regarding the work of his/her SMU. The work of the SMUs is checked during the school inspection.

As illustrated in Figure 5.3., mediating artefacts and tools available in Auyl in relation to the work of the SMUs included: an SMU plan, agendas for meetings; SMU minutes; and SMU files and reports.

Mediating Instruments/Artefacts/Tools:

SMU plan
SMU meeting agenda
SMU minutes
SMU files and reports

Subject:
SMU teachers



Object:
Implementing and delivering subject programmes

Outcome:
Improve student's achievements and students' pastoral care

Rules:
Ministry Order
Director Order
Local Department of Education Instructions

Community:
School community
Parents Community
Local Departments of Education
Department of Quality Control of the Ministry of Education

Division of labour:
Deputy Director
Heads of SMUs
Teachers as members of SMU

Figure 5.3: The Subject Methodological Unit activity-system and mediating artefacts as used in the Auyl comprehensive school

In Auyl, the SMUs' work had to be carried out in strict compliance with regulations and guidance, as one Head of the SMU noted:

> 'I ought to have my six files related to the SMU's activities in strict order with the regulations and guidance in place. Those files are on the following subjects: methodological work; legal regulations; the SMU annual plan; internal school monitoring; subject programmes; and on teacher attestation. Our [Head's] main work is to make sure that when a teacher is assigned to a task from the *Raiono* or the Ministry they meet the deadlines. We observe young teachers' lessons, conduct seminars, work on monthly and yearly plans, and conduct SMU meetings every month' (Head of MU A3).

By contrast, an experienced teacher, who had previously worked as the Head, stated that the main role of the Heads was to keep documents in order for inspection; and the fact that many activities set out on paper never get implemented was ignored. Yet another teacher representing the SMU for Humanities described the work of the Head of the SMU as 'work on the side that she did on the run':

> 'We never had a formal SMU meeting. Teachers get assigned to tasks on the run. It appears to be work on the side for her [the Head of the SMU] that she can do on the run' (Teacher A17).

Nevertheless, there were signs of the old ways of working changing, so to speak. For example, the newly appointed Head of the SMU for Languages wanted to create space for teachers to meet frequently; and wanted her paperwork to be in line with the way in which her SMU worked. She also confirmed that her predecessor's work was as described by Teacher A17:

> 'I am newly appointed Head of the SMU. My predecessor was an elderly teacher. For her, the work for the SMU was something she did along the way while doing other things. I plan to work differently. My papers will set out what we do in the SMU' (Head of SMU A5).

Many of the teachers noticed the there was a gradual change in the character of the work performed by the SMUs. They attributed this to the appointment of the new Deputy Director for Academic Affairs:

> 'The new Deputy Director for Academic Affairs is trying to change the way we work. At the first SMUs' meetings of the current year, we discussed the results of the subject decade and the issues experienced by beginning teachers. It was the first time that we discussed real issues' (Teacher A2)

In addition, a beginning teacher admitted that the fact that the work of the SMUs was changing was helpful for her learning:

> 'At the SMU meetings, we have started to discuss Open lessons, which is helpful for young teachers like myself' (Teacher A14).

It was interesting how the participants in my study reflected on the changes taking place in the work of the SMUs - some of them realising it only for the first time while discussing the topic with me. Many of them stated that they had never thought of those changes before they spoke to me about it. At the same time, many of them were reflective concerning the other aspects of sociocultural context and school conditions that hinder the democratic thinking process. Here is one such reflection from the Deputy Director:

> 'It is, of course, good to ask the kind of questions you ask and make teachers think and change. However, I, as a Deputy Director, cannot make some teachers work in the same way. This is because I am a daughter-in-law or I am somebody's cousin; and I am younger than many of them. Many of them knew me as a schoolgirl. To be honest, most of the time I go along with their way of working' (Deputy Director A2).

As such, while teachers in Auyl formed a departmental community on paper, in reality they experienced conflict and tensions between the generations of teachers and their ways of working with one another, which was also dictated by the school's proximity to the wider community and its collectivist value system requiring respect to elderly teachers.

Yet another tension that was not discussed openly in the school community but that was a factor in hindering genuine collaboration among Auyl teachers was the division between teachers who had completed full-time study and those who had qualified through the *zaočnoe* route. Although many of them identified the *zaočnoe*

route as a barrier to effective teaching, for some it was important that I distinguished between, on the one hand, those teachers who had gained their *zaočnoe* degree in the Soviet period and, on the other, those who had gained it more recently, stating that 'back then' [in the Soviet period] it was a credible degree:

> 'Out of nine teachers in my SMU, seven hold diplomas gained through the *zaočnoe* route. I myself graduated following a *zaočnoe* study. However, back then [in the Soviet time], we used to go to the institute three times a year for a month to study. We used to work in the library and attend seminars and lectures. Now what? Everyone holds a diploma, but not everyone knows how to write a lesson plan or how to set an aim for the lesson or objectives' (Head of SMU A5).

As discussed in the previous chapter, there was widespread negative perception regarding the quality of the *zaočnoe* qualification; but little was being done by the Ministry of Education to tackle the issue (see subsection 4.4.4, p.124-125). Schools do not indicate in any of their reports that a teacher has followed the *zaočnoe* route. While there is an assumption that teachers learn and become part of the teaching profession by being mentored, it was hardly the case in Auyl.

The next two subsections discuss the sub-activity-system with the Subject Methodological Unit activity-system relating to the mentoring of young teachers[36] and conducting the subject decade. Both were identified as being the platforms for teacher interdependence by research-participants in Auyl.

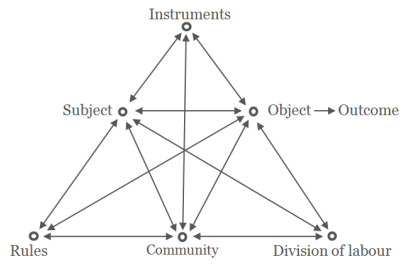
[36] Instead of the term Newly Qualified Teacher (NQT), it is more accurate in the Kazakhstan school context to use the terms 'young teacher' or 'beginning teacher'. This is due to the fact that a teacher can qualify after he/she obtains their professional qualification category. I will use the terms 'young teacher' to refer to a NQT and a beginning teacher throughout this thesis.

5.3.2.1 The young teacher mentoring sub-activity-system in the Auyl comprehensive school

According to an instructional letter from the Ministry of Education, every school should, at the beginning of the school year, organise a young-teacher mentorship programme. The main aim of this programme, as described in the instructional letter, is to organise the young teacher's induction into the professional school culture. The ultimate expected outcome from the young- teacher mentoring is to prepare a qualified teacher. A mentor should be assigned to a mentee by the order of the school director. The main responsibility for organising and overseeing the work which the mentor teacher carries out with the mentee lies with the Head of the SMUs. Thus, the young-teacher mentoring activity-system is a part of the work of the SMU; and so it is a sub-activity-system derived from the SMU activity-system as shown in Figure 5.4. The artefacts and tools that were available for a young teacher in Auyl included the young teacher's previous knowledge and knowledgeable others.

Instruments/Artefacts/Tools:
Previous knowledge
Knowledgeable others

Subject:
Young teacher



Object:
Induction into the professional school culture

Outcome:
Qualified teacher

Rules:
Ministry Rule on teacher recruitment
Instructions about young teacher mentoring
School Director Order to assign a mentor

Community:
School Community
Parent community
School administrative team
Local Departments of Education

Division of labour:
Deputy Director
Heads of SMUs
Mentor teacher
Mentee teacher

Figure 5.4: The young-teacher mentoring sub-activity-system and mediating artefacts as used in Auyl comprehensive school

The instructional letter of the Ministry of Education specifies many other mediating instruments (such as mentoring plans; lesson plans; lesson observations; and feedback sessions) to be employed to achieve the desired outcomes in mentor and mentee work. Unfortunately, however, none of the existing mentors and mentees were able to show me their plans for mentoring, lesson observation and feedback sessions as specified in the instructional letter from the Ministry of Education. The only available resource in relation to mentoring in Auyl was an order from the Director about the appointment of mentors to young teachers. Hence, the young teachers in the mentoring programme relied on their previous knowledge on how to conduct lessons, or look for knowledgeable others willing to help them to learn about the practices in the school

Here is how the Auyl Director explained to me how mentoring work in her school is initiated:

> 'At the beginning of each school year, I assign a mentor to a young teacher. I invite both of them to meet with us and we ask the young teacher to work closely with the mentor. The mentee is also informed that, if he/she needs any help from the school administrative team, we are always happy to help him/her' (FG, Director A).

However, while the young teachers confirmed the procedure of assigning a mentor, they were sceptical about the support and help they received through mentorship. There was a belief that the mentorship arrangement was only there on paper to show to the inspection team. Here is how a young mathematics teacher expressed her view about her mentorship:

> 'My mentor is very experienced. She tries to help me only when I approach her myself and ask questions. To be honest, most of the time she does not have time. I really do not want to comment on this, because I know we need

papers for the inspection. So, instead, I learn from a retired teacher at home, from my father-in-law' (Teacher A16).

By contrast, the newly appointed Head of the SMU for Languages, who (as discussed in the previous subsection, p.171) wanted the SMU be engaged in real work rather than paperwork, expressed her disappointment about the beginning teachers' preparedness to work with mentors:

> 'A beginning teacher of Russian joined us two years ago. She worked as a teacher for two terms and left for maternity leave. She came back to teach this term and she is working for a month or so now. As you know, while a teacher is on maternity leave her *'staž'* (employment track record) keeps accumulating. That means, by now, she has two years of experience. She is not willing to be mentored saying that she has two years of experience and that is sufficient for her to be able to teach' (Head of MU A5).

When I asked the same beginning teacher - whose daily lesson I had an opportunity to observe - if she needed any support or mentorship, she responded that she had an agreement with the Director about the terms of her work schedule. Although, according to the Order of the Director, she was assigned a mentor to work with for that school year, she did not feel obliged to follow the suggestions of the Head of the SMU:

> 'I know how to teach. I made an agreement with the Director that I would come to the school for two hours every day in the afternoon. I have small children at home and I cannot leave them for longer. I do not think observing other teachers' lesson makes any difference to my teaching' (Lesson observation, Teacher, A13).

As such, taking into consideration all the beginning teachers' experiences in Auyl, it can be said that there was no shared understanding among the school

management team, the Heads of the SMUs and the teachers about the value and focus of young-teacher mentoring. It therefore did not properly serve as a learning platform for young teachers.

Nevertheless, at the focus-group discussion, participants said that during the subject decades they all have an opportunity to conduct an Open lesson in order to share their own experiences and to observe other teachers' work. However my observation of the Open lessons and teachers' feedback sessions as conducted as part of the subject decade was that this was a battlefield for teachers; and especially so for young teachers. The following subsection discusses the mandatory subject decade activity-system to be held by each SMU during the school year and the Open lessons as a part of the subject decade.

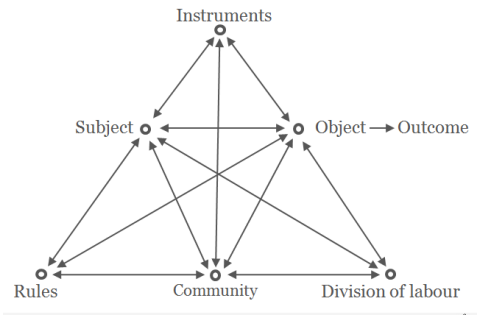
5.3.2.2 The subject decade sub-activity-system in the Auyl comprehensive school

The Deputy Director for Academic Affairs in Auyl said that 'the subject decades constitute a systematic means of maintaining professional development and the exchange of best practice among teaching staff and are conducted by each of the SMUs once per school year' (Deputy Director A2). The subject decade takes place over a week to ten days for each subject area. Teachers of the subject organise various activities, including seminars, and school-wide events as a way of sharing experience. According to the instructional letter from the Ministry of Education, Subject decades are the recommended form of organising in-school professional development. In the school structure, subject decades are sub-activity systems within the Subject Methodological Units.

Figure 5.5 illustrates this. Artefacts available for mediatating subject-teachers' exchange of experience in Auyl were found to be: Open lessons which included lesson observation and feedback sessions; the knowledge of teachers who have participated in subject decades in previous years.

Mediating Instruments/Artefacts/Tools:
Open lessons/Lesson observation
Feedback sessions/Previous knowledge

Subject:
SMU teachers



Object:
1) Experiences Exchange
2) Teacher Qualification Upgrade

Outcome:
Teacher professional development

Rules:
Ministry Instructions
Pedsovet plan
SMU plan

Community:
Subject methodological Unit
School Community
School administraitve team
Local Departments of Education

Division of labour:
Deputy Director
Heads of SMUs
Teachers
Students

Figure 5.5: The subject decade sub-activity-system and mediating artefacts as used in Auyl comprehensive school

During my fieldwork, two subject decades were held in Auyl: by the SMU for pre and primary-school and by the SMU for Languages. The main activity that was mandatory within the subject decades was Open lessons. Both of the subject decades were restricted to holding Open lessons. In total, I observed three Open lessons. As described by an experienced Auyl teacher - whose Open lesson I had an opportunity to observe – An Open lesson is 'a model lesson that a teacher can demonstrate to his/her colleagues' (Teacher A3). On the other hand, the Deputy Director observed that:

> 'Usually Open lessons are conducted under two sets of circumstances: by an experienced teacher with the aim of sharing best practice; and any teacher applying for teacher attestation so that they can receive colleagues' feedback. When based on such grounds, the school administrative team approves the teacher's application' (Deputy Director A1).

In both cases, at the end of the Open lesson a teacher reflects on her/his lesson and observers provide feedback. The characteristics of the Open lessons that I had the chance to observe in Auyl were that the students were the teacher's normal students; the lesson content was drawn from the subject programme; the lesson had been rehearsed on the part of both students and teacher; the teacher's reflective comments were limited to explaining the aims and objectives of the lesson plan; feedback from the school administrative team and other colleagues emphasised the weaknesses of the lesson with less attention being paid to its strengths; and no teacher commented on what she/he had learned from the lesson which might improve their teaching practice.

One teacher (Teacher A5), whose Open lesson I observed with her colleagues, stated in one-to-one interview that she had been trying out the same lesson with the same class for a week in preparation for the subject decade, so that students learned their script by heart. This was something acceptable for everyone in the school. Moreover, teachers were encouraged to demonstrate a perfect lesson by rehearsing it again and again. However in these rehearsed lessons it was difficult to see or even understand how the pedagogical approaches used were supporting students' learning. The focus of the teacher delivering an Open lesson was therefore on minimising criticism from the observers. The observers' task, on the other hand, was one of finding the lesson's drawbacks. Here is an example of what sort of feedback was provided at the lesson Open lesson conducted by Teacher A3 (Appendix P contains the record of the lesson observed):

> 'We know that [Teacher A3] is a very experienced teacher. Many young teachers learn from you. However your children were loud and noisy today. Please pay attention to their behaviour. I think you need to take time to give them proper instruction to work with cards, posters, etc.' (Feedback session, Head of the SMU A3).

I also observed six daily lessons delivered by teachers of different subjects; and these looked nothing like Open lessons. To begin with, the teachers were naturally tense during the classes and the students looked worried when I came to observe their classes. I was not introduced to the class and instead the teachers told the class about me beforehand, right after I asked their permission to attend the classes, which I did at least one day in advance. It was obvious that the warm-up sessions so widely used in Open lessons had nothing to do with daily lessons. For example, the teacher started her daily lesson with Grade 10 students, which I observed, with a warm-up session. From the students' reaction, one could tell that it was rare for them to do this kind of activity. Some students looked puzzled; but everyone carried on with what they were asked to do by the teacher.

There were no active-learning approaches used by teachers in any of the daily lessons observed. A lot of attention was paid to what was written in the textbooks. Any form of interaction was between the teacher and an individual student. Students concentrated on getting the right answers to the teacher's questions.

Unfortunately, it was evident to me that the pedagogy and the efforts made to prepare Open lessons had nothing to do with the daily lesson. In other words, the Open lesson, as was rightly admitted by the Deputy Director, were 'show-off lessons' (Deputy Director A2). It is, of course, difficult to generalise and draw conclusion from the very limited number of lessons observed. However, my summary of the teachers' Open lessons is in line with what was stated by Chichibu (2015), a Japanese scholar specialising in Lesson Study, who had the opportunity to observe Open lessons conducted by Kazakhstani teachers. He wrote: '[The Kazakhstani] teacher delivering an Open lesson receives little formative feedback and an opportunity is missed to increase the effectiveness of classroom observation in order to improving pupil learning and teaching' (Chichibu, 2014, www.lessonstudy.co.uk).

5.4 Summary and discussion: answering the research questions

With specific reference to the Auyl school context, this section summarises and synthesises the main findings and also offers answers to the research questions:

- What is the nature of teacher collaboration for professional learning in Auyl?

  Sub-questions:
  - Is there evidence of teacher collaboration for professional learning in Auyl?
  - If yes, what kinds of teacher collaboration for professional learning are there in Auyl?
- What are the key factors that facilitate or hinder teacher-collaboration for learning in Auyl?

This final part of this section presents the main conclusions and the implications of the findings for Auyl.

5.4.1 The Auyl comprehensive school vision

In general, this chapter has recounted the story of Auyl, a state-funded comprehensive school located in a relatively poor rural area and with a highly homogeneous teacher community. Due to the size of the school, it had a very low student-teacher ratio and comparatively small class sizes. The main goal of Auyl school at the time of my fieldwork was to raise students' attainment in the UNT. However, the Auyl administrative team and its teachers genuinely believed that their school was rated at the bottom of the rankings because the Auyl students were not able to get help from their teachers during the exam, as was done by all other schools (see subsection 4.4.8, p.144). The findings show that this view has a huge implication on the Auyl teachers' perception about teachers own learning, which I discuss further in the following sections while answering the research questions.

5.4.2 Forms of teacher collaboration for professional learning in Auyl comprehensive school

Overall, three forms of teacher collaboration were identified within the Auyl school context based on teachers' motivations: i) teacher collaboration as a compliance strategy; ii) teacher collaboration as a survival strategy; and iii) teacher collaboration as part of job responsibility. These forms of collaboration occurred in both formal and informal settings.

1) Teacher collaboration as a compliance strategy

The mediating artefacts used to achieve the expected outcome form activity and sub-activity systems strictly compliant with what was recommended by the directives of the Ministry of Education, with little or no appropriation of those recommendations in a way that would improve teaching and school performance. For example, the concept of conducting an Open lesson as a part of the system of teacher attestation and the mediating artefacts used in the form of the feedback session were not, in this case, constructed so as to facilitate the sort of lesson-analysis that would help a teacher focus and reflect on student learning. The teachers delivering the Open lesson instead took the view that they should minimise observers' criticism by rehearsing the lesson to make it a perfect lesson. In general, the rule-governed activity and sub-activity systems which were reported by the research-participants as being platforms for teacher professional interaction were used to support unquestioningly decisions made by the policymakers or the school-leadership team. In other words, it may be termed contrived collegiality, which, according to Hargreaves and Fullan (2012), is characterised as being administratively regulated, compulsory, implementation-oriented, fixed in time and space and predictable. However, the focus of this form of collaboration in Auyl was far from being that of teacher-learning in order to improve practice. I termed it a compliance strategy, as it was a form of collaboration designed to comply with

external rules, mostly to do with school inspection. This served as one of the inhibiting factors discussed later in the section.

2) Teacher collaboration as a survival strategy

In some cases the Auyl school community comply on paper with what is stated in the rules and directives of the authorities, while the actual work never takes place, as in the case of young-teacher mentoring. Thus, young teachers willing to stay in the profession look for a like-minded teacher, usually as young as themselves, with little experience. This type of collaboration has characteristics similar to balkanised collaborative culture, in that a teacher chooses to collaborate and communicate with another teacher with whom he/she works more closely and spends most of their time (Hargreaves & Fullan, 2012). However, this collaboration is not about competing groups, jockeying for position and supremacy, which Hargreaves and Fullan (2012) identify as characteristics of balkanisation collaboration. On the contrary, the forms of collaboration that Auyl teachers choose, especially young teachers, are more of a 'sink-or-swim' approach, or, as I call it here, teacher collaboration as a survival strategy. Moreover, this type of collaboration is even more restricted taking into consideration that many teachers interacting with each other were young and were graduates of the *zaočnoe* form of study. As the result, there was a lack of confidence among these teachers in every aspect of their work and they often looked for a solution outside Auyl school and usually within their own family. This form of collaboration was one of the reasons why some of the younger teachers were considering leaving Auyl as soon as they gained some teaching experience.

3) Teacher collaboration as part of job responsibility

Despite the compliance mentality in place, there was noticeably genuine collaboration, driven by an exchange of ideas and learning across different levels of the school hierarchy. That is, the Auyl Director working closely with her Deputies; the Deputies working with the Head of the SMUs and teachers; and teachers working with each other. For example, when the new Deputy Director took charge of conducting a seminar on sharing experience, there were signs of teachers' willingness to take responsibility and collaborate on discussing issues of teaching and learning to improve students' results. It would appear that the authority given by the Deputy Director to conduct such a seminar has the potential to move things on from a compliance mentality and lead the teacher community towards problem solving through discussing issues related to student learning. I termed this teacher collaboration as a part of job responsibility. In other words, this form of collaboration involves a teacher with authority (in this case, the Deputy Director) using his/her professional capacity to interpret the externally imposed rules and make them internally applicable within the specific context. This example therefore shows that the compliance mentality was not so much about the rules as the school leadership's ability to interpret and take responsibility for how the rules are interpreted. It must be noted, however, that the decision to be fully responsible for what is done in the school and how it is done did not mean freedom from the performance-driven and punitive inspection system (Akhmetzhan, 2016) which serves as an inhibiting factor for teacher collaboration.

Consequently, while I offer answers to the sub-questions about the existence and types of teacher collaboration in Auyl teachers' practice, to have a full understanding of the nature of teacher collaboration for learning in Auyl means that there is a need for me to present and discuss the key factors that facilitated the existence of the types of collaboration identified above; as well as the factors that inhibited the occurrence of collaboration focused on staff involvement in

developmental activities related to students' learning, which I am going to present in the following section and hence offer answer to the second research question.

5.4.3 Key facilitating and inhibiting factors for teacher collaboration in Auyl comprehensive school

Overall, when the findings were mapped out using the three-fold conceptual framework employed and the cultural-historical activity system (AS), a different mix of key facilitating and inhibiting factors was identified in Auyl school, indicating that factors operate at different levels and in complex ways.

i) State Compulsory Standard for Secondary Education and the UNT

The findings demonstrate that one of the most important contextual forces that restricts teachers' ability to collaborate for professional learning and on new ways of approaching how students learn and how to teach them is the State Standard and the UNT. Both of them compel teachers to follow a lesson-by-lesson approach in line with very detailed and descriptive subject programmes dictated from the top and strictly in accordance with approved textbook content. High-stakes assessment like the UNT has been identified by many researchers (Burkhalter & Shengebayev, 2010; Sagintayeva et al., 2014) as the most powerful determinant of the priorities of pupils, teachers and their parents. The findings from Auyl support the argument that if the assessment system, State Standard and subject programmes do not properly reflect the key education values and principles, such as making the development of critical thinking mandatory at national level, education reform will be in vain.

ii) National school-ranking system and school facilities

Due to its position in the national school ranking-system based on the UNT results, Auyl was underfunded, which in general had led to a deterioration in the school infrastructure (e.g. cold classrooms; an empty library; no visual aids; empty laboratories; no food served in the canteen; and no drinking water), making it uncomfortable for teachers to remain in the school. Additionally, Auyl was located far from the district center and the *Raiono*, which made it difficult to access first-hand information and knowledge about reform initiatives dictated from the top or any changes related to the current system. A lack of access to the internet and mobile connections contributed towards the Auyl school community dependence on the rule-governed activity-systems and the *Raiono*.

iii) School organisational culture and school inspection

The findings also show that there are contradiction between the school organisational culture and inspection system. For example, there is a contradiction between the SMU activity-system and young teacher mentoring sub-activity system due to the prevalence of the culture of obedience towards the rules dictated from the Ministry of Education; the compliance mentality imposed by the school inspection; and whole distrust in teacher education and teacher qualification upgrade system believed to be accessible through arrangement based on 'people of the circle'; 'comrades in misfortune' (see subsection 4.4.5 p.134); or 'collecting money to stop an inspection coming to a school' (see subsection 4.4.3. p.121). Hence, young teacher collaboration for professional learning is used as a survival strategy by looking for knowledgeable others outside the young teacher mentoring activity-system or outside the school setting, as discussed as a part of the findings from the Auyl school.

iv) School leadership and teacher professional identity

Another example of contradiction is one caused by the process of appointing a school director. This is something in which the school collective takes no part; and the director is instead appointed by the Head of the *Raiono* in consultation with the *Äkím*. A director thus feels obliged to follow the written and unwritten rules which are dictated by the his/her immediate employers (the *Äkímat* and *Raiono)*; and this at times means ignoring teachers' opinions, as it was put by the Kazakhstani education activists (see subsection 4.4.6, pp.135-136). It can also be argued that teachers choose not to participate in the schoolwide decision-making process because, due to a highly centralised top-down system that leaves little autonomy for schools and teachers (OECD, 2014b; OECD, 2015), they are restricted in the development of a separate professional identity. In addition, teachers are dependent on the school director because the director has complete power to select, hire and dismiss teachers.

v) Teacher attestation and teacher professional development

In general, the findings show that the Auyl research-participants' perception of their own professional learning was more driven by policy than by concern for students' learning. Many of them found it difficult to detach their professional development from the formal system of teacher attestation and for the upgrading of their professional qualifications. The reason is that the system for upgrading teachers' professional qualifications is the most important determinant for Kazakhstani teachers in obtaining a higher salary (see subsection 4.4.5, pp.128-134). Hence, all of them gave as an example of a platform for teacher interaction and collaboration the rule-governed activity systems that partially regulate the process of nominating, approving and recommending a teacher for an upgraded professional qualification.

Certificates from externally organised PDC also had an important role to play in teacher attestation. This made the research-participants believe that they would be better off by attending such courses; while many of them, at the same time, found the trainers' lectures had no impact on their daily teaching practices. As such, collecting as many certificates as possible for the purpose of teacher attestation through attendance at PDC was a win-win situation for teachers, teacher-trainers and specialists in the *Raiono*. The latter kept sending teachers to all sorts of PDC and thus regularly distracted them from their normal work (see subsection 4.4.5, p.132). Undoubtedly, this had an impact on student learning.

vi) Importance of personal connections and people of the circle

The teacher community in Auyl did not trust the UNT or the teacher-attestation system, driven as they were by the conviction that 'everything can be arranged through the people of the circle'. Clear signs of this were the Auyl director's appointment through personal connections; the way in which winners at student Olympiads and teachers' competitions were arranged; and the process of articles being written by external individuals. Not only Auyl but also the *Raiono* specialist encouraged such arrangements by being directly involved in the process. That was because the *Raiono* found itself in the same position as the teachers following SPED-2020 (see section 4.4.5, p.132-134) and the introduction of the indicator which increased the proportion of teachers with the highest and the first category. As a result, although the characteristics (in terms of age, education level, gender and professional qualification level) of the Auyl teacher community were comparable with the national level, it was nevertheless not able to produce improved UNT results. Additionally, very low student results in the UNT could be attributed to the high proportion of teachers recruited who held the *zaočnoe* study diploma, creating a so-called 'double-negative loop' (see subsection 4.4.4, p.124).

vii) Socio-economic condition and *stavka* pay system

Teacher learning within Auyl was complicated by several additional sociocultural and socio-economic factors. The village where Auyl is located is in a very poor socio-economic state. In general, every household is engaged in farming, as there are no job opportunities in the village except in the school and a state-financed kindergarten. Owing to the to the size of the school, Auyl could afford to recruit only a single teacher in many subject areas. Many of them were recruited for less than the *stavka* (see Appendix N), meaning that they earned very little and became engaged in farming, which sometimes became more of a priority for the teacher than his/her work in school (see section 4.4.4, p.123).

There is no health-service provision and no postal or bank service available. As the result, people had moved out of the village after the collapse of the Soviet Union, including many of the experienced teachers; and more of them were considering moving out, including some of the retiring and also the young teachers (see subsection 4.4.4, pp.126-127). This is in line with most of the literature about the condition of the rural areas in Kazakhstan in the post-Soviet era (IMF, 2014; UNDP, 2016; Save the Children, 2015).

viii) Teaching staff proximity to the community and collectivist culture

The prevalence of a collectivist culture in the community and the proximity of the teaching staff to the community lead to conflict avoidance and fosters groupthinking and lack of criticality. In other words, many teachers, especially the more experienced (the Soviet generation), were ready, against all the odds and as a demonstration of their loyalty to the school *kollektive*, to protect the school's collective image. For example, the weak position of the school leadership, partially dictated by the importance of kinship relationship and personal connections, that contributed to the lack of vision, the lack of access to stimulating school facilities and the conditions, never been discussed openly in the school *kollektive*. Hence,

while some of the young teachers considering leaving Auyl for better opportunities in the city were more open with me in sharing problematic issues. However, others, who planned to stay in the village, followed the culture of the community. In other words, they preferred to stay loyal to the school *kollektive* by 'keeping the trash in-house'.

ix) Level of trust as a potential for transformation

In spite of all the social and economic difficulties, there is a high level of trust between the people of the village and the teachers. In addition, as discussed in section 4.3 (pp.104-106), most of the students in the village live with their grandparents while their own parents stay in the city to earn a living; and those elderly peoples' perspective on what it means to be a teacher was heavily shaped by their own experience of Soviet collectivist culture, in which the 'teacher's duty was not only to educate young minds but also to influence all the people in a community. In other words, they see 'the teacher as a mirror of society', as stated by Lunacharskii (1958), the first Commissioner of Education of the USSR; an idea that I have discussed in relation to the current policy debate between going back to 'the old good Soviet' or perusing 'unknown new' (see section 4.1, p.94-99).

5.4.4 Conclusions and implication of the findings for Auyl comprehensive school

The first two research questions are concerned with the types of teacher collaboration and the factors impacting them. The answers for Auyl indicate that the nature of teacher collaboration for professional learning in the school results from both conscious and unconscious values; beliefs, attitudes and perspectives; interactions and practices heavily shaped by the school's history, its locality, its proximity to the community; by the value system of the various stakeholders; and the policy environment.

Generally speaking, restriction of access to the knowledge base created at the top of the system, coupled with the socio-economic situation of the Auyl locality, had created a school-organisation system in which teacher interdependence was focused not so much on how to be a better teacher but on how to remain in the system without creating conflict and by complying with the written and unwritten rules within and beyond the school setting. This is in line with Silova and Steiner-Khamsi's (2008) conclusion that, while Kazakhstani officialdom in trying to build an independent education system has borrowed the language of reform from external sources, little has been implemented in schools. In other words, political rhetoric has not changed teachers' practice in post-Soviet secondary education.

For teams of teachers working interdependently to achieve common goals — goals linked to the purpose of learning for all - to be promoted in Auyl, just as in the case of the pilot projects implemented in the NIS schools (see subsections 1.2.1-1.2.4, pp. 5-15), there is a need for the Auyl leadership and its teachers to be exposed to diverse contemporary initiatives and concepts of teacher learning; and consistent support for these ideas to become a part of school culture. As indicated by researchers (Nias, Southworth, & Yeomans, 1989), culture does not change by regulation but by specific displacement by others of the existing norms, structures and processes. It is especially true in countries with a collectivist value system and a very hierarchical management-structure within schooling (Hairon and Tan, 2016; Wang, 2015; Lam, Yim and Lam, 2002).

While one can argue that many of these characteristics of Auyl are antithetic to teacher collaboration, some of them nevertheless provide the capacity for change and transformation. A sign of this can be said to be the new Deputy Director's vision for how to develop the Auyl teachers' capacity to raise student attainments in terms of the UNT. The internal unity of the Auyl community and its organisational stability, as well as the presence of high level of trust in the *kollektive,* have the potential to create a transformative collaborative culture under the guidance of strong leadership. The high level of obedience and respect to

authority can be overcome if the teaching community can be allowed to embrace conflict and address tension through constructive criticism (Achinstein, 2002, Hargreaves, 1993). Although the experience of the Auyl community in terms of the *pedsovet* and the Subject Methodological Units looks very restricted as they use mediating artefacts dictated by the rules, there is however a huge potential for both the *pedsovet* and the Subject Methodological Units to become platforms for real teacher learning with outcomes for students. Additionally, Auyl has an advantage of working with a small number of students per teacher and of a big enough school to accommodate one-shift-schooling. In other words, the school administrative team and teachers require to be creative in designing mediating artefacts/ tools and instruments to be used in the rule-governed activity-systems that they themselves reported as platforms for their interaction.

Chapter 6: Teacher collaboration for learning in the Audan gymnasium

This chapter narrates the story of Audan gymnasium, which was established in 1923. It is one of four schools located in a district town with a population of more than 12 000 people. The town has a more diverse population ethnically speaking than Auy. The Audan was celebrating its ninetieth anniversary when I was conducting my fieldwork. It is one of the oldest schools in Kazakhstan.

In 2000, Audan obtained the status of a gymnasium[37] and started streaming children based on their ability to study advanced mathematics, sciences and languages. As a result, one third of the students were selected for the so-called gymnasium classes. The rest were from the geographical catchment area and were not subject to a selection process. The school operated across all grades, beginning with pre-school (age 6) and thereafter grades 1-11 (age 7 to 17). There were 1125 students in the school. This was double the school's capacity and led to the school functioning in two shifts: from 08:30 to 13:35; and from 14:00 to 19:00. Its student population consisted of eight different ethnicities (Kazakhs, Azerbaijanis, Chechens, Russians, Tatars, Kurds, Turkish and Uzbeks). Education was offered in two languages: Kazakh and Russian. The average class size was 28[38], with a minimum of 28 students in a class and a maximum of 37. The student-teacher ratio was 9.5:1, slightly higher than the national average of 8.5:1.

[37] According to Order No372 of the Ministry of Education and Science of the Republic of Kazakhstan, dated 17 September 2013, a gymnasium is an educational institution implementing a secondary-school curriculum [the curriculum of a primary, a basic secondary and a general secondary], providing specialised education in social-humanitarian and other areas in accordance with the capabilities of the students.

[38] The average class size in Kazakhstan is 18.9 (OECD, 2014b, p.237).

6.1. The Audan gymnasium facilities, resources and leadership

The gymnasium is located in a three-storey building next door to the *Raiono's* office. Similar to Auyl, its corridor walls were clear of anything but a laminated poster of the country's anthem, and a display board for announcements. There were 27 classrooms. The classrooms were standardised, with enough space to accommodate 30 pupils and a teacher. Each classroom was assigned to a teacher who was responsible for keeping it clean and safe for teaching.

The staffroom was big and with enough furniture to accommodate around 50 teachers at a time. It was equipped with around 40 chairs; three sofas; two desktop computers; seven bookshelves; and five announcement boards. The staffroom in Audan had a welcoming atmosphere. In the staffroom, teachers were engaged in discussion with each other about lesson plans and preparations for events and subject decades. During the staffroom observation process, it was common for me to see younger teachers helping older teachers fill in the electronic class journal[39] that Audan was implementing as a part of an e-learning pilot project. Many experienced older teachers admitted that it was difficult for them to learn how to use the e-journal software application. They therefore relied on younger teachers to help them to complete the journal, as they were required to do on a daily basis:

> 'Many of us have not been able to learn how to use this electronic journal application. So colleagues who know how to use it come and help us to complete it whenever they find free time. We should fill in the journal on a daily basis' (Teacher B1).

The school library, located on the first floor, was also very warm and welcoming. There were display shelves about events taking place in the world of literature and also relating to a range of subject areas. However it was resourced only with copies

[39] The electronic class-journal was introduced as a part of the e-learning pilot project which was about digitising the data in state-funded schools and making it remotely accessible for parents and inspectors.

of the textbooks and literature required for each grade in compliance with the subject programmes approved by the Ministry of Education. The Audan library did not keep any of its teachers' publications. All the bookshelves were located behind the librarian's desk, making it impossible for students and teachers to search for required resources for themselves. The library was resourced with seven computers. The library space was also used as a meeting point for teachers and for tutoring students.

The spacious canteen on the ground floor was very functional. Although its priority was to provide students from more-deprived families with free hot meals, it was frequently used by teaching staff at lunchtime and dinner-time. This was also due to the fact that many teachers spent long hours working in the school, from 8:00 am to 8:00 pm. The canteen in Audan was also the only place in the school with a large-enough space to accommodate all 119 teachers at one time. It was therefore used for conducting schoolwide meetings and big events. During the time of my fieldwork, for example, a *pedsovet* meeting I observed and whole-school events to celebrate the nineteenth anniversary of the school were conducted in the canteen. Additionally, it was the only place where one could get access to drinking water in the school. The lavatories for students were located outside the school; while the lavatories located inside the schools could be accessed by teaching staff only. Audan was heated by the centralised district-heating system. The latter kept the school building warm twenty-four hours a day. In general, Audan facilities were favourable for teachers staying and working after lessons.

An additional factor that made the teachers work long hours and remain in the school after class was the Audan director's management style, as clearly communicated and modeled by the members of the administrative team. In general, the highly experienced Director, who had worked in the school for twenty-four years, was perceived by the school body as a professional and trusted leader from whom to learn. I will be discussing the findings concerning this point in the next section.

The Director had experience of working as a secretary for the office of the Communist Party during the Soviet era; and had previous experience of heading the *Raiono* for four years immediately before the dissolution of the USSR in 1991. The Audan Director, as she admitted herself, was appointed against her will by the decision of the *Äkímat*. As I heard only positive comments about Audan's achievements, my first question at my interview with its Director was to ask her if she was doing her dream job. Her answer was as follows:

> 'I am not going to lie to you. I never dreamed of or even wanted to work in a school, or teach. I cannot say I like teaching, but I do my job well. I was appointed as Director of this school. No one asked me if I wanted to be one. The school was not among the best. I guess I was sent to support the school and make the best use of my knowledge to bring it to this position. It is now one of the best schools in the district' (Director B).

According to the UNT results for 2012-2013, Audan ranked as the second-best performing school among 38 schools in the district, having lost its leading position to a small rural school.

Audan was mainly financed from the local budget. However, because it was one of the highest-performing schools in the district, the *Raiono* also supported Audan as a pilot school for educational innovations, with the finance coming directly from the national budget. 'Serving as a platform for the e-learning project made it possible to equip ten classrooms with interactive whiteboards and receive funding for two fully equipped computer laboratories with internet connection', said the Audan Director. The school library and the offices of the school administration were all equipped with computers and with internet connection. Apart from that, the *Raiono* treated Audan as a priority in terms of equipping the school with modified Physics and Biology laboratories. Moreover, since 2004, Audan had been chosen to serve as an exam centre for the UNT exams.

The Director of Audan worked closely with the *Raiono* and supported every initiative begun by the officials, as she believed her school was there to serve the wider community by following all official instructions and rules:

> 'I do my best to support the *Raiono* and *Äkímat* in all their initiatives. I was in their shoes some time ago. I worked as the Head of the *Raiono* myself. I was a member of the Communist party and trained to serve the wider community wherever I am sent to work. Therefore, I understand how difficult it is to follow all the instructions coming from the top if there is no support from local schools (Director B).

One the other hand, as stated by one of the Deputy Directors in Audan, it was both good and bad for the gymnasium to be located next door to the *Raiono* office. According to her, it was good, as the Audan administration team and teachers had direct access to the specialists working in the *Raiono* and thus could receive first-hand information. One the other hand, proximity to the *Raiono* made Audan the site used by the *Raiono* and the *Äkímat* for big meetings, seminars and conferences related and not related to education as necessary, which was time-consuming for the teachers and sometimes beyond the school's responsibilities:

> 'Our Director never refuses the request from the *Äkímat* and the *Raiono*. We help them with holding big meetings, conferences, seminars and hosting official visits. Some of them are nothing to do with education institutions at all. All these events are very time-consuming for us [teachers].' (Deputy Director B3).

Yet another factor that linked Audan teachers to the authorities and be assigned urgent tasks was the use of technology, especially mobile phones. Mobile phones were everywhere in Audan. Teachers, especially the Deputy Directors were always on their mobile phones. During the one-to-one interviews, participants kept answering their phones. Teachers would even take a call during a lesson. The

teacher, whose lesson I observed, responded to a call during the lesson. She gave the following explanation to me for taking the phone call during the lesson:

> 'I understand that it is bad not to switch off your phone during the lesson but I cannot help it. We all have commitments and I never know when someone will call me. It can be a call from the *Oblono* or *Raiono* or even from our school administration to fulfill some urgent task. So we all keep our phones on' (Head of the SMU B1).

In general, the facilities in Audan were more organised and better suited to promoting teacher interaction.

In the following subsection, I will describe the teacher community in Audan and its role in the school organisational structure and in the school decision-making process. I also describe the make-up of the Audan teaching staff, as measured by their level of their education, years of experience and qualifications, in order to develop an understanding of how these characteristics and assigned roles shape and impact research-participants' beliefs about learning in collaboration. The characteristics of the Audan teaching community will also be shown in comparison with both the data relating to the national picture and the Auyl teaching community.

6.2. The Audan gymnasium teacher community

According to Head of the *Raiono*, due to its gymnasium status and strong leadership, the Audan creams off the better teachers and the motivated students, thereby weakening the schools located nearby. Audan's staff of 119, including the school administration, was predominantly female (86%). All the Audan teachers were represented in the school *pedsovet* - the highest level of collegial school decision-making body (see Figure 6.1). The Audan teachers also belonged to one of the ten SMUs depending on the subjects they taught.

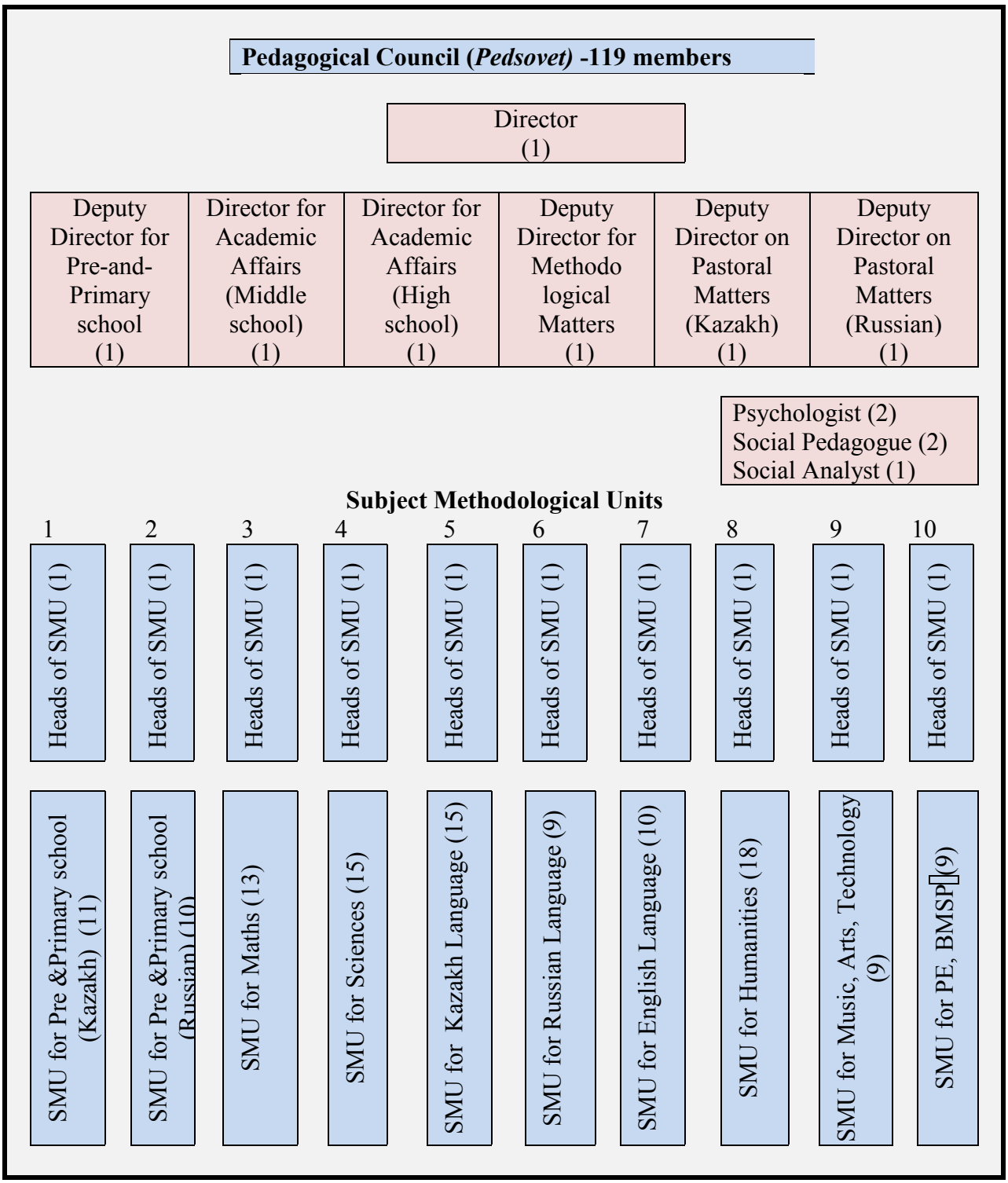


Figure 6.1: Audan gymnasium organisational hierarchy and structure

Overall, there were ten SMUs and so ten Heads of SMUs: 1) pre-school and primary for Kazakh classes; and 2) for Russian classes; 3) Mathematics; 4) Sciences; 5) Kazakh language; 6) Russian language; 7) English language; 8)

Humanities; 9) Music, Technology and Art; 10) Physical Education (PE) and Preparation for Basic Military Service (PBMS). The Audan school administration team was represented by the Director and six Deputy Directors, the latter responsible for the following areas: 1) Pre-School and Primary School; 2) Academic Affairs for Middle School; 3) Academic Affairs for High School; 4) Scientific and Methodological Matters; 5) Pastoral Matters for Kazakh classes; and 6) for Russian classes. The Deputies for Pastoral Matters had five assistants: two psychologists (one working in the Kazakh language and one in Russian); two social pedagogues (also in the Kazakh and Russian languages); and a social analyst.

The Audan teachers were a diverse group in terms of their ethnicity. Around 17 percent of teachers were Russians; and another three percent of teachers were from ethic minorities: Germans, Chechens, Uzbeks, Azerbaijanis, and Tatars. The Audan Director was ethnically German and was seen by many of her colleagues to be demanding and disciplined because of her ethnicity. According to the Audan Director, more than 25 percent of the teachers in her school were those who attended the same schools as students, including herself:

> 'I was born in this town. I graduated from this very school, where I now serve as a Director. Around 25% of teachers in my school are those who graduated from this school and were born in this town. We also have several generations of the same family teaching in our school' (Director B).

In general, Audan employed a large number of teachers with diplomas from higher educational institutions: 96 percent compared to the national average of 87 percent. It had more teachers with the first and highest qualification categories (59%) than the national level (41.8%) and Auyl school (35.8%), as demonstrated in Table 6.1.

Table 6.1: Audan gymnasium teaching staff: distribution by years of experience and qualification compared to the national figures and Auyl school

By Years of Experience					By Qualification Category			
	National	**Audan**	**Auyl**			**National**	**Audan**	**Auyl**
More than 20 years	33%	**24%**	28.6%		**Highest**	10.4%	**29%**	12.0%
9-20 years	35%	**46%**	28.6%		**First**	31.4%	**30%**	23.8%
Less than 8 years	32%	**30%**	42.8%		**Second**	31.3%	**20%**	31.0%
					No	26.9%	**21%**	33.2%

The distribution of teachers by age indicates that Audan has a greater proportion of teachers who can be seen as belonging to the 'Soviet generation' of teachers (70%) than those belonging to the 'Independence generation' (30%). According to the Audan Director, about 15 to 20 teachers would be at retirement age within the following two to five years. She herself was expecting to retire in 2015, the year after my fieldwork:

> 'The next two to five years will be difficult for our school, as there are 15 to 20 teachers going to retire. I am trying to recruit experienced teachers available in the town and also attract young teachers from the. I myself will be retiring in 2015' (Director B).

As mentioned in the preceding section, the Audan teaching community perceived its Director as a professional and trusted leader from whom to learn. In particular, her administrative team and the members of the middle-management team showed great respect towards her and praised her for being a very patient and at the same time demanding leader from whom they could learn quickly:

> 'I remember, she [the Director] used to discuss issues in great detail with me when I had just started my job as her deputy. At the beginning, I thought that it was it was a sign of mistrust. Once I felt confident in my work, she loosened

her control on me. Now she gives a lot of space to do my job' (FG, Deputy Director B6).

Other Deputy Directors stated that the Audan Director advised them how to deal with their daily work (Deputy Director B2); always had time to discuss general issues and reports with them (Deputy Director B3); constantly suggested readings to them (Deputy Director B1); advised them on how to speak in public and even about their dress code (Deputy Director B3).

On the other hand, at middle-management level, while the Heads of SMUs agreed about the role of the Director and her commitment to the school, they also highlighted in the focus-group discussion the role of the Deputies in bringing to fruition the Audan Director's vision of improving student achievement by clearly framing her ideas in the SMU plans and implementing them like clockwork:

> 'We have a weekly plan, a monthly plan, a plan for a term, a plan for a year. We have plans for the subject decade agreed with the Deputy Director and approved by the Director. There is a separate plan for young teachers' mentoring. We present a review of the weekly lesson plans of every teacher to the Deputies. All these things are done to improve student achievement as demanded by the Director; and her Deputies make us run like clockwork to implement the ideas' (FG, Head of SMU B1).

In the teacher-level focus-group discussion, teachers were clear about school discipline and the results expected from them. Many of them stated that the Audan Director was able to set up a merit-based employment system and had thus protected the school against the so-called tradition of bestowing favours (based on kinship ties and the *blat* system). However, at the same time, some research-participants indicated that they felt mixed feelings of fear and respect towards the Audan Director and her administration. One teacher in the focus group said that 'teachers are not allowed to have time for gossiping' (Teacher B1). Many teachers

in the one-to-one interviews confessed that the Director's strategy of speaking openly at the *pedsovet* about whatever she heard had happened or was happening in the school made them think twice before they expressed an opinion on anything:

> 'Although I know that our Director is easy to contact we fear her. There is a feeling that she has cameras everywhere, figuratively speaking. She knows what we discuss in the staffroom. She never hesitates to come and ask what the discussion was about. So, we prefer to keep our thoughts to ourselves' (Teacher B4).

The teaching community had a very clear hierarchical structure within the school's organisation, strictly distributed from top to bottom. That is, the Deputies were learning from and putting into practice the Audan Director's vision; the Heads of the SMUs were learning from and working closely with the Deputy Directors; and, finally, the teachers were working closely with the Head of the SMUs to implement the vision of the school leadership and achieve the expected results. There was therefore a shared knowledge and understanding of how to achieve the results.

However, under the pressure of maintaining the school's high-achieving status and its record on UNT results (see subsection 4.4.8, p.145), the learning practices within this disciplined organisational hierarchy were not all positive. For example, according to the Audan psychologist, Audan regularly persuaded the parents of underachieving students that their son or daughter should leave the school after obtaining the Certificate of Completion of Basic School at any cost (see subsection 4.4.8, p.144).

Having considered the Audan teachers' role in the school hierarchical structure, let me now turn to the interrelationships between the Audan teaching staff and their interdependence as far as learning is concerned, as dictated by the activity-systems in place and as reported by the research-participants. Once again, I will use

Engeström's (2005) concept of a mediational model of an activity-system to illustrate each of the activity-systems presented. Attention will be paid to the level at which the tools/instruments/artefacts are appropriated by the Audan teaching community within the rule-governed activity systems in order to achieve the required outcomes from the activity-systems.

6.3. Collaborative practices in the Audan gymnasium

The Audan teachers reported that they had the opportunity to interact with the Audan Director and Deputy Directors in *pedsovet* meetings; with the middle management as a member of the SMUs; with experienced teachers when entering the young-teacher mentoring; and with colleagues while preparing students for Olympiads and while preparing themselves for teacher attestation to upgrade their own professional qualification level. Appendix U sets out the opportunities for interaction in Audan as reported by the research-participants. In general, as in the case of Auyl, opportunities for teacher interaction in Audan can be considered within the rule governed activity-systems and sub activity-systems: 1) in *pedsovet* meetings; 2) in SMUs; 3) within the young-teacher mentorship; and 4) in the subject decades. Additionally, the responses received from the Audan research-participants included more options for informal interaction and exchange of ideas based on teachers' established friendship-relationships. For example, a few teachers responded that they preferred lunchtime talks; break time catch-ups; discussion of important issues quickly over the phone; or visiting each other's homes and having a proper discussion over tea or lunch.

In the following subsections, I analyse the responses of the Audan regarding how they used the rule-governed activity systems in place which were identified by them as platforms for their interaction and interconnectedness for learning.

6.3.1. The *pedsovet* activity-system in the Audan gymnasium

The Deputy Director for Methodological Matters said that, even though the *pedsovet* was the platform for the collective decision-making process, what were approved at the a *pedsovet* meeting were matters and decisions that had been agreed beforehand at each level of school management. According to her, if teachers wanted to debate and discuss an issue to be reported at a *pedsovet* meeting, it had to be done beforehand and not during the *pedsovet* meeting. To deal with that, she said, the Deputy Directors or Head of SMUs could hold meetings as necessary:

> 'No one changes any question or agreed decision once it is already on the *pedsovet's* agenda. If we want to have debates, it should be discussed and debated before it is considered at a *pedsovet.* Teachers can discuss issues at the SMUs; with the Head of the SMU; or with the Deputy Director, asking for a meeting or just discussing concerns as necessary' (Deputy Director B3).

In Audan, the *pedsovet* is therefore a body which makes the final decisions on issues and concerns which have been discussed beforehand in an organised manner. That is based on the weekly meeting conducted by the Audan Director with the participation of Deputy Directors and Head of the SMUs as required.

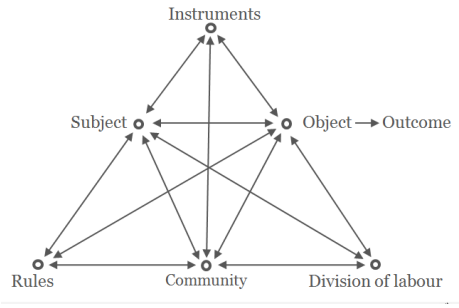
> 'The Director holds a meeting with the members of the school administration every Thursday, where we invite the Heads of the SMUs as required. There is no possibility of us [the members] missing or not attending that meeting. Our lesson timetable is properly planned so that everyone is able to attend the meeting' (Deputy Director B5).

However the school *pedsovet* plan, its agenda and its reports are all kept in order in line with the requirements of the Ministry of Education. Figure 6.2 illustrates the *pedsovet* activity-system and mediating artefacts as used in Audan.

Mediating Instruments/Artefacts/Tools:

Weekly school administrative meeting
Deputy Directors' meeting with Head of the SMUs
Pedsovet plan
Pedsovet meeting agendas and presentations
Pedsovet minutes and decisions
Pedsovet reports

Subject:
School collective



Object:
Collective decision-making

Outcome:
Improve teaching and students' pastoral care

Rules:
Order of the Ministry on *pedsovet*
Order of the School Director to set up a school *pedsovet*

Community:
School community
Parent committee
Local Departments of Education
Department of Quality Control of the Ministry of Education

Division of labour:
Director's role
School collective's role
Deputy Directors' role
SMU Heads' role

Figure 6.2: The *pedsovet* activity-system and mediating artefacts as used in Audan gymnasium

The *pedsovet* meeting that I observed[40] during my fieldwork in Audan was dedicated to a discussion of the Annual Address of the President of the Republic of Kazakhstan to the people of Kazakhstan, entitled 'The Path to the Future' (November, 11, 2014), with the participation of a guest speaker from the *Äkímat*. The guest speaker also represented the '*Nur Otan'* Party – the political party which held power in the country. The *pedsovet* meeting started with the agenda being

[40] It should be noted that my presence as a researcher at the meeting might have had an impact on how the *pedsovet* was planned and how teachers behaved in the meeting. The presence of a guest speaker may also have had a similar effect. I arrived in the school that day and my presence as a researcher was announced at the beginning of the *pedsovet.* I was provided with an opportunity to introduce myself and talk about my research at the end of the *pedsovet,* after the guest speaker had left the meeting. Many teachers did say during the one-to-one interviews that my presence as a researcher at the *pedsovet* meeting was a matter of suspicion for them until I made my presentation.

introduced by the Audan Director; followed by the teachers voting to agree the agenda by a show of hands. The Director delivered a presentation; and this was followed by a formal speech from the guest speaker on the topic of the Annual Address. Afterwards, the Director opened up the floor to comments and questions. However no one seemed to want to begin. The Director reacted in the following way:

> 'Ok, if there are no comments or questions, then I have to ask some of you to express your opinion on what we have just heard. [Name], you are a history teacher - you must be interested in this topic, so what do you think?' (Director B).

Three more teachers were asked in the same way to express their opinion. Their opinions were minuted as a reaction to the subject discussed and thus formed part of the report of that *pedsovet* meeting. At the end of the *pedsovet*, the secretary of the *pedsovet* gave a summing-up to the effect that all the Audan teaching staff members were present; that no objection had been raised to the proposed agenda; that presentations were made about the subject under discussion; and that the teachers' reactions to the subject under discussion were registered and would be included in the minutes and final report of the *pedsovet.*

Immediately after the *pedsovet,* I was invited by the Director to her office, where we had an informal talk and she let me take some notes about what we discussed. She was interested in every aspect of my research work; and also asked my opinion about what I had just observed at the *pedsovet.* She was in control of every aspect of school life. I asked if the *pedsovet* functioned in the way that I had observed, particularly in terms of directly requesting teachers to respond to the subject under discussion. The Director gave the following answer:

> 'Unfortunately, our system works this way; or it may be that my management is like this. If I do not make teachers speak up, they do not volunteer to do so.

> Why? Because no one wants to take more responsibility than they have at their level. This is especially the case when we discuss a topic like the one at today's *pedsovet*. As you witnessed, it was related to the policy of a whole country and not directly linked to teachers' daily work' (Director B).

The opinions of the members of the Audan administration team and the opinions of the teachers about how the *pedsovet* functioned did not differ from the opinion of its Director. In general, the members of the Audan school administration team felt included in the process of whole-school decision-making; whereas the teachers felt controlled by the school administration:

> 'We [the teachers] work closely with the Head of SMU to achieve better and better results in our subjects. In spite of that, we are sometimes named in the *pedsovet* meeting. Of course, we are named for a reason: often because of bad lessons and bad results. It is shaming. We try our best not to be named. … However, you never know when she [the director] is going to pass by your classroom; and, when she does, she wants to see if students' workbooks are marked or other paperwork completed. So we need to do everything on time. Sometimes it is unbearable from a psychological point of view' (Teacher B9).

According to the Deputy Director for Pastoral Work, the Director's approach to naming teachers at the *petsovet* meetings was perceived more positively than by teachers. This was probably due to the fact that the Director's Deputies had direct access to and knowledge of the school-level decision-making process:

> 'She [the Director] has created a culture of competition. She highlights the achievements of everyone in front of the collective, usually at *pedsovet* meetings. She has also created a tradition of encouragement by awarding certificates of different kind of appreciation for achievements, for contribution and so on. She consults with us on this matter; so by extension we also create competition among teachers in our own areas' (Deputy Director B5).

At the same time, the young teachers found *pedsovet* meetings very informative and useful for their development, as they think that some information is accessible only by the school administration:

> 'Everything presented at the *pedsovet* is very interesting for us. It is as if we are being given access to knowledge which belongs normally only to the school administration. We learn a lot just by listening to their reports and announcements about the changes in secondary education which they get through the *Raiono* or the Ministry of Education' (Teacher B16 and Teacher B17).

In general, when the *pedsovet* was named as one of the platforms for teacher interaction by the research-participants in the focus-group discussions, they were referring to formalism. However when questions were asked about how they prepared for the *pedsovet* meetings and what was discussed and how the *pedsovet* was conducted, I came to the understanding that each matter approved by the Audan *kollektive* at a *pedsovet* required a particular process of discussion at different levels before it was considered at the *pedsovet.* Despite this fact, the ultimate decision-making power was concentrated in the hands of the Audan Director. The Audan Director pointed out that there are consequences for the school leadership, but not the school collective as a whole, for any wrong decision made:

> 'I delegate leadership responsibilities to my Deputies and sometime to teachers; but I control. If I do not control the decision-making process at all levels myself, how can I take responsibility for whatever decisions are made? You know, a school director, as a public official, is legally responsible for all the decisions made in his/her school' (Director B).

The impact of this factor becomes obvious when the findings concerning the SMUs activity-system in Audan are discussed. This was especially so when many

of the Audan teachers were exposed to the CoE course, where they thought they had learned something different and had the permission of a higher authority than the school Director to act more freely in terms of how they deliver the end result for students.

Let me now turn to the findings of the Subject Methodological Units, also reported by the Audan research-participants as one of the platforms for teacher interaction and collaboration for learning.

6.3.2. The Subject Methodological Units activity-system in the Audan gymnasium

During the focus-group discussion with the Head of the SMUs and the school administration team, it was stated that the appointment of the Head of an SMU was carried out by the Audan Director in consultation with the Deputies. Some of the Heads of the SMUs contended that at times the Director had made them take on the job against their will. However they all agreed that the Audan Director never appointed a teacher to be a Head of the SMU if she/he did not deserve it:

> 'Against my will, I was appointed to be a Head of SMU. However now I understand that our Director chooses a teacher who is committed to the work and has a sense of responsibility towards it; and someone who can be asked to do it, who deserves it' (FG, Head of the SMU B5).

'Once you are trusted, there is no going back; but you have to do good job. There is no other option'. This was said by the Head of the Mathematics SMU, who had served as the head for more than fifteen years. What was also interesting to discover was that there was a community spirit among Head of the SMUs. They perceived themselves as not belonging to the school administrative team, but as a bridge between the teachers and the school administrative team. For example, at the beginning of each week, each Head of the SMU presented the lesson plans of

the teachers within that SMU for the approval of the Deputy Directors and communicate any comments or feedback to the teachers:

> 'I meet with my teachers on Fridays and Saturdays to check their weekly lesson plans. Once they are ready, I take them to the Deputy Director for approval. We usually submit our lesson plans on Mondays. If there are any comments, I work that out with the teacher' (FG, Head of the SMU B3).

In addition, all the SMU Heads who participated in my study stated how much they helped each other to learn how to run an SMU and how to communicate with the school administrative team.

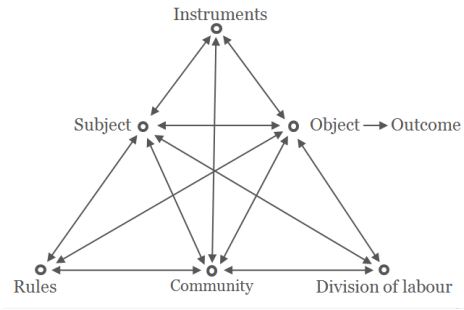
> 'I am a newly appointed Head of SMU and I learn from them [other Heads of the SMUs]. I ask for reports to read and I observe their meetings. I can ask for their time to discuss issues if I need to clarify anything. So that is not a problem' (FG, Head of the SMUB7).

The document analysis confirmed that the Heads of the SMUs work hard to keep up with the requirements set up by the Ministry of Education and the Audan school administration. I was given access to all the SMU files, which were kept in the office of the Deputy Director. Each SMU had a file consisting of five main parts: 1) the SMU annual/term/monthly plans; 2) the teaching staff profile updated for each academic year; 3) the teacher attestation plan; 4) the normative and legal regulations for education generally and in the subject area in particular; 5) an analysis of the SMU's work. In addition, according to the each SMU was made to conduct subject decades in a very strict and disciplined way; and to show detailed analysis of the outcomes of the upgrades to teacher qualifications and the young-teacher mentoring - the latter with detailed analysis of the results produced by the mentor and mentee. These two aspects of the SMU activity-system will be discussed in subsections bellow.

Thus, while the work of the Audan SMUs was carried out in full compliance with the guidance of the Ministry of Education and as required by the inspection system, there were a lot of additional instruments employed in order to achieve the outcomes required by their work. Figure 6.3 illustrates the Audan SMU activity-system and the mediating instruments and artefacts used.

Mediating Instruments/Artefacts/Tools:
SMU plan
SMU meeting agenda/minutes/presentation/files/reports
Young teacher mentoring
Subject decades
Lesson plan approval

Subject:
SMU teachers



Object:
Implementing and delivering subject programmes

Outcome:
Improve student's achievements and students' pastoral care

Rules:
Ministry Order
Director Order
Local Department of Education Instructions

Community:
School community
Parents Community
Local Departments of Education
Department of Quality Control of the Ministry of Education

Division of labour:
Deputy Director
Heads of SMUs
Teachers as members of SMU

Figure 6.3: The Subject Methodological Unit activity-system and mediating artefacts as used in Audan gymnasium

In general, the Audan teachers as members of the SMUs were all committed to school improvement and maintaining the school's position as highest achieving in the region. At the same time, they held the belief that there were areas held by the school administration team and by middle management to which they as teachers had no access. Many of them therefore agreed without much question to the policy approach and management style put in place by the Audan Director. Here is the general reflection by one teacher:

> ‘The problem is that we never think why we should do this or that. We do it because we are told to. We work with templates and orders set up by the school administration. For example, the Deputy Director for Primary Schools recently conducted training in which she asked us to draw a picture of a successful student and a picture of an underachiever. Then she asked us about what actions we would take to convert a successful student into an underachiever and vice versa. We followed what was asked. Then, at the end of the task, she asked us why we did not want the successful student to stay as they were? That made me to think a lot - about why we do not ask questions about what we do or what we are asked to do’ (FG, Teacher B6).

At the time of my fieldwork, there was tension within the collective of the Audan. This was because all 23 teachers (14 of them participating in my research) who had successfully completed the CoE courses were boycotting the school administration, because it did not provide teachers with proper support to implement the ideas and innovations from the CoE courses, as the teachers had been instructed by the CoE trainers. As the result of this demand, teachers completing the CoE course were allowed to have a creative-group discussion-day every fortnight:

> ‘We completed the CoE course. A lot was explained to us about reflective practice and teacher research during our course by the NIS trainers. We want to engage with reflective practice and use a critical-friend approach in our lessons. But our school administration did not support us. So, we [the teachers who attended the COE course] boycotted our administration! We were instructed by our trainers to question the way we teach. As the result, we were allowed to form creative-groups and organise the exchange of experiences every fortnight’ (Teacher B5).

At the same time, the Audan Director’s position in relation to initiatives dictated from the top, such as CoE course, was as follows:

> ‘I personally do not agree with many of the reform initiatives. I can be dissatisfied and unhappy with what I receive from above while in my office. But I never show it to the school collective. I know that I serve as a bridge between policymakers and teachers; and I have no choice but to promote the policy of the Ministry’ (Director B).

The Audan Director thus admitted the obedience she showed towards hierarchical power; and at the same time she expected orderly discipline and obedience from her own staff members.

I observed one of the creative-group discussions conducted by the five mixed-subject teachers who had completed the CoE course. The only attendees were the twelve teachers who had not had the chance to attend the CoE course. It was only the second time that the teachers who had completed the CoE course had organised a creative-group session. The teachers who organised the discussion were disappointed by the number of teachers who attended their session. They said that the reason for the low turnout was lack of awareness of the benefit teachers would obtain from attending the discussion. On the other hand, the culture of competition between teachers who had attended the CoE course and those who had not was very high; and so every teacher wanted to attend the actual CoE course:

> ‘The creative-group discussions should be attended on a voluntary basis. Unfortunately, not everyone sees the benefit from attending this group discussion. On the other hand, many teachers say that they want to attend the actual CoE course, not our version of the CoE course’ (Head of the SMU B2 and Teacher B2).

In other words, the Audan teaching community shared the belief that the external trainers were better at explaining the new approaches and technologies in teaching and learning than their own colleagues.

Additionally, I observed five lessons conducted by the teachers who had completed the CoE course (see Appendix R). One of the teachers who observed the lessons of the CoE teachers said that, until recently, Audan teachers held the belief that they could learn only from teachers specialising in the same subject area and had never considered trying cross-disciplinary learning:

> 'Previously, we never had the opportunity to learn across the SMUs. We used to interact with teachers of the same subjects. However, after attending the CoE courses, we [teachers] created so-called creative groups consisting of teachers specialised in different subjects. We conducted seminars with a teacher of History. I am a teacher of Kazakh. We learn a lot from each other' (Teacher B4).

The opinion of the Deputy Director on the recent situation in relation to teachers carrying out a boycott and wanting to implement what they learnt in the CoE course was that this was due to tension over who would be appointed Director when the present director retired:

> 'There is uncertainty with regard to who is going to be the successor to our Director. She [the Audan Director] has no say in who will be her successor. It all depends on the decision of the Head of the *Raiono* and *Oblono*. The boycott was organised by one of our colleagues who wants to become the Director. As a result, the collective is divided into two camps. One camp wants to stay loyal to what we have done and how we work. The second camp wants change, which I do not think is going to be good for our school in terms of maintaining the leading position in the region' (Deputy Director B3).

In other words, the time for change initiated by the Ministry of Education (CoE courses and introduction of a new curriculum as discussed in Introductory Chapter) came at the time of possible changes in school leadership team, which seemed create a lot of worry among teachers, including the once that was discussed in

section 4.4.7 (p.141) practicing the traditional system of doing favours based on kinship and *blat*.

The following subsections discuss the sub-activity systems within the Subject Methodological Units relating to the mentoring of young teachers and the subject decades.

6.3.2.1. The young teacher-mentoring sub-activity-system in the Audan gymnasium

The young-teacher mentoring programme was applicable to all teachers who joined the Audan school at anytime during their career and whatever their professional qualification level. Here is the explanation provide by the Deputy Director for Methodological Matters, who is responsible for this initiative:

> 'At the beginning of for any teacher who joins our school a mentor is appointed. Once the order is issued, the mentor and mentee should develop a joint work plan. What we require in the plan is that the mentor carry out at least two lesson-observations per week in the mentee's classes and vice versa. A mentor should dedicate sufficient time to work with the mentee on certain aspects, such as lesson planning; analysing the students' results; preparing the teacher profile; and so on. At the end of the programme, the mentor prepares a report, and we [the school administration members] also prepare our feedback report, which is then discussed at the office of the Director. Usually, the discussion takes place in April. A mentee will be offered an extension of his/her contract based on the results of our work' (Deputy Director B3).

One of the participants in my study was a History teacher with twelve years of experience and with the CoE certificate. He had joined the school recently and

were made to undergo the young teacher mentorship and was under immese psychological pressure. Here is what the teacher shared:

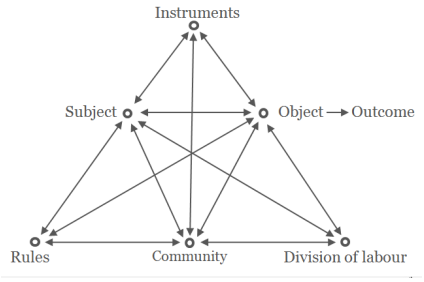
> ‘I am an experienced teacher. However the Director required my to fulfill the programme of a young teacher. I was given a mentor. I have very good support in this school from my mentor and in general from colleagues. However, I am waiting for April with anxiety. I do not know what the feedback will be and if I will get an extension of my contract’ (Teacher B7).

Figure 6.4 illustrates the fact that the Audan young-teacher mentoring sub-activity system used the following mediating aretefacts: work plan of the mentee and mentor; lessons observation by the school administration-team members and the Head of the SMU; detailed reports about the results of the mentor’s and mentee’s work; and a collegial discussion of the results of the work.

Instruments/Artefacts/Tools:

The work plan of the mentee and mentor
Lesson observation by school administration/Head of the SMU
A detailed report on the results of the mentorship
A collegial discussion of the report and the results

Subject:
Young teacher



Object:
Induction into the professional school culture

Outcome:
Qualify teacher to continue to work in the school

Rules:
Ministry Rule on teacher recruitment
Instructions about young teacher mentoring
School Director Order to assign a mentor

Community:
Subject methodological Unit
School Community
Parent community
School administrative team
Local Departments of Education
Department of Quality Control of the Ministry of Education.

Division of labour:
Director
Deputy Director
Heads of SMUs
Mentor teacher
Mentee teacher

Figure 6.4: The young-teacher mentoring sub-activity-system and mediating artefacts as used in Audan gymnasium

I had the opportunity to observe the History teacher's Open lesson that he conducted as part of his a young-teacher mentorship. His lesson was observed by the Director, the Deputy Director, the Head of the SMU, his mentor, and two other History teachers. In general, the Open lesson was a rehearsed lesson already tried out with the same students. The students knew when and how to react to the questions, sometimes overtaking the questions with the answers. The feedback provided by the Director at the end of the lesson was very reflective on why certain active methods were used and the purposes behind them; whereas the Head of the SMU provided feedback on the students' engagement and the teacher's connection with the students. However none of them pointed out that the lesson was one which had been well rehearsed. In other words, there was a shared understanding and implicit agreement among the Audan *kollektive* that the Open lesson should be a well-rehearsed and well-prepared 'showing-off' lesson. This assumption was confirmed when I participated in the subject decade held by the SMU. The following subsection will present the findings about the subject decade sub-activity system in Audan.

6.3.2.2. The subject decade sub-activity-system in the Audan gymnasium

According to the Audan school rules, a subject decade should be conducted by each SMU; and, according to the plan, no two subject decades are conducted in the same week, as explained to me by the Deputy Director for methodological matters. During an SMU's subject decade, all teachers should deliver an Open lesson and conduct an event in a team of two or more teachers.

The first week of my fieldwork started with observation of a subject decade organised by the SMU for PE and PBMS, which gave me the opportunity to observe Open lessons and a feedback session in which the Audan Director took part. I also attended the SMU meeting held by the Deputy Director at the end of a subject decade.

At the focus-group discussion, the Head of the SMU for PE and PBMS said that his SMU was required to conduct a subject decade and he said that was not the case for other schools in their area:

> 'Our school [Audan] is one of the prestigious schools in the region and we [the SMU for PE and PBMS] should keep that status up. I know neighbouring schools where PE teachers are required just to deliver physical training lessons. We, on the other hand, are required to think through how we deliver our lessons by educating the student about physiology and training them to be healthy and strong. Of course, it would be easier for me to work in the neighbouring school; but probably now I cannot give up this job. I am so used to the fact that my SMU is part of the school life. So we put a lot of effort to make the subject decade interesting for students and teachers' (Head of the SMU B7).

Appendix Q contains the planned events and Open lessons conducted by the teachers of the SMU for PE and PBMS during a subject decade. As such, teachers not only delivered Open lessons but also organised events for teachers, students and parents, which the whole school seemed to enjoy greatly.

> 'Since we are celebrating the nineteenth anniversary of our school this year, it was decided that we would do all types of events, with the involvement of parents, teachers and students, when conducting subject decades. Yesterday, I attended the Sport Day event as a teacher and a mother. It feels really good that our school is like a second family for all of us' (Deputy Director B3).

At the same time, just like the young-teacher mentorship, the subject decade in the Audan had a very disciplined process involving attending the event; observing; reporting; and finally concluding the event by discussing the results of the week at a formal meeting in which the Audan Director and the Deputy Director concerned took part.

The Open lesson that I observed along with the Audan Director was a very well-planned lesson; and once again it was also well rehearsed. During the feedback session, the Director asked the teacher to demonstrate the lesson once again at the regional seminar that the school was going to deliver as a part of their work serving as a platform for sharing best practice with the other schools in the district:

> 'This, I think, is a very well-prepared lesson with clear aims and clear instructions for students to follow. Moreover, it integrated theoretical and practical knowledge about their [students] physical development. I would like you to include this lesson in the regional seminar and to show it again to the PE teachers from the district schools' (Director B).

Many research-participants contended that delivering Open lessons are good for two reasons. One reason they put forward was that by receiving feedback a teacher prepares for teacher attestation. That is, the teacher receives a letter from the employer about the results of an independent evaluation of the professional competence of the teacher based on observing the lesson. The second reason they gave me was in line with what the Audan Director asked the PE teacher to do: that is, to have a well-prepared lesson to deliver at the regional and district seminars as a part of the sharing of best practice.

Finally, the discussion of the results of the subject decade conducted by the SMU for PE and PBMS was led by the Director, during which the Deputy Director summarised the results of the subject decade and the consolidated report was submitted by the SMU to the Director. No questions were asked and no comments made. At the end of the meeting, the summed up by saying that 'it was one of the best subject decades organised by the SMU for PE and PBMS. Let's approve their report' (Director B). According to the school rules, reports on subject decade had a very standardised structure. In fact, generally, all files and any type of report within the Audan were organised in a very standardised and highly structured way,

in order to facilitate the process of school inspection. Here is what the Deputy Director said about the highly standardised way of presenting the documentation:

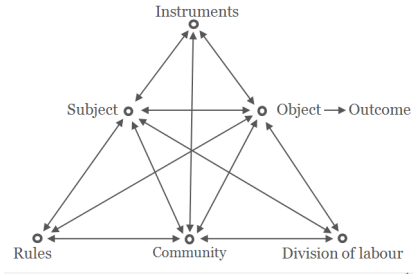
> 'We use a standardised format for all our reports across the school, at least for the sake of school inspection. God forbid that a new inspector should come - we might get in trouble as he might have his own preferred way of seeing plans and documentations. If so, we would re-write and re-print and re-approve everything we did previously' (Deputy Director B3).

Figure 6.4 illustrates that the Audan subject decade sub-activity system employed the following mediating aretefacts to achieve the expected outcome: the detailed planning of a subject decade; the conducting of Open lessons; lesson observation and feedback sessions; schoolwide events as a team; and finally the formal report that is discussed and approved at the formal meeting, with the participation of the school administrative team members and the members of the SMU concerned.

Mediating Instruments/Artefacts/Tools

Subject decade plan
Open lessons/Lesson observation/Feedback sessions
Schoolwide events as a team
Formal report/ Formal discussion of the results

Subject:
SMU teachers



Object:
1) Exchange with experiences
2) Teacher Qualification Upgrade

Outcome:
Teacher professional development

Rules:
Ministry Instructions
Pedsovet plan
SMU plan

Community:
Subject methodological Unit
School Community
School administraitve team
Local Departments of Education
Department of Quality Control of the Ministry of Education.

Division of labour:
Director
Deputy Director
Heads of SMU
Teachers
Students
Parents

Figure 6.5: The subject decade sub-activity-system and mediating artefacts as used in Audan gymnasium

As such, the Audan school subject decade sub-activity system served as a platform for teacher learning, collaboration and sharing, despite the fact that some of the teachers did not consider it learning but preparing reports and complying with rules set by the school administration.

> 'I do not know if I learn anything from any of my colleagues by following all these rules set by the administration. I know for sure we all interact with each other in order to prepare reports and submit them on time as required by the administration. Am I right?' (FG, Head of the SMU B5).

It can therefore be said that teacher learning in the Audan is perceived differently by members of the teaching staff, based on where a particular teacher stands in his/her professional life in terms of accumulated experience; professional wisdom; and their methods of questioning and reflecting on their own practice.

6.4. Summary and discussion: answering the research questions

With specific reference to the context of the Audan gymnasium, this section summarises and synthesises the main findings and offers answers to the research questions:

- What is the nature of teacher collaboration for professional learning in Audan?

  Sub-questions:

  - Is there any teacher collaboration for professional learning in Audan?
  - If, yes, what kinds of teacher collaboration for professional learning are there in Audan?
- What are the key factors that facilitate or hinder teacher collaboration for learning in Audan?

This final part of this section presents the main conclusions and the implications of the findings for Audan gymnasium.

6.4.1. The Audan gymnasium vision

This chapter has narrated the story of Audan, a state-funded gymnasium located in a district town with an ethnically diverse student and teaching community. Although it had a low student-teacher ratio, the student community was twice as big as the capacity of the school.

The main goal of the Audan leadership was to maintain the position of the school as high performing and the best school in Kazakhstan. In general, the Audan teaching community was extremely disciplined in following the vision of the school leadership, which was perceived as a professional and trusted leadership from whom to learn. The characteristics of the Audan teaching community were better than the national level. Its teachers were diverse in terms of their ethnicity.

In the following section, I synthesise the evidence concerning the forms of teacher collaboration identified in Audan and offer an answer to the first research question.

6.4.2. Forms of teacher collaboration for professional learning in the Audan gymnasium

As with the Auyl, three forms of teacher collaboration were identified in Audan, all based on teachers' motivations: i) teacher collaboration as a compliance strategy; ii) teacher collaboration as a survival strategy; iii) teacher collaboration as a part of job responsibility. Additionally, there was a more visible and informal type of teacher collaboration based on teachers' personal relationships and how far the on-site facilities promoted collaboration.

1) Teacher collaboration as a compliance strategy

Just as in Auyl, teacher collaboration in Audan that took place within the rule-governed activity and sub-activity systems was strictly compliant with the order of the Ministry of Education. There was however a more creative use than in Auyl school of mediating artefacts in order to achieve the desired outcomes. In general, it can be argued that the established culture of peer-coaching; the school-leadership team-members' learning; the young-teacher mentoring programme, the conducting of subject decades; and the preparation for *pedsovet* meetings all served as platforms within Audan for teacher collaboration in terms of exchange of ideas, interaction and learning. However, as the findings suggest, all the activities on these platforms were aimed mainly at internal appraisal, where the supervisors prepared subordinates to follow the disciplined and strict rules set by the Audan leadership. The supervisor and the subordinates are made equally responsible for the outcomes they achieved. Therefore, it was a form of collaboration as a compliance strategy with a slightly different motive than in Auyl, however, with its focus on internal discipline.

2) Teacher collaboration as a survival strategy

At times, however, it seemed that the relationship between the supervisor and the subordinate, mentor and mentee led to uncritical reflection and feedback from colleagues, especially when Open lessons were being conducted. This is because, as the data illustrates, failing to achieve the expected outcomes set by the school administration was punished by naming and shaming in front of the school collective. In the case of the young-teacher mentoring, failing to demonstrate achievements meant no contract extension for a young teacher. As a result, just as in the Auyl, collaboration became for some a survival strategy through a failure to appreciate the constructive debate that is necessary for authentic professional learning (Achinstein, 2002). In other words, the approach to collaboration in Audan can be also seen as contrived collegiality, i.e. administratively regulated,

compulsory, implementation-oriented, fixed in time and place, and predictable (Hargreaves, 1994).

3) Teacher collaboration as part of job responsibility

Nevertheless, the evidence shows that making teacher collaboration part of the job responsibility produced the desired outcome of ensuring the survival of only those teachers who could cope with the demands of the Audan administration. For example, all the Deputy Directors stated that they learnt how to work from the Director and their own colleagues who also work as her Deputies; whereas all the Heads of the SMUs stated that all the Deputy Directors were there ready to work with them; and that there was also mutual help and collaboration among the Heads of the SMUs which was a part of their job responsibility. Mentors and mentee teaches also had a very clear job description and guidance on how they should work together and even how many times they had to observe each other's lessons. The Deputy Directors and the Heads of the SMUs had to observe a certain number of lessons as a part of their job responsibilities. In addition, from the perspective of the organisational culture, the facilities in the Audan and the conditions in the school environment were more organised and encouraged formal and informal interaction and collaboration. For example, all the Deputy Directors were located in the open-space facility, ensuring that they communicated on a day-to-day basis. The teachers frequently used the staffroom space for their formal and informal meetings.

As such, while the forms of teacher collaboration in Audan were similar to the types of teacher collaboration in Auyl, they were all context-dependent and differed in terms of teachers' motivation. Those aspects will be discussed in Chapter Eight when I present the cross-case analysis. At this point, as with Auyl, in order for me to have a full understanding of the nature of teacher collaboration for learning in Audan, there is a need for me to present and discuss the key factors that facilitate the existence of the types of collaboration identified above. Some of the

factors that I have discussed in Chapter Five in reference to Auyl are also relevant to Audan; and so cross-referencing will be made as applicable.

6.4.3. Key facilitating and inhibiting factors for teacher collaboration in Audan gymnasium

As in the case of Auyl, Audan teachers' learning and professional development were also impacted by wider sociocultural, socio-economic and school organisational, and micropolitical factors.

i) School culture and rule-governed activity systems

The findings from Audan demonstrate that the long-standing *kollektive* school culture and the rule governed activity-systems inherited from the Soviet education system - such as the *pedsovet*, SMUs and the young-teacher mentoring system - are not only present, but also act as a unifying bond between the different generations of teachers. In Audan, all the platforms for teacher collaboration worked well and served their purpose in exactly the way intended during the Soviet era: that is, for the purpose of control. These achievements can be attributed to the ability of the Audan Director, who was educated by the Communist Party, and who served as Head of the *Raiono* before the dissolution of the Soviet Union. However, the results were delivered at a cost to teachers' work-life balance and their psychological and emotional states, because mistakes and failures were ruthlessly punished by being named and shamed at meetings.

ii) Official rules and norms and administrative code

The findings also showed that there was contradiction and incoherence within the official rules and norms issued by the Ministry of Education, as well as incoherence in the national legislation, which all serve as a barrier to teacher collaboration for learning. For example, within the *pedsovet* activity–system

contradiction occurs due to an incoherence in the Order (No272) of the Ministry of Education. This compels the school director to set up the *pedsovet*; and the same time makes the same director serve as Chairperson of the *pedsovet*. The director's power of positionality therefore restricts the participation of the teaching staff in the schoolwide decision-making process. On the other hand, it becomes complicated, because of national policy, for a school director to decide how much teaching staff should be involved in the decision-making process. This is because the Administrative Code No235-V (June 5, 2014[41]) and the Law on Public Service of the country both say that a director is the sole person liable for all the major decisions made in his or her school. That is, the director may be sued if there is a complaint on the part of a teacher for not having been given an opportunity for professional development; while it is the teaching community who approve, through the mechanism of the *pedsovet,* a teacher being given the opportunity for professional development.

iii) School leadership and teacher professional identity

In general, the leadership style of the Audan Director was seen to be professional and trustworthy, helping her staff develop the required skills to achieve high student results. Some teachers attributed the Audan Director's trustworthiness to her ethnicity. Nevertheless, the teachers' participation in the decision-making process in the *pedsovet* looked limited. It can be argued, just as with Auyl, that it was caused by the process of appointing a school director, a process in which the teaching staff had no say. However, in Audan, this limitation seemed to be present not because of the school Director, but through teachers' own choice. The Audan Director was convinced that teachers want to be led and told what to do instead of taking responsibility for experimentation and innovation. On the other hand, this

[41] An example is Article 219 of the Administrative Code of the Republic of Kazakhstan on exceeding norms for administrative expenses. This stipulates that, in all state-owned enterprises [that is, including schools], any violation of the norms for administrative expenses established by the regulatory legal acts entails on the first occasion a person being fined the sum of fifty monthly index calculations [from January 2017, one monthly index calculation is equal to 2269 *tenge*, that is 7.6. USD]. If a school director is fined, he should pay one month of his salary – 380 USD]

assertion was not free from fear-based management, as mentioned above. For example, two teachers who had attended the CoE course but failed to pass its qualifying exam at their first attempt found it difficult to continue teaching at Audan. One of them, an older and more experienced teacher, experienced psychological turmoil, as she put it, as a result; whereas her younger colleague made the decision to quit teaching (see section 4.4.9, pp.148-149). In other words, as was suggested by the Head of the SMU for Mathematics, there was overall a 'carrot and stick' approach to managing people (see section 4.4.8, p.145).

iv) National school-ranking system and teacher professional identity

The findings also show that the school leadership's belief that teachers want to be told what and how to achieve results was also not free from the school leadership's fear of those in authority over the school, namely the *Äkím* and the Head of the *Raiono*, as the school results had an effect on the *Äkím's* and the *Raiono's* rating on the national ranking scale (see subsection 4.4.8, p.143). Thus, for example, malpractice by the parents of a student in connection with the international student Olympiad (e.g. presenting someone else's written work as their child's) because of their desire to see their son/daughter gain a win was not stopped or discouraged by the Audan leadership (see subsection 4.4.1, p.112).

v) Proximity to the *Raiono* and school position

It can be said that the dependency and mutual reciprocity between the Audan school leadership and the authority, as was explained by the Audan Director , was due to confusion about the direction of the changes and the performance-based accountability system imposed on schools from the top. As such, while the Audan Director stayed loyal to her line-management, that is, the *Äkímat* and the *Raiono,* by making teachers work hard responding to all tasks related and unrelated to the education system, her school benefited from additional funding by serving as a platform for piloting educational innovations and from the constant support of the Head of the *Raiono.* Additionally, Audan's proximity to the *Raiono* gave the

Audan teachers easy access to information at first hand; but the *Raiono* specialists expected return favours from the Audan teachers in terms of help and support with conducting school inspections, district-wide events and seminars, as well as serving as members for student Olympiads. The confirms the absence of knowledge in the *Raiono* regarding how to support schools, as highlighted by Shamshidinova (2015c) and based on the results of a survey conducted among the teachers who attended the CoE course (see subsection 4.4.2, pp.116-117). It confirms that the system of financing schools in Kazakhstan favours high performers, leaving low-performing schools no chance of recovery.

vi) Teacher attestation and teacher professional development

In general, the findings show that the Audan research-participants value teacher professional development as a way of remaining competitive in the Audan teaching community. Just as in Auyl school, the Audan teachers value teacher PDC provided by external specialists, usually as recommended by the *Raiono.* However not necessarily everyone believed that those courses had an impact on their own teaching and student learning. This dissonance between the teachers' beliefs and the value of the externally delivered courses can be explained by the value of the course-attendance certificates within the teacher-attestation system (see subsection 4.4.5, p.131, also Table 4.6, p.130).

The value placed on externally delivered course certificates was used as a lever by the Audan leadership in order to make demands on teachers' time and their compliance with the internal rules. That is, no teacher could join the externally delivered course and apply for teacher attestation until their nomination was approved by the Audan Director. This nomination was based on the teacher's results in actually teaching and also their wider contribution towards the status of the school (eg. in terms of serving as school inspectors; participating in pilot projects; delivering seminars and workshops for schools in the district; participating in events organised by the *Raiono* and *Äkímat*; gaining a winning

place in a teacher competition; achieving publications; and producing student-Olympiad winners). In other words, as the teachers themselves confirmed, they had to show they were deserving of nomination.

vii) Importance of higher authority and teacher voice

The findings also suggest that in fact teachers could have a voice if they wanted to, if the circumstances were advantageous. For example, when some of the Audan teachers who successfully completed the CoE course were instructed by the course trainers to act as the agents of change in their own school settings, tensions were generated within the Audan gymnasium teaching community which took the form of boycotting the school leadership. It is important to reiterate that those teachers who boycotted the Audan school leadership perceived that the CoE course trainers possessed more authority than did their own school leadership in terms of directing and dictating teaching and learning in accordance with the implementation of the new curriculum. In fact, the school had little information about the new curriculum and its implementation. Unfortunately, therefore, assigning a group of teachers to collaborative team-learning with little or no information about the school context, as had been done by the CoE course trainers, did not contribute towards genuine collaboration for teacher learning. It rather developed aspects of a balkanised collaborative culture: 'a culture made up of separate competing groups, jockeying for positions and supremacy' (Hargreaves & Fullan, 1996; 2012).

viii) Socio-economic conditions and ageing teaching staff

While the teachers in the Audan gymnasium were in a better position regarding access to basic infrastructure in the district town in which the school was located, they also lacked access to a good healthcare service and job prospects for the teachers' family members. Thus, as with the teachers in Auyl, many teachers in Audan, especially the very experienced ones and those near retirement age, had plans to move to the city. As such, the prospect of fifteen to twenty teachers

retiring in the next five years, including the Audan Director, along with expected changes in the school leadership about which the Audan teachers were uncertain, seemed to create tensions between what may be called 'two camps' of teachers. One camp wanted to continue working in a disciplined way by pursuing the vision of the Audan school-leadership and the existing rules. The motivation for this was the fact that the processes in place, i.e. the current approach to subject programmes and school leaving exams, were producing good results. The second camp, consisting mainly of teachers who had attended the CoE courses, wanted change and transformation. However they were unsure about the direction of the changes and how the school exam was going to change based on the new curriculum.

ix) Diverse teaching community and people of the circle

The Audan teaching community benefited from a more diverse population of teachers belonging to various *clans* and representing a range of ethnic groups. Interestingly, there was a generally accepted perception of a teacher's ability to be self-disciplined based on their ethnicity. For example, Russian teachers were seen as being more self-disciplined than Kazakh teachers. It was also believed that the Audan Director's ability to make the school work in a very disciplined way was based on the fact that she was of German background. While this perception is debatable from my own subjective perspective, there is a visible benefit from such diversity in terms of preventing the tradition of granting favours based on kinship or family ties, in spite of the fact that around 25 percent of teachers in Audan had attended the same schools as students.

Nevertheless, in general, there was a fear of the system of granting favours returning to the school after the retirement of the Audan Director. This uncertainty was caused by the current system of appointing school directors, a process which was carried out by the Head of the *Raiono* in consultation with the *Äkímats* and with no participation from the school's teaching community. As discussed in subsection 4.4.6 (p.135-137) this issue has been raised by the activist teachers and

education observers, but has never had full attention from the Ministry of Education. At the time of my fieldwork, there were already some signs of teachers using their personal connections, something about which the Audan Director expressed her disappointment. For example, by using her connection in the *Raiono* (see section 4.4.9, p.148), a teacher was able to join the CoE course without the Audan Director's approval. Hence (as pointed out in section 4.4.7, p.142), this again confirms that teachers acting in a highly regulated system with high distance from power and high respect for authority feel vulnerable in problematic situations, i.e. instead of looking for an internal solution by embracing conflicts, discussion of the problem and tension are avoided. As a result, teachers sought a solution from outside their own setting; or by connecting to people they knew with appropriately higher status.

6.4.4. Conclusions and implications of the findings for the Audan gymnasium

Based on the above discussion and the findings presented in previous sections about the Audan, it can be said that the nature of teacher collaboration for professional learning in Audan, just like in Auyl, results from both conscious and unconscious values; beliefs, attitudes and perspectives; interactions and practices heavily shaped by the school's history, its locality, its proximity to the community; by the value system of the various stakeholders; and the policy environment. As such, while some of the factors can be attributed specifically to Audan only, it also shares other factors with Auyl.

Generally speaking, if we refer back to the definition of collaboration that I use for this study - a team of teachers working interdependently to achieve common goals - goals linked to the purpose of learning for all - for which members are held mutually accountable - it can be argued that from the perspective of the organisational culture Audan has creatively used historically established activity and sub-activity systems to be a platform for teacher collaboration for achieving

Audan's main goal. That is, it has delivered high-calibre student results in the school-leaving exam and remained top of the school-performance ratings.

As such, when the teacher characteristics were combined with the highly organised school hierarchy, employing strict communication from top to bottom to communicate the school leadership's vision through very disciplined and highly regulated internal norms and mediating aretefacts, it had positive and at the same time negative effects on teacher learning and collaboration. Its positive effect is that it can be counted as a good approach in that it makes teachers interact with each other to achieve desired outcomes, given that the current system inherited from the Soviet era is characterised by having large power distance and a high level of uncertainty avoidance. That is, teachers felt great respect for authority and tried to avoid tensions and conflicts. The negative effect is that it restricted teacher ownership of the vision and promoted formalism and a tendency to 'play the game', mostly based on respect for authority and also out of fear, as many teachers attested.

While one can see in Audan many of the characteristics attributed to Auyl in terms of factors inhibiting teacher collaboration, Audan is however more organised; and teachers are more reflective on how they can achieve results and why they should be led by the school Director. The experience of the Audan teaching community in terms of the rule-governed activity systems shows a considerable potential to become a platform for teacher learning with outcomes for students, as there is already a good infrastructure of peer-coaching, motoring and supervising. For that to happen, however, there is a need for better communication from the policy level to the school level about the new reform initiatives; and access to knowledge created at the top. There is also a need for professionalisation of the *Raiono* specialist, who should support schools in implementing a new curriculum, instead of expecting teachers from high-performing schools to do the work for them.

Chapter 7: Teacher collaboration for learning in the Aimak autonomous school

This chapter tells the story of Aimak autonomous school. The school was opened in 2013 and is located in one of the regional cities with a population of about 330 000. Aimak belongs to the network of publicly funded schools for gifted and talented children specialising in mathematics and sciences. Under special legislation, it has autonomy and academic freedom. In order to fully realise this new academic independence, a management system based on the principle of collective decision-making, consisting of two levels, was implemented: (i) a Board of Trustees responsible for monitoring of the school's development strategy, and (ii) an Executive Body responsible for the implementation of the strategy.

Aimak school is a full day-school with one shift. It operates across the age range of Middle and High schools, that is, grades 7-12 (ages 11-18). The school is highly selective and implements a competitive entry process while aiming to be accessible to all segments of society. The total number of students in the school at the time of my fieldwork was 575, all in grades 7-10, as it was its first year of functioning. The student population was diverse and included students from eleven different ethnic-minority groups (Russians, Koreans, Uzbeks, Tatars, Uighurs, Kurds, Ukrainians, Turkish, Germans, Azerbaijanis and Dungans) living in the city. Study is offered in two languages: Kazakh and Russian. The average class size was 18[42], with a minimum of 12 and a maximum of 24. The student-teacher ratio was one of the lowest at 5.6:1, compared to the national average of 9.5:1[43]. At the time of my fieldwork, the school did not produce any student results and had no graduates before 2016.

[42] The average class size in Kazakhstan is 18.9 (OECD, 2014b, p.237).

[43] The national figure ranges between 5.5:1 and 15:1 depending on the location of a particular school (National Report, 2014).

7.1 The Aimak autonomous school facilities, resources and leadership

Aimak autonomous school is located in a newly constructed, very modern, three-storey building with a capacity of 720 students. As with the previous two schools, there was no display of teacher or student work on either corridor or classroom walls. There were 62 classrooms, including advanced laboratories equipped with cutting-edge equipment for the study of the natural sciences. Almost all classrooms were equipped with an interactive whiteboard and all of them had access to the internet. A very good mobile and wi-fi connection was available in every corner of the school.

A few young teachers expressed the view that a well-equipped school like this makes them work hard to keep up with new technology and learn alongside their students:

> 'Although I have little teaching experience, I have been working on developing digital resources for biology classes. Now, I can have access in this school to very good-quality digital resources. But I have to work a lot to learn how to use all these technologies. To be honest, I learn a lot from my students' (Teacher C16).

Since the Aimak building had been constructed recently, it was of modern design, made up of five different blocks, each dedicated to a different subject area (the natural sciences; the humanities; the languages; the art and music; and a block containing the offices of the school administration) and equipped accordingly. However this made it difficult for teachers from different subject departments to see each other and meet during the break times. Although there was a staffroom in the administrative block, it was only used by five international teachers working in the school. Local teachers preferred to stay in their own blocks and in their own classrooms. Few of them came to the staffroom during my fieldwork, and when

they did it was mainly to work with international teachers as they were engaged in team-teaching together.

> 'When I do not have lessons, I remain in my classroom and do my work. Sometimes my colleagues come to see me there, sometimes I ask them to come to my classroom. It is not efficient for us to meet at the staffroom. We are located in T-block, we remain in the block and my SMU is scheduled to meet on Mondays and Thursday on a regular basis there' (Head of the SMU C4).

The school administrative team was very much aware of the teacher isolation created by the school design. Hence, during the focus-group discussion the Aimak Director proposed one way to eliminate the isolation by changing the norms of the staffroom based on his and his administrative team's visits to schools around the world:

> 'We all [school administrative team members] visited schools in different countries: Singapore, Finland, the UK, the USA. What we liked about their staffrooms was the relaxed atmosphere, where teachers are allowed to have tea, coffee and cookies. We however still follow the Soviet mentality, which is about keeping your working space clean and thus no coffee or tea is allowed in the staffroom. But, I am going to change it. [turning to his team] Let's buy a coffee machine for our staff room tomorrow[44]. Hopefully, this will be one of the ways we make our teachers talk to each other and visit the staffroom more often' (FG, Director C)

From this example, we can see that in the current school system it is not always about external compulsion; and nor is it about administrative restrictions: it is sometimes about traditions, which somehow do not get questioned internally to

[44] Next day, as promised, a coffee machine was supplied.

make the working environment to serve the purposes, such as making teachers get together.

The school library was designed to serve as an open-resources repository, that is, where all the resources are made available for students and teachers to assess for themselves. The furniture and the space available for individual and group work in the library were also both designed so as to make it an attractive place for students and teachers to meet and work. It was better resourced than the Audan and Auyl and included a range of textbooks by subject and grade; science encyclopedias; and novels to read for pleasure. However many research-participants contended that it did not have many resources related to teaching and learning or methodological and research books for teachers to read:

> 'Our library is a great place to spend time with students. I wish we had more resources for teachers to read about action research, the teacher researcher and many other methodological resources for teaching' (Head of the SMU C8).

On the ground floor, there was a spacious multifunction hall with a stage which could host various school-wide gatherings and events. The school canteen was equipped with a modern kitchen and a large dining room for about 400 people and had been used to serve a three-course meal for all 575 students. The Aimak administration had a tradition of having lunch together. It was the decision of the Aimak Director, who believed that a more informal atmosphere would promote discussion with his administration team and build mutual trust:

> 'This is a very new school. My team members are also new to each other. So, I decided to have lunch with the school administrative team members on a daily basis. This has become a tradition and I believe it also helps to build trust among us' (Director C).

Drinking-water stations were available throughout the school. Aimak was connected to the central heating and sewerage system of the city. In general, its maintenance cost were the highest in the country. However, as a pilot school for curriculum innovation, Aimak enjoyed extensive financing from the national budget. Hence, it was not dependent on the local budget; and therefore had no accountability to the local authority or the *Gorono/Oblano*.

However, as was made clear by the Director of Aimak, in many aspects of running the school Aimak has to follow the rules and regulations of the Ministry of Education because of the school inspection. Additionally, the Director asserted that the difference between all other state-funded comprehensive schools and Aimak was that those [comprehensive] schools are dependent on decisions made by the *Äkímats*, *Raion/oOblono/Gorono*; whereas Aimak is dependent on the decisions of the Executive Board. According to him, this hierarchical structure was another layer of bureaucracy in the system that allowed little autonomy at school level:

> 'I agree that, on the whole, we [the network of autonomous schools] are doing good things - the Executive Board works in more sensible way than the *Oblono*. But it is another layer of the Ministry of Education. We [Aimak] need approval from the it for how we work with schools around us. If this does not change the way we manage the school, it does constrain our development. We want be able to achieve what we aim to achieve' (FG, Director C).

Information about upcoming meetings and any discussions taking place in the school were exchanged via email and through a Google application for meeting schedules. The lesson timetable was available on the electronic display located in each block of the school, library, and open space areas. It was kept automatically updated with any changes.

The following subsection will describe and discuss the characteristics of Aimak's teaching community (their level of education; their years of experience; and qualifications) and their role in both the school organisational structure and the school decision-making process, in order to generate an understanding of how these factors impact on the research-participants' beliefs about continuous professional development and learning in collaboration. The characteristics of the Aimak teaching community will be shown in comparison with the national picture, as well as the data relating to the teaching communities in Auyl and Audan.

7.2 The Aimak autonomous school teacher community

Aimak was highly selective in recruiting teaching staff. They were offered much higher salaries than in mainstream comprehensive schools. Its staff of 102, including the school administration and the international teachers, was predominantly female (73%). Aimak recruited a higher percentage (27%) of male teachers than the national average of 20 percent (OECD, 2014b). Aimak's organisational structure resembled very closely that of comprehensive schools in Kazakhstan. Namely, there was a *pedsovet*; the school-management level represented by the school administrative team; and the middle-management level represented by Heads of the SMUs.

Aimak's administration consisted of the school Director and the Deputy Directors for: 1) academic issues; 2) methodological work; 3) professional orientation and experimental work; 4) pastoral work; 5) international affairs; 6) finance; and 7) the student boarding school. There were ten SMUs: 1) Mathematics and ICT; 2) Physics; 3) Chemistry; 4) Biology; 5) Kazakh; 6) Russian; 7) English; 8) Humanities; 9) Physical Education and Basic Military Service Preparation; and 10) Arts. There were also a pediatrician, a medical assistant and a psychologist to serve Aimak students. The Aimak organisational hierarchy and structure is shown in Figure 7.1.

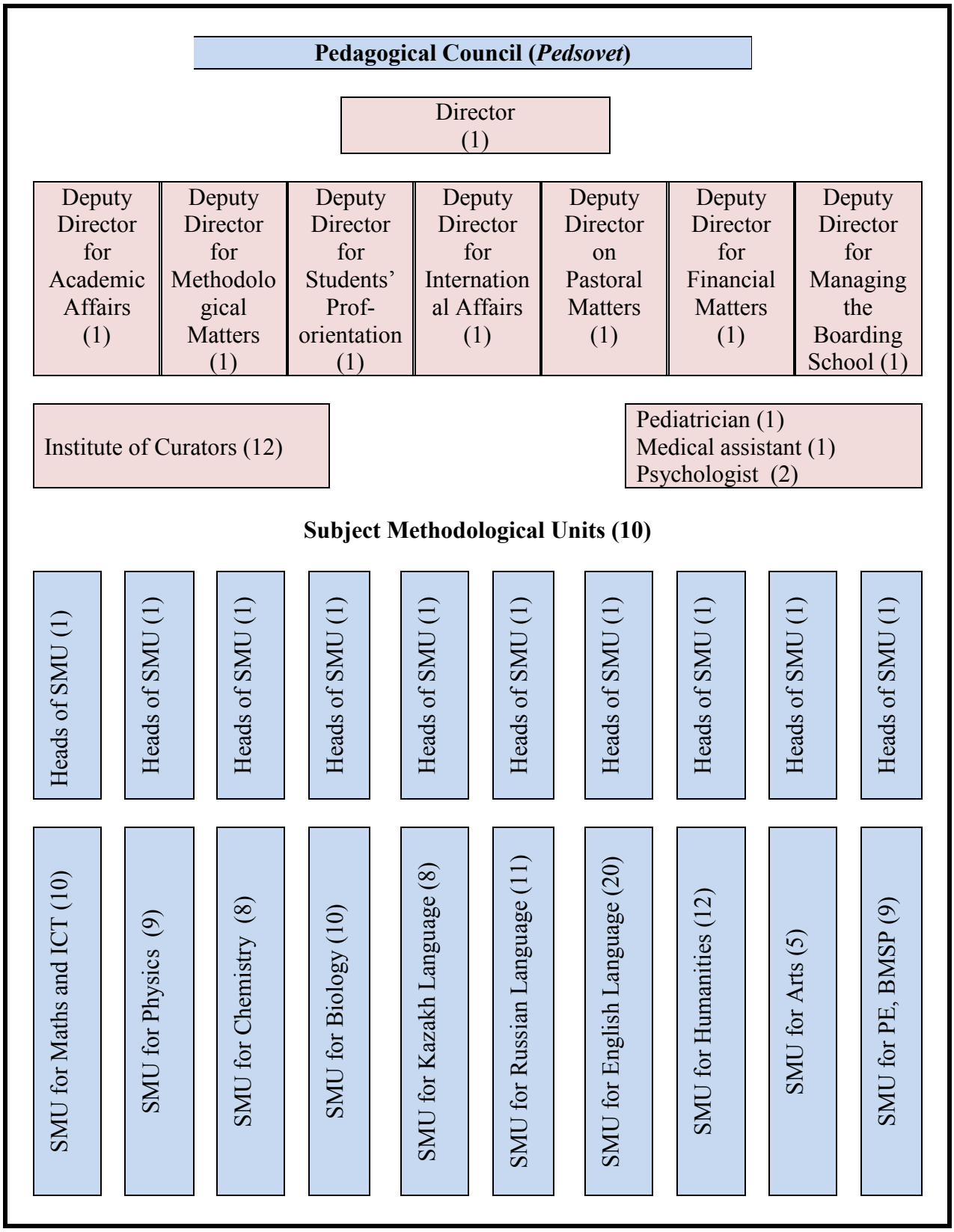


Figure 7.1: Aimak autonomous school organisational hierarchy and structure

Out of 102 teaching staff in Aimak, five teachers were international teachers, four having a BA degree and one a PGCE. Half of the international teachers' timetable was devoted to team-teaching and working in collaboration with local teachers. All the local teachers were graduates of higher-education institutions, 92 percent having graduated through full-time study and 8 percent through the *zaočnoe* route. Among local teachers, there were two teachers who had earned their Masters degree from UK universities through the *Bolashak* [The Future] programme[45]; six teachers who held Masters from the Kazakhstani higher-education system; and another two teachers hold the Candidate of Science[46].

It had much higher percentage of teachers with the highest qualification categories (45%) than the national level (10.4%) and Auyl school and Audan gymnasium. This is shown in Table 7.1. The distribution of teachers by age indicates that Aimak also recruited a higher proportion of teachers belonging to the 'Soviet generation' (66%) than teachers of the 'independent generation' (33%).

Table 7.1: Aimak autonomous school teaching staff: distribution by years of experience and qualification compared to the national figures, Auyl comprehensive school and Audan gymnasium

By Years of Experience					By Qualification Category				
	National	**Aimak**	**Audan**	**Auyl**		**National**	**Aimak**	**Audan**	**Auyl**
20 years <	33%	**31.0%**	24%	28.6%	**Highest**	10.4%	**45.0%**	29%	12.0%
9-20 years	35%	**35.0%**	46%	28.6%	**First**	31.4%	**12.0%**	30%	23.8%
Less than 8 years	32%	**33.0%**	30%	42.8%	**Second**	31.3%	**10.0%**	20%	31.0%
					No	26.9%	**21%**	21%	33.2%

[45] *Bolashak* programme is the Presidential programme to support eligible students from Kazakhstan to study in 200 best universities around the world. www.bolashak.kz

[46] Candidate of Science is a first postgraduate scientific degree in the former Soviet countries.

As reported by the Aimak Director, selecting teachers on a competitive basis led to him recruiting more teachers with a Soviet background, which according to him served as a barrier to change and innovation:

> 'I have only now begun to understand that the innovations we are trying to implement requires younger teachers with vision. I am a bit concerned that we have recruited teachers of experience [with a Soviet background] who hardly want to change anything in their practice. It gets worse because these teachers find it difficult to be called learners and they are obsessed make younger teacher to respect them for their age' (Director C).

The Aimak Director also pointed out that all the teachers selected to work in his school were expected to be involved in the process of curriculum development; the development of the assessment system; textbook writing; and the development of educational resources – all of which was never previously the case in secondary schools in Kazakhstan. He wanted to try more a democratic way of managing the school whereby teachers would be allowed to voluntarily join projects and professional-development initiatives and he did not want to constrain them with formal decisions. However some of the research-participants in my study were uncomfortable with the way in which the school leadership tried to employ a more democratic way of managing, allowing teachers to think for themselves and to be part of the different innovative projects offered on a voluntary basis:

> 'We are not used to the way our young director and his deputies manage the teaching staff. Maybe one could call it a democratic way of managing the school. But many of us do not like this approach. For me, discipline is important; and teachers should follow the rules. If there is no rule, there is no discipline' (FG, Teacher C5 and Teacher C4).

Here is how the Aimak Director reacted to my question about his democratic approach to managing the school. He was more reflective than the teachers

regarding what was happening in the process of his attempt to change teachers' thinking:

> 'Our school was established recently. It does not have an established culture and traditions. Teachers have been selected on a competitive basis. As a result, we have teachers who perceive themselves to be the best. Each one wants to be called a 'star'. They all brought with them their own beliefs and traditions to our school. Most of them are still in negotiation with one another; they are trying to understand each other and work with one another. It is not an easy process. In the beginning, I tried to implement a more democratic style of management. But my way was sometimes misinterpreted and sometimes abused. … So, they still want someone else to be accountable for decision-making. I understand it. They need time. I decided therefore to be more authoritative for the time being. I am better providing them with step-by-step, little-by-little, opportunities to learn how to listen to one another. … I am a learner myself; I do not have much experience. There is also no one who could teach me how to do it. At least, we [referring to himself and his Deputies] agreed among ourselves to read more to learn how to handle these change processes' (Director C1).

Yet, some research-participants expressed their disappointment over the Aimak Directors changing the management from democratic to more authoritative, as it was put by one of the Art teachers:

> 'My previous school has a very authoritative management. When I joined this school [Aimak] I liked it a lot. I liked the spirit and creativity and freedom that we Art teachers were provided. Here, teachers can work on their subject and do more. …But now the school administration has become more controlling. It is not only my opinion. We talk about it and we discuss it among the teachers. I am disappointed, because it is not good for my

subject. If it is to be controlled, than it is not Art: it is a drawing lesson' (Teacher C2).

This is not to say that the Aimak teachers were not involved in change activities. Indeed, many of the teachers interviewed during the fieldwork appeared to be taking advantage of the new freedoms brought about by empowerment to engage in innovation to varying degrees. Teachers' involvement in reform will be discussed in the next section.

Let me now turn to teacher interconnectedness in relation to collaboration for learning, as represented in the activity-systems in the Aimak school setting. Once again, I will be using Engeström's (2005) concept of a mediational model of an activity-system to illustrate each of the activity-systems to be presented.

7.3 Collaborative practices in the Aimak autonomous school

The Aimak teachers reported that they collaborate on multiple levels: at school level; at subject-department level and across subject departments; at different assigned task-group levels; at individual-teacher level based on attending the same professional development courses; or at the level of a friendly relationship based on various other aspects of school/professional and personal life. While Aimak had some form of school *pedsovet* and SMU activity-systems in place in line with the regulations of the Ministry of Education, it did not have a young-teacher mentoring activity-system and did not have a tradition of conducting subject decades. This was due to the fact that the Aimak school was in the early stages of formulating its organisational and structural culture. In the following subsections, therefore, I will be presenting only two of the activity-systems: the *pedsovet* and the SMUs activity-systems.

7.3.1 The *pedsovet* activity-system in the Aimak autonomous school

The Aimak did not have a *pedsovet* plan as there was a misunderstanding about where the Aimak autonomous school could be autonomous and which rules of the Ministry of Education should be followed:

> 'At the beginning I had no idea that our school [Aimak] had to follow the rules of the Ministry of Education. For example, that we have to have four mandatory *pedsovet* meetings a year. I am now collecting all the information to put together the minutes of the *pedsovets* in order. We have two or three years before the first inspection from the Ministry of Education of our school. I hope we can catch up with all the requirements soon' (Deputy Director C2).

In fact, the Aimak operated based on the instructional school academic plan in line with the development strategy for the network of autonomous schools. The development strategy for the network of autonomous schools had clear mission and vision statements, which were clearly communicated to all teaching staff. By this means, Aimak aimed to provide high-quality education and to be a leader in the education sector in Kazakhstan. It vision was to prepare a generation of students with high moral values; who are well-balanced, healthy, creative and critical thinkers; who are autonomous learners and problem solvers; and who are fluent in the Kazakh, Russian and English languages. Its vision also included sharing innovative practices which had been successfully implemented in Aimak with mainstream comprehensive schools, thereby helping to improve the quality of education and the welfare of students nationally.

> 'When we were interviewed and signed the contract, we all agreed to the mission statement of this school [Aimak], which is to contribute to the reform of secondary education in Kazakhstan and share our best experiences

> with mainstream comprehensive schools. I therefore now have to do my best to help to fulfill this mission' (Teacher C11).

Based on its vision and mission statements, the Aimak school administration held planned weekly meetings, which could include schoolwide meetings; a meeting with the Head of the SMUs only; or with the teachers of the specific SMUs as necessary.

> 'We try to conduct meetings with teachers on different aspects of school life: students; teachers; teaching and learning; and pastoral work. We meet once or twice a week. We also meet with the entire school collective when everyone is free from teaching, which is after 15:30. …This is a new school with a new curriculum and a new assessment system. Our teachers should learn how to implement them. They therefore need to share practice, ideas and discuss any difficulties they encounter. By organising weekly meetings, we are trying to cultivate a practice of sharing ideas' (Deputy Director C2).

However, some teachers were not happy with the frequent meetings, since, they said, the meetings were organised with no specific plans or clear objectives. Thus, the teachers, especially the experienced teachers, questioned the usefulness and necessity of these weekly meetings:

> 'I do not understand why the school administration conduct so many meetings in a week. I personally think it is a waste of time. I would be better engaged in preparing my lesson plans and preparing to deliver my lessons for the next day and the next week. Why don't they delegate this discussion to the Head of the SMUs and let them decide what to do with the information provided by the school administration' (Teacher C3).

Nevertheless, younger teachers were more enthusiastic about meetings with members of the school administration:

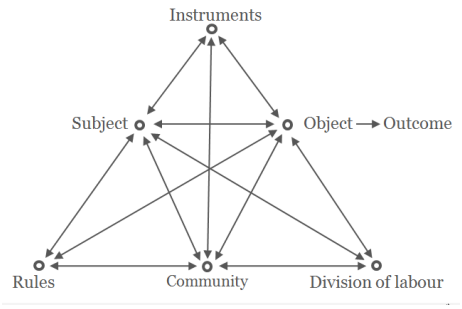
> ‘I like weekly meetings. We share ideas with the school leadership team. One week we work with the Deputy Director for methodological work, where we can discuss with him our understanding of the policy documents on formative and summative assessment; and the following week we concentrate on team-teaching approaches and work with the international teachers’ (Teacher C17).

The *pedsovet* meeting was therefore something that Aimak carried out as a formality, as displayed in Figure 7.2, with the only mediating artefact sets of minutes ‘in case the inspectors visit the school’ (Deputy Director C2). However, weekly school-administration meetings and schoolwide meetings conducted as necessary seemed a more effective process for collegial decision-making in Aimak.

Mediating Instruments/Artefacts/Tools:

Pedsovet protocols
Weekly school-administration meetings
Schoolwide meetings as necessary

Subject:
School collective



Object:
Collective decision-making

Outcome:
Improve teaching and students’ pastoral care

Rules:
No rules were available

Community:
School community

Division of labour:
Director’s role
School collective’s role

Figure 7.2: The *pedsovet* activity-system and mediating artefacts as used in Aimak autonomous school

In general, there was a recognition among the Aimak school administrative team that a greater degree of power-sharing and distributed leadership was needed in the school to fulfill the full potential of the school's autonomy and engender a greater sense of collaboration. However, the mature organisational structure which would meet this new challenge has not so far been introduced. The school organisational structure in Aimak thus resembled very closely that of the comprehensive schools in Kazakhstan, which was in turn a legacy of the Soviet system. That is, the structure is regulated by the same norms adapted from the Soviet system. That structure helps to concentrate power in the hands of the small number of people at the top of the organisation, with occasional delegation of power to the Heads of the SMUs and sometimes ordinary teachers. As discussed in the previous section, this was the struggle that the school administrative team was going through. Let me now turn to the analysis of the SMUs activity-system in Aimak.

7.3.2 The Subject Methodological Units activity-system in the Aimak autonomous school

Once again, there was no document available in relation to how the SMU were managed in Aimak. However, the Aimak administration introduced a methodological day to be conducted once a week by each of the SMUs. The aim of this methodological day was to facilitate in-service peer-to-peer teacher professional development and exchange of experiences. It was up to the Heads of the SMUs to organise the day and teachers' learning, as was stated by the Deputy Director for Methodological Matters.

The Heads of the SMUs decided to set up a so-called 'creative group of teachers' from amongst those of their teachers who had successfully completed the CoE course as a means of developing a programme for in-service peer-to-peer training. It was agreed that, on the methodological day, teachers from various subject areas should be able to attend and participate in any of the training sessions run by the 'creative group'.

> ‘I have completed the third-level CoE course for trainers. I can now work as a teacher trainer. I also trained a cohort of teachers from mainstreams schools before I joined this school [Aimak]. They all did well. Wednesday is the methodological day in our school. We have creative groups consisting of five teachers in each group. On this day, we conduct master-classes and share our experiences with our colleagues’ (Teacher C17).

While many teachers interviewed were in favour of a methodological day, some felt more comfortable working with individual teachers based on their preferences and established friendships:

> ‘There are eight of us in the Chemistry SMU. On Mondays, we discuss lessons plans for the coming week. We than again come together to discuss the current week’s lessons every Thursday, because we are able then to understand what went well and what not so well. We also are made to attend the methodological day on Wednesdays. However, I prefer to work with [name], because I think we have the same spirit and share the same understanding of issues in what and how we teach. We observe each other’s lessons and we reflect on good and bad lessons. We have become friends. But it [friendship] does not undermine our ability to be critical. Maybe it is because we are at a certain age when we understand that doing things by following the textbook will not help us’ (Teacher C6).

Additionally, a few teachers felt that cross-disciplinary and mixed-group discussion was not useful for them; and so they preferred to work with their own SMU colleagues within their own subject area:

> ‘For time being, I am not satisfied with the work of the creative groups, and cross-disciplinary and mixed-group discussions. Perhaps it is useful for others. I want something useful and tangible.’ (Teacher C7).

I observed a creative-group discussion as part of the methodological day prepared and organised by the teachers of Languages and History. The discussion was attended by 21 teachers, five of whom were the organisers. The atmosphere was relaxed and made learning pleasurable. The approach that the teacher-trainers used to organise the discussion was a mixture of teachers preforming as students and fulfilling all the assignments and tasks; and at the same time the teacher-students commenting on the teaching approaches used and how those might be improved. At the end of the three-hour session, the creative-group had a sample of a perfect lesson plan for teaching History integrated with language learning (in Kazakh, Russian and English).

The feedback that I received at the end of the sessions was very reflective. One piece of feedback was received from a teacher who had joined the school recently. She was very happy with what she got out of the discussion:

> 'You see, we never put ourselves into the students' shoes. Once we became the students, we could see the real struggle that they go through. I appreciated this approach so much. I will be better off in planning my lessons from now on' (Teacher C14).

On the other hand, a more experienced teacher who had been working in Aimak longer and had attended several of the creative-group discussions suggested that it was high time for them to try different methods of learning:

> 'We have tried these methods of learning several times already. Other creative groups are using the same approach. We should be more innovative in how we learn from each other. Otherwise, we will be bored and stop doing these creative-group discussions'. (Teacher C1).

It was also informative that teachers in the interview compared and contrasted their way of working in Aimak with their previous workplace, especially in terms of lesson observation and feedback sessions:

> 'I started my teaching experience in a village school in 2006. I had a mentor. I used to be observed by her and, at the end of the lesson, I used to listen to her criticism with tears in my eyes. She used to make me feel miserable. I struggled so much, but survived. Now I am happy that this school [Aimak] is giving me an opportunity to become a better teacher with a better way of observing lessons and a friendly way of providing feedback' (Teacher C12).

I had been invited by two teachers (Teacher C11 and Teacher C12) to observe their lessons and the way they observe each other and provide feedback to each other. Both of them were trained in the CoE course. The Deputy Director for the Pastoral Matters observed one of the lessons with me. I could therefore observe both the feedback session between two teachers and between the teacher and the Deputy Director. As such, the feedback between two teachers was more constructive and thoughtful in terms of the lesson content, approaches used and the time allocated for students to think. The Deputy Director's approach was totally different. It was very rigidly structured and dealt in detail with the students' behaviour; the classroom atmosphere and teacher's way of presenting; and methodological aspects in general. The Deputy Director's feedback session took 30 minutes; and it was one of the reasons that one of the teachers whom I interviewed and observed did not want any of the school administration observing her lesson.

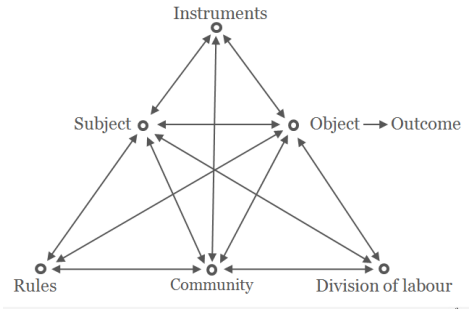
> 'Whenever my lesson is observed by the Deputy Director, I am tense and worried; not because of my lesson but because of the time I spend after the lesson listening to criticism which is not constructive' (Teacher C1).

In general, the Subject Methodological Units activity-system in the Aimak autonomous school did not have any formal mediating artefacts and there were no rules and regulations in place at that point. However, if it is to be presented by employing Engeström's (2005) concept of a mediational model of activity-system, it could be illustrated as displayed in Figure 7.3. That is, there were two main mediating instruments in place to promote teacher collaboration for learning: 1) creative-group discussion sessions facilitated by providing a methodological day for teachers; and 2) individual teachers' own preference to work with other teachers based on developed admiration, friendship and mutual benefit.

Mediating Instruments/Artefacts/Tools:

Create-group discussion
Individual teachers preferred/friendship-based interconnections

Subject:
SMU teachers



Object:
Implementing and delivering subject programmes

Outcome:
Improve student's achievements and students' pastoral care

Rules:
Not regulated by any rules

Community:
School community

Division of labour:
Deputy Director
Heads of SMUs
Teachers as members of SMU

Figure 7.3: The Subject Methodological Unit activity-system and mediating artefacts as used Aimak autonomous school.

7.4 Summary and discussion: answering the research questions

This section summarises and synthesises the main findings and offers answers to the research questions specific to the context of the Aimak autonomous school:

- What is the nature of teacher collaboration for professional learning in Aimak?

  Sub-questions:

  - Is there any teacher collaboration for professional learning in Aimak?
  - If yes, what kinds of teacher collaboration for professional learning are there in Aimak?
- What are the key factors that facilitate or hinder teacher collaboration for learning in Aimak autonomous school?

This final part of this section presents the main conclusions and the implications of the findings for Aimak autonomous school.

7.4.1 The Aimak autonomous school vision

This chapter has narrated the story of Aimak, a state-funded autonomous and highly selective school located in a big regional city with an ethnically heterogeneous student and teacher community. Aimak serves as a platform for piloting the new skills-based curriculum, which provided teachers with a degree of flexibility in trying out various student-centered pedagogical approaches. It has a very clearly communicated vision and mission statement that everyone in the school shared and could refer to. It aimed at educating a generation of students who are autonomous learners, problem solvers and creative and critical thinkers. Its vision also included sharing innovative practices with comprehensive schools. Its facilities and environmental conditions were favourable for the implementation of a new curriculum. Opened in 2013, it was in the process of creating its own professional-learning community.

In the following section, I synthesise the evidence concerning the forms of teacher collaboration identified in Aimak and offer an answer to the first research question.

7.4.2 Forms of teacher collaboration for professional learning in Aimak autonomous school

In Aimak there were the same three forms of teacher collaboration for professional learning as were found in Auyl and Audan: i) teacher collaboration as a compliance strategy; ii) teacher collaboration as a survival strategy; and iii) teacher collaboration as part of job responsibility. However, they are all context-dependent and differ in terms of teachers' motivation. Apart from these forms of teacher collaboration, there were also informal types which sprang from the opportunity to attend the same CoE course. Some of the teachers who had attended the CoE course developed one-to-one professional relationships and ways of working with like-minded teachers, while staying engaged in more widely implemented collaborative initiatives, such as creative groups and methodological days.

1) Teacher collaboration as a compliance strategy

The findings show that there were those teachers who were uncertain about the rules in Aimak and complained about being expecting to be involved in the process of curriculum development; the development of the assessment system; textbook writing; and the development of educational resources on a voluntary basis. That is, they were unhappy with a democratic approach to management. They argued that the decision-making process should stay with the school leadership and expressed their objection to sharing that responsibility with the school leadership, as would be the case in a comprehensive school through the *pedsovet* platform. As such, many of the teachers who wanted to have disciplined and clear rules of the game were not sure if they wanted to continue working in Aimak. Their decision to speak in this way was also related to their perception that they were not valued as much as they were in their previous schools. The choice made by these teachers to

participate in collaboration based on the rules of the game could thus be seen as a compliance strategy.

2) Teacher collaboration as a survival strategy

On the contrary, younger teachers, especially teachers with a Masters degree, welcomed a democratic style of school management which allowed them not only to discuss ideas with the school-leadership team members but also to get the support to implement them. The young teachers were also open to more informal discussion and participated in the school-leadership team tradition of having lunch together. In addition, it was observed that a collaborative culture was emerging within some of the SMUs. It was also evident that some of the Aimak research-participants valued teacher collaboration and sharing as a way of being competitive in an already very competitive environment of elite teachers. For some, it was a survival strategy, allowing them to obtain an extension of their contract to continue to work in Aimak. The high salary they were paid by Aimak school served as additional motivation. In other words, one should work hard and perform well to stay in the job, as there was no possibility of making the job secure by arrangement with influential contacts (see subsection 4.4.7, p.141).

3) Teacher collaboration as part of job responsibility

Finally, there were research-participants who created platforms for collaboration by embracing all the opportunities, tensions and conflicts within their own SMUs and across the SMUs, looking for new knowledge and being involved in all sorts of innovative projects. They also kept creating their own projects. For example, the Biology teacher was keen to develop digital resources and to write a textbook, motivated to do so by the capacity for learning of their very able students and the state-of-the-art laboratory and technology in Aimak. Yet another very young teacher who had completed all three levels of the CoE course was running a teacher-training course as part of the creative group. This cohort of teachers seemed to see teacher collaboration as a part of their job responsibility, allowing

them to accumulate new knowledge and construct better approaches to teaching, thus remaining competitive.

Consequently, while the forms of teacher collaboration in Aimak are similar to the types of teacher collaboration in Auyl and Audan, they are, as mentioned above, all context-dependent and differ in terms of teachers' motivation. The similarities and differences across the case-study schools of those forms of teacher collaboration will be discussed in Chapter Eight. To have a full understanding of the nature of teacher collaboration for learning in Aimak, there is now a need for me to present and discuss the key factors.

7.4.3 Key facilitating and inhibiting factors for teacher collaboration in Aimak autonomous school

A different mix of facilitating and inhibiting factors, from the micropolitical, organisational and sociocultural perspectives, were identified in Aimak. This indicates the importance of external and internal contextual factors; and underlines both the opportunities and the limitations of the school-leadership team and the capacity of the teaching staff.

i) The new student-centered curriculum and assessment system

In general, the findings indicate that the new curriculum and assessment system piloted in Aimak was focused on a student-centered and constructivist learning approach, requiring students to demonstrate skills and competences rather than repeat material from a textbook. It therefore motivated teachers to search for effective ways of delivering their lessons; and thus generated a need for teachers to talk to each other and create platforms for the exchange of ideas, as well as establish one-to-one amicable professional relations. In addition, the influence of the specially trained school leadership; the school's cutting-edge facilities; and the fact that the students were higher ability all served to motivate teachers to progress

their professional learning. This even included considering learning from their own students about new developments in technology.

ii) School organisational structure and school management

Despite that fact that Aimak had been set up as an autonomous school regulated by special law, it was formally made to follow the rule-governed activity-systems, such as the *pedsovet* and SMUs as dictated by the Ministry of Education, which were not properly linked to the needs of Aimak. In other words, at the time of my field work, the school culture in Aimak did not have the mature organisational structure that would help to meet new challenges. Rather, it had a combination of the current organisational structure of the comprehensive schools, which was in turn based on a very hierarchical system of management; and collaborative initiatives for professional learning based on individual teachers' own disposition, group dynamics and the opportunities provided. The Aimak school leadership was therefore encountering particular difficulties in creating a professional-learning community based on sharing and teacher collaboration.

iii) School leadership and teacher professional identity

The findings demonstrate that there was implicit competition among the teachers, who had all been carefully selected, which created conflict, especially in terms of their expectations of the school leadership. Some teachers openly criticised the Aimak director's more democratic management style. These teachers expected the Aimak leadership to be strict and assign tasks to teachers in a disciplined way by setting up rules which had to be followed. For example, one of the Heads of the SMUs believed that Aimak teachers should be assessed for their individual achievements but not for their collective work. She contended that: 'while some of the teachers work hard to innovate and deliver results, others sit back and wait for the hard workers to tell them at the creative-group discussions how to deliver results' (Head of the SMU C7). It can be said that this was the voice of those

teachers' past experience in other schools. On the other hand, there were other teachers who preferred a democratic management style. They expressed disappointment when the Aimak director decided to be more directive in managing the school.

The Aimak Director also raised a concern over recruiting highly experienced teachers belonging to the 'Soviet generation', because, as he contended, those teachers found it difficult to be described as learners. This perception was not free from wider sociocultural traditions as discussed in subsection 4.4.7 (p.138), which meant that the elderly and more experienced teachers expected respect for their opinion to be shown by the younger generation. Nevertheless, there was a recognition among the Aimak leadership that a greater degree of power-sharing and distributed leadership was needed in the school to fulfill the full potential of the school's autonomy and engender a greater sense of collaboration.

In general, the Aimak school leadership and the members of the teaching staff were very enthusiastic about the new ways of working and the opportunities provide for them to develop new knowledge. The Aimak teachers, especially those who had attended the CoE courses, talked very articulately about reflective practice; action research; the role of the teacher-researcher; the constructivist learning approach; and the criteria-based assessments used to evaluate students' work. Many research-participants articulated a strong commitment to their students' learning based on their own self-reflection and peer-evaluation. As discussed above, this was due to the fact that the new subject programmes required these competences and skills from students and teachers.

iv) Importance of higher authority and protection from people of the circle

Aimak was managed by the specially created management company that was yet another layer of bureaucracy in the system restricting school autonomy, as it was

put by the Aimak Director. The Director put it in this way because, while the special law regulating Aimak school's status meant that it was not accountable to the *Äkímat*/*Oblono*/*Gorono,* it nevertheless experienced pressure from them in terms of the dissemination of its successful practices to the mainstream schools, as set out in its mission statement. At the same time, however, any decisions made by Aimak in relation to the dissemination of practice had to be approved by the managing-company executive board; and this applied also to such matters as the recruitment of teachers and the appointment of the school-leadership team. On the other hand, according to the Aimak leadership, it was advantageous to be managed by the management company, as it protected Aimak from the pressure of ad hoc requests to make special arrangements originating from officialdom and parents around teacher appointment and student admission (as discussed in subsection 4.4.7, p.142).

v) School facilities, environmental conditions and resources

Finally, in addition to high-quality human resources, Aimak school had the best possible environmental conditions, facilities and resources. It enjoyed extensive financing; fully equipped classrooms with up-to-date technology; and the use of a fully resourced open-space library. Teachers were motivated to stay in the school to learn new things. The science teachers provided aces to the state-of-the-art laboratories said they were motivated to search for new information, advance their knowledge and improve their teaching level. They made time available for interaction in the form of a methodological day, which provided teachers with opportunity to get to know each other and exchange experiences. Nevertheless, teachers were restricted in cross-SMU interaction. This was due to the design of the school building, which consisted of five different blocks, each dedicated to a different subject area, making it difficult for teachers from different subject departments to see each other.

7.4.4 Conclusions and implications of the findings for the Aimak autonomous school

Based on the above discussion and the findings presented in the previous sections concerning Aimak, it can be said that teacher collaboration can only be properly understood by taking into account not just the particular school context but also the particular teacher's experience. That is, as argued by Brownell and her colleagues (2006), 'without understanding how individual teacher qualities influence a teacher's ability to profit from collaborative learning opportunities, we have no way of understanding how to gauge the potential success of such efforts or determine what type of collaborative structures teachers need' (p.171). The findings indeed show that not all members of the Aimak teaching staff chose to collaborate. It is also evident that not everyone benefited from collaboration even when provided with the opportunities, facilities and resources with which to collaborate and share.

The evidence suggests that, as far as their attitude towards learning and sharing was concerned, there was a difference between the attitude of teachers from the Soviet generation and those from the independent generation. For example, the Aimak Director expressed the opinion that the Soviet-generation teachers in his school mostly wanted to be told what to do and how to do it, as they were not ready to take responsibility for decision-making. This was not surprising, as their beliefs and expectation were based on their experience of working in the nation's mainstream schools; which are characterised by having large power distance and a high level of uncertainty avoidance (see subsection 4.4.7, p.142).

Additionally, for the different generation of teachers, complications occurred in the negotiation of their own stance and belief system, due to the collectivist mentality which means that the younger generation is expected to show respect for the older generation by avoiding disagreements and tensions. Thus, while some teachers welcomed the change in management style of the Aimak leadership from

democratic to more authoritative, others were disappointed. As stated by the Audan Director, everyone in his school was learning; and even he was learning how to handle these change processes by reading, since there was no one to tell him how to do it. It can be argued that, while the characteristics of the Aimak school are more favourable for developing and sustaining a professional learning community, there is however a need for critical reflection on the key enabling and inhibiting factors and the ongoing management and longer-term development of the Aimak school culture in terms of learning and collaboration.

That is, there was no integration between the official rules as dictated by the Ministry of Education (*pedsovet*, SMUs) and the choice of the school collective choice within the school organisational culture (eg. the methodological day, the creative-group sessions). Thus Aimak could use the concept of expansive learning to help to establish the culture. According to the activity theorists (Engeström, 2001; 2003; Engeström & Sannion, 2010), expansive learning is when an individual involved in a collective activity takes action to transform an activity system through a reconceptualisation of the object and the motive of activity, embracing a radically wider horizon of possibilities than in the previous mode of activity (pp. 30-31).

On the other hand, for this to happen, there is a need for Aimak to professionalise the teaching staff; and allow the staff to develop its professional identity. The findings from Aimak demonstrate that teachers, especially those who had attended the CoE courses, talked very articulately about reflective practice; action research; the role of the teacher-researcher; the constructivist learning approach; and the criteria-based assessments used to evaluate students' work. In other words, there is a need allow them to become extended professionals committed 'to systematic questioning of one's own teaching as a basis for development; the commitment and the skills to study one's own teaching; and the concern to question and to test theory in practice' (McLaughlin, Black-Hawkins, McIntyre, 2004, p.4, in reference to Stenhouse, 175, p.143).

Chapter 8: Reflections, cross-case analysis, discussion and implications of the study

In this final chapter, I start with reflections on the rationale for the research; on the research design; and on the use of cultural-historical activity theory as an analytical tool, as all of these have a huge impact on how the cross-case analysis has been organised. Next, I discuss how the cross-case analysis is organised. The answers offered in the preceding Chapters, in the specific context of each of the case-study schools, to the first and second research questions will be integrated in the cross-case analysis. This is with the aim of drawing conclusions and discussing the implications of my study for the development of a culture of collaboration for teacher professional learning in Kazakhstani schools and some policy recommendations. At the end of the Chapter, I will therefore be addressing the third research question: What are the implications of the study for the development of a culture of collaboration for professional learning in Kazakhstani schools?

8.1. Reflection on the rationale for the research

The CoE course aimed to build 'human capital' by investing in the development of the capacity of individual teachers; and at the same time build the 'social capital' of the school collective, in which knowledge and skills can be shared to the benefit of all. This initiative marked a willingness on the part of policymakers in Kazakhstan to move away from the previous top-down approach to teacher professional development. In general, it was assumed that this new concept of teacher collaboration would be an effective strategy for encouraging teachers to take ownership of the major curriculum reform that is taking place in the Kazakhstani secondary education system

My role as an insider in these education-reform initiatives, as I discussed at some length in the Introductory Chapter, allowed me to develop a strong conviction,

first, about the importance of creating professional communities of practice that emphasise teachers' collaboration for learning; and, second, that such communities of practice can serve as a powerful force in accelerating the dissemination of practice successfully piloted in the NIS schools, as well as sustaining such reform efforts beyond the NIS environment. However, through being engaged in implementing the NIS projects between 2010-2015, I came to understand that the process of facilitating the engagement of teachers in collaborative professional learning is not easy, but one which is very delicate, complex and requires time, resources and support (McLaughlin, 2006; McLaughlin et al, 2014).

To reiterate briefly, the nature of my understanding was that this process is not free from the various personal, professional and emotional characteristics of individual teachers; and that these should be dealt with delicately. The process is complex because, in devising new policies for educational change, there is a need to understand that policy is not so much implemented as reinvented and redefined at each level of the system (Darling-Hammond, 1998, p.647; Bridges, 2014). Hence, what ultimately happens in schools and classrooms is less related to the intentions of policymakers than it is to the knowledge, beliefs, resources, leadership and motivations that operate in a local context (Darling-Hammond, 1998, p. 647-648).

As such, informed by the outcomes of the projects that had been implemented in the NIS environment, I was challenged to undertake this study wherein I argue that, while attempting to provide Kazakhstani teachers with more opportunities to take ownership of reform and control over their own work, policymakers, including myself, have underestimated the micropolitical challenges; the factor of the school organisational structure; and the broader sociocultural factors impacting upon teachers' beliefs and behaviours during the process. Against this background, this study was undertaken in order to explore the nature of teacher collaboration for professional learning and to identify key enabling and inhibiting factors in three purposely chosen state-funded schools in Kazakhstan. The study also aims to

contribute to the knowledge gap regarding the creation and establishment of a culture of professional learning communities in Kazakhstani schools and beyond.

8.2. Reflection on the research design

By considering the theoretical perspectives adopted by international researchers from different parts of the world (mainly the UK, the USA, Australia, Europe, China and Singapore) in order to examine teacher collaborative learning in various school settings and educational contexts, I was able to identify three very important dimensions to consider while designing my own study. Hence, I developed the three-fold conceptual framework that I presented in Chapter Three (see Figure 3.3, p.60) and which I will be using again in this Chapter to organise the cross-case analysis.

To reiterate, the first dimension that I considered was the impact of the wider sociocultural and sociopolitical factors on teacher collaboration. This dimension allowed me to set the boundaries for the case study, as discussed at some length in Chapter Four. The discussion helped generate a better understanding of the shared characteristics and the differences between the three case-study schools from the perspective of the policy environment and the contextual forces that enable and inhibit teachers' interaction. The second dimension was the school organisational culture where teacher collaboration was occurring. When considering this dimension, I particularly looked at the role of the school's organisational hierarchy; the rule-governed activity and sub-activity systems; the school's physical facilities; and the environmental conditions enabling or inhibiting teacher collaboration. The third dimension was the teaching staff and the characteristics of the school administrative and middle management and their interrelationships, which encompasses the use of power, control and conflict within the school's organisational structure; and provided a better understanding of whose interests were served by collaboration. The second and the third dimensions were discussed in separate chapters (Chapters Five, Six and Seven) dedicated to presenting the

findings from each of the case-study schools; and as a means of answering the first two research questions: concerning the nature of teacher collaboration and the factors that encourage or constrain teacher collaboration for learning.

8.3. Reflection on activity systems analysis

To organise and analyse the data generated within the rule-governed activity and sub-activity systems, I used the cultural-historical activity-theory analytical tool, referred to as activity systems analysis. Activity systems analysis allowed me to highlight the importance of appreciating the social context of the *pedsovet*; the SMUs; young-teacher mentoring; and subject decades, recognising how they can all facilitate teachers' learning opportunities. A triangular model to represent the activity and sub-activity systems made it possible to look closely at who the participants are; and how the individual teacher or the school collective use artefacts to achieve their desired outcomes. Moreover, it helped understanding of why there were different approaches used to the appropriation of artefacts across three case-study schools while all of them operated in similar policy environment. For example, the Auyl school strictly followed the rules in relation to what artefacts to use in each activity-systems; whereas the Audan gymnasium created additional mediating artefacts and control instruments to achieve expected outcomes. Hence, when the rule-governed activity-systems were represented by the triangular model, it made it easy to trace the systemic contractions and tensions (Engeström, 1993). The triangular model permitted me to develop an activity system for teacher collaboration for learning that I am going to present at the end of this Chapter as a contribution to the theory (in section 8.5, p.291).

The following sections will discuss how the cross-case analysis was organised in order to preserve the uniqueness of the findings regarding each case-study school; to draw out simultaneously the similarities and differences in findings across the schools; and finally to highlight the conclusions and the implications of the study, as mentioned at the start of this Chapter.

8.4. Cross-case analysis and discussion

I started my thesis with the Kazakh saying: 'He who separates himself from the *collective* will be eaten by a wolf' /'*Bölíngendí börí žeidí'/*, as used by one of the teacher-participants in my study. I, as an insider-researcher, offered two ways of interpreting this saying, so that it related not only to the Soviet approach of training teachers to stay loyal to an ideology dictated from the top, as was the case with Audan Director who was trained to serve the Communist Party. It could also be seen as being about staying loyal to the wider community values and beliefs, as in the case of Auyl school *kollektive.*

These examples demonstrate that, while organising the findings from the case-study schools, it is important to remember the epistemological principle that case knowledge emerges from a dense description of the particularities of a case (Simons, 1980; Stake, 1995). In the following subsection, I describe the approach used to organise the cross-case analysis by employing the three-fold conceptual framework to map the findings from the three case-study schools and as a guideline to draw out the similarities and differences across the schools.

8.4.1. Approach to the organisation of the cross-case analysis

Impact cannot be considered separately from purpose. To reiterate, in the context of this study, I used following definition of collaboration, which is teams of teachers who work interdependently to achieve common goals — goals linked to the purpose of learning for all — for which members are held mutually accountable. Keeping in mind the purpose, the following approach is offered to the organisation of the cross-case analysis. First, I refer back to the three-fold conceptual framework (initially illustrated in Figure 3.3, p.58), as illustrated in Figure 8.1, within which I summarise the themes presented and discussed in previous chapters Four, Five, Six and Seven. The detailed explanation follows Figure 8.1 below.

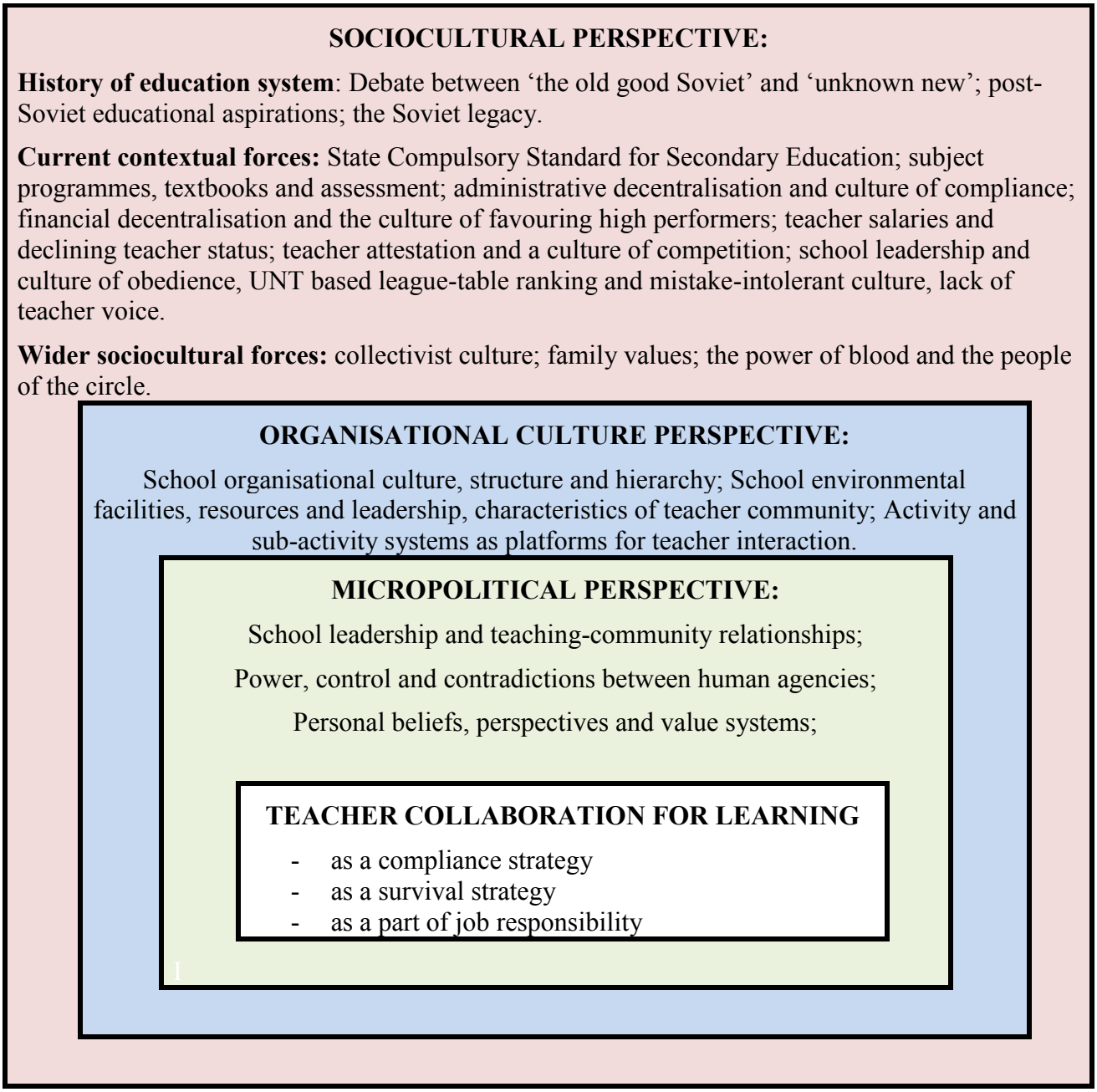


Figure 8.1: Three-fold conceptual framework and summary of factors impacting teacher collaboration for learning; and forms of teacher collaboration identified across the three case-study schools

Figure 8.1 shows that teacher collaboration for learning depends on a number of factors both inside and outside schools. From the sociocultural perspective, for example, the choice of teachers regarding collaboration can be affected by the history of the education system; current contextual forces; and wider sociocultural

forces. Each of these major factors includes many sub-themes that can have a direct or indirect effect on teachers' choice to work with each other. These factors have been extensively presented and discussed in Chapter Four.

At the level of the organisational culture, the following factors have been identified as having an impact on teacher collaboration within the school context: the school organisational culture, structure and hierarchy; the school environmental facilities and resources; the school leadership and the characteristics of the teacher community; the implementation of the activity and sub-activity systems. These themes will form the second aspect of the cross-case analysis and discussion.

The final aspect to be considered for the cross-case analysis is the group of factors related to human agency and relationships. As shown in Figure 8.1, these factors are grouped under the micropolitical perspective and include: the relationships between the school leadership and teaching staff; power, control and contradictions between human agencies; and personal beliefs, perspectives and value systems.

The forms of teacher collaboration identified across all three case-study schools are placed at the center of the framework. That is: i) as a compliance strategy; ii) as a survival strategy; and iii) as a part of job responsibility. Within the cross-case discussion, reference to the differences and similarities in the characteristics of the forms of teacher collaboration across the three case-study schools will be made wherever appropriate.

The following subsections will present the cross-case analysis and discussion following the logic presented in Figure 8.1. That is, I will first discuss the implication of sociocultural factors for teacher collaboration across all three case-study schools. Second, I will discuss the impact of school organisational, structural and environmental factors. Finally, the complexities in relation to human agency and relationship will be presented and discussed.

8.4.1.1. Implications of sociocultural factors for teacher collaboration

In Chapter Four, I made the case that the policy environment in education in Kazakhstan has a huge impact on teachers' way of working and thinking. I argued that the language used to reform the educational system as part of the piloting of the new skills-based curriculum at the network of 20 NIS had generated a debate between 'the good old Soviet' and 'unknown new' among various stakeholders. However, the evidence from all three case-study schools shows that the teachers from the state-schools have not been part of this debate nor of any discourse around it. The reason for that, I argued, is the historically established culture of compliance, in which teachers are expected to follow the rules exactly as they are written in the official documents. This argument was supported by an experienced teacher-participant in my MPhil study who contended that the Soviet schools had the necessary infrastructure for *kollektive* interaction and decision-making '*... to make sure that we [teaching staff] have the same understanding of any document received from the authorities*' (see section 1.3, p.21).

Initially I took this assertion as a teacher's argument for having a platform for teacher collaboration for learning; and it made me ask the question whether teacher collaboration is something new to the Kazakhstani school culture or part of the forgotten past? (see section 1.3, p.22). However attending to the concept of the '*kollektive'* specific to the Soviet legacy (see section 2.5.3, pp.45-46) enabled me to see that Kazakhstani teachers' understanding of interactions or decisions within the *kollektive* is constructed differently than is anticipated by the new reform initiative, given that the latter encourages teacher collaboration for learning. That is, a teacher-participant's interpretation was in line with the element of *kollektive*–building that was instilled in every aspect of Soviet schooling (see section 2.5.3 p.46). That is: 'Different *kollektives* do not compete or clash with one another because all of them are cooperating in the building of socialism' (Kharkhordin, 1999, pp.93-94). In other words, it was a consensus-based *kollektive* effort that eliminated any form of disagreement and tensions within the collective. In general,

my findings correlate with those of Kursturuba (2008), who studied teacher collaboration in post-Soviet Ukraine, and concluded that collaboration in Soviet schools had the characteristics of groupthink, with uncritical conformity to group decisions, unthinking acceptance of the latest solutions, and suppression of individual dissent (p.312).

Achinstein (2002) argues that conflicts, tensions and critical reflections are vital in fostering school reform and growing strong professional communities. Critical reflection, according to her, involves the process of challenging the taken-for-granted assumptions of teaching and schooling practice and imagining alternative perspectives for the purposes of changing conditions (Achinstein, 2002). Thus, it can be said that, while policymakers, education observers, and researchers in Kazakhstan debate over whether 'a teacher is the mirror of society' or 'schools are a reflection of our society' (as discussed in section 4.1. pp.94-100), little attention is paid to the ability of teachers to develop a separate professional identity (see section 4.3, p.104) and use critical reflection to develop strong learning communities. This is not to discard the idea that there might be individual teachers who were and are, consciously or unconsciously, showing their concern for student learning outside of the prescriptive subject programmes and make use of critical reflection.

In general, the evidence demonstrates that the teachers and the case-study schools coped with an inertia which was a combination of 'the good old Soviet' and the 'unknown new' by relying on their own judgement; that was in turn formed depending of the school location, its distance form the knowledge base, its proximity to the community, and socio-economic state of the wider community. As we can see from Auyl school research-participants' experiences, many things are left to the judgement of a system believed to be unfair and corrupt (see section 4.4.8, pp.144-145). Also, in the case of Auyl, the shared distrust towards the education system was dictated by the teachers' proximity to the community, lack

of access to the knowledge base created at the top, and poor living standards of the people in the village in general (eg. pp.126-127).

By contrast, the Audan Director demonstrated an ability to adjust the rules and regulations to suit the context of her school, in which she organised her teaching staff like clockwork (see section 6.2 pp. 202-203). The ability of the Audan Director was attributed to her ethnicity (see section 4.4.7, pp.140-141). However, doing so was not easy for her, as shown by her frustration at the changes dictated by the authorities. At the same time, she never outwardly displayed her dissatisfaction about aspects of policy and about teachers, as she believed she was there to serve as a bridge between the policy and teachers (see subsection 6.3.2, p.214). It can be also concluded that the Audan Director's attitude towards the policy was dictated by Audan's proximity to and close working relationship with the *Raiono*; and the benefits that the school obtains as a high-performing school in that position (see subsection 6.1, pp.196-198).

In the case of Aimak, there was room for teachers to shape their own professional identity in a development that was triggered by the new skills-based curriculum, with extensive financing; the opportunity of working in state-of-the-art laboratories and fully equipped classrooms with up-to-date technology; and to make use of a fully resourced open-space library (see section 7.1, pp. 235-239). However, its teachers were not free from the compliance mentality that is part of the current system, which had its effect on the Aimak Director decision to change his management style from a more democratic to a more authoritative one (see section 7.2, pp.239-242).

In general, policies such as the implementation of a skills-based curriculum and CoE courses that highlight the importance of teacher collaboration for learning and portray teachers as agents of change and innovation are all problematic in the context of Kazakhstani schools. As I have illustrated throughout this thesis, it is problematic because of the deep-seated beliefs and value systems that form school

culture being impacted by the wider sociocultural context of schooling in Kazakhstan. The findings demonstrate that the following features of the secondary education system in Kazakhstan impacted on teachers' behaviour:

First, there is tight prescription of the content of subject programmes, textbooks and the assessment system. This is combined with administrative decentralisation and an inspection system, which together impose a culture of compliance at national, local and individual levels (see subsection 4.4.2, pp.114-118). Second, tightly prescribed norms of financing, combined with financial decentralisation, have created a culture of favouring high performers, leaving low-performing schools no chance of recovery (see subsection 4.4.3, pp.118-122). Third, the rules about teacher attestation and the upgrading of a teacher's qualification linked to salary increases has created a culture of competition, making teachers from low performing schools vulnerable (see subsection 4.4.5, pp.128-134). Fourth, appointing school directors with no participation from the school collective imposes a culture of obedience on two fronts. One, the school director feels obliged to follow the written and unwritten rules dictated by the *Äkímats* and *Raiono* and at times ignore teachers' opinion (see subsection 4.4.6, pp.135-137). Two, teachers feel obliged to follow the rules of the school director, who is given authority to recruit and dismiss teaching and auxiliary staff (see subsection 4.4.6, pp.135). Finally, the introduction of the UNT-based ranking system has created a so-called 'mistake-intolerant culture', in which schools and individual teachers are punished by being publicly named and shamed for not delivering the desired outcomes (see subsection 4.4.8, p.145). Isolating teachers in this way results in teachers and schools adopting the practice of 'teaching to the test' (OECD, 2015b, see also subsection 4.4.8, p143).

In previous chapters, I argued that the deep-seated belief that teachers execute what is dictated from the top, rather than innovate or initiate change, is not going to alter because some teachers are exposed to the concept of collaboration and its perceived benefits. Instead, as many international researchers have argued (Nias,

Southworth, & Yeomans, 1989; Cordingley et al, 2015; Smith & Scott, 1990; Achinstein, 2002a), change comes about by specific displacement of existing norms, structures and processes in a way that is conducive to a culture of learning communities; or by teachers devising their own distinctive model for moving toward collaboration - a model in which conflicts and tensions are embraced and debated in a constructive way. In other words, for teachers to act as agents of change and take ownership of the reform initiative, as anticipated by the policy-makers, there is a need for the de-construction of established concepts and constructs such as the 'school *kollektive*'; the role of the school director and local authorities; ensuring coherence between the value system and the State Standard; subject programmes; and the system of assessment including the school-leaving exam, as has already argued by a number of scholars working in Kazakhstan (Sagintayeva et al., 2014; OECD, 2014b; 2015).

I do not wish to advocate for a position of complete school or teacher autonomy, characterised by a lack of regulation. Instead, I wish to emphasise the importance of clearly stated regulations and norms as long as they fit with the purpose of the planned changes and innovations. That is, as noted by international scholars (Fullan & Hargreaves, 2012; Burkhalter & Shengebayev, 2012; Harion &Tan, 2016; Lam, Yim and Lam, 2002), the practice of collaboration and related regulations works out differently in the context of a specific school system and a specific country. Therefore, more conceptual and theoretical work needs to be done on the creation of school culture that can integrate teacher collaboration for learning in the Kazakhstani school context.

Although a professional development programme such as the CoE course is necessary and is one way of introducing change into the system, it is not the only way. Instead, it is one of the many components that must come together to have a lasting effect on change. That is because, even when there is an expectation that teachers will replicate the desired practices learned on the CoE course, they have a tendency to adapt them to fit their own context or go back to the old ways of

working. As highlighted by King and Newman (2001), the link between the individual and the collective is important:

> 'To be sure, high-quality instruction depends upon the competence and attitudes of each individual teacher. But, in addition, teachers' individual knowledge, skills and dispositions must be put to use in an organised, collective enterprise. That is, social resources must be cultivated, and the desired vision for social resources within a school can be summarized as professional community' (Bolam et al., 2005, pp.14-15, in reference to King &Newman, 2001).

Therefore, there is a strong need to make explicit the emphasis on the professionalisation of teachers' work, focused on goals linked to the purpose of learning for all; and for which members are held mutually accountable in policy conception and regulations. This is especially important, since we have learnt that Kazakhstani teachers operate in a highly centralised, top-down educational system. I therefore argue that until teacher collaboration for learning is adequately conceptualised in the main regulatory documents, teacher collaboration in state schools will be used as compliance and/or a survival strategy or as a part of a job remit at the most.

It is particularly important to build on the momentum of the recent reform initiatives and help teachers to develop agency by providing the support and conditions conducive to the continued development of professional-learning communities based on teacher collaboration for learning. The initial conceptualisation of teacher collaboration for learning to be implemented in schools could have the aim of developing teacher confidence in carrying out small and very focused action-research projects, as was the case in the pilot project at the Nazarbayev Intellectual Schools (see subsection 1.2.3, pp.10-12). However care should be taken in organising teacher collaboration for learning by balancing the interests of the individual teacher and the collective, as the evidence show that not

everyone in the collective benefits equally from collaboration. For example, in the context of Aimak, one of the Heads of the SMUs proposed that teachers should be assessed for their individual achievements but not for their collective work, as she believed some of the teachers work hard to innovate and deliver results, while others sit back and wait for the hard workers to say how to deliver the results' (see subsection 7.4.3, p.257).

As international researchers (Hargreaves, 1994) warn us that when teacher collaboration is administratively regulated, compulsory and implementation-oriented and predictable, it will be contrived collegiality. Nevertheless, a number of other studies (Hu, 2010; Wang 2015; Datnow, 2011) put the case that it is necessary for some education systems, especially highly centralised education systems which are based on more collectivist values, to start with administratively regulated collaboration. What has been learnt from these studies is the importance of schools' loosening of control of arranged collaboration at later stage to allow spontaneous meetings and informal interactions to occur among teachers. Hargreaves and Fullan (2012) term this type of collaboration arranged-collegiality. As they state, the difference between contrived collegiality and arranged collegiality is to be found in whether there is already enough trust, respect, and understanding in the culture for new structures to have the capacity to move that culture ahead (Hargreaves & Fullan, 2012, p.125). In general, it can be asserted that all three case-study schools had high levels of trust among teachers as members of the school *kollektive*, generated partially through the school organisational culture, the hierarchical structure and the activity-systems impacting on teachers' daily work, as discussed in the following subsections.

8.4.1.2. Implications of school organisational cultural and environmental factors for teacher collaboration

In general, just like any group of schools in the world, Kazakhstani schools are bounded by structures shaping their capacity to afford or constrain teacher learning. Organisational culture factors, such as the *pedsovet,* SMUs, subject decades and young-teacher mentoring, emerged as the preferred answer given by the research-participants from all three case-study schools when they were asked about collaboration and learning from each other. This common perception across all three case-study schools concerning the platforms for teacher collaboration can be explained by the fact that schools in Kazakhstan, as discussed in previous section, have operated historically in a very centralised and bureaucratic system, in which predictability and control was and is very important. It has been argued that tight regulation from the top provides clear direction for the sector; policy continuity; and enables monitoring of progress towards the achievement of policy goals as set out in strategic documents (OECD, 2015, also see section 4.4.2, p.115). It is therefore not surprising that the answers given by the teachers from the case-study schools in relation to platforms for collaboration correlated not only across all three schools but also with the answers of teachers from seven randomly selected schools during the pilot stage of my study (see section 3.2, pp.54-55).

Generally speaking, all three schools share the characteristics of the highly bureaucratic and hierarchical school-organisation model that has been preserved as a legacy of Soviet schooling. It is one that is tightly regulated by the Ministry of Education. According to Order (No272, 2007), teachers in all three case-study schools had to be represented in the school *pedsovet,* where they could have an input to the decision-making process. According to another Order (No583, 2007), teachers had to be grouped into SMUs based on their subject areas. The role and responsibilities of the school director and deputies are regulated by Order (No338, 2009). The evidence from all three schools shows that when these regulations are combined with a school inspection system aimed at quality control (instead of

quality assurance as stated by Irsaliyev, 2013), following exactly what is written in policy directives and orders, what results is a compliance-based mentality and a school culture that undermines teacher learning for the improvement of teaching practice. Moreover, the sanctions used to punish non-compliance with the written rules create fear by allowing 'naming and shaming' at the policy level (see subsection 4.4.8, p.145) and at school level (subsection 6.3.1, p.208). The findings partially confirm Akhmetzhan's (2016) assertion 'that the best teacher is someone who chooses to lie, rather than tell the truth during an inspection. …worrying about passing an inspection than about children' future' (see section 4.2, pp.102-103).

In particular, the findings from Auyl illustrate that rule-governed activity and sub-activity systems can exist on paper without being practiced by teaching staff (see subsection 5.3.2, pp.170-171). Although many blamed the newly appointed school director, who used her connections to be appointed, the findings confirm that the practices existed on paper long before the appointment of the current director (see subsection 5.3.2; pp. 170-171). It can therefore be argued that a highly regulated bureaucratic can create a lack of trust in the system, as in the case of the Auyl teachers who developed an 'everything-can-be-arranged' mentality (see subsection 5.4.3, p.188).

On the other hand, the findings from the Audan demonstrate that the long-standing *kollektive* school culture and the rule governed activity-systems inherited from the Soviet education system - such as the *pedsovet*, SMUs and the young-teacher mentoring system - are not only present, but also act as a unifying bond between the different generations of teachers. In Audan, all the platforms for teacher collaboration worked well and served their purpose in exactly the way intended during the Soviet era. That is, for the purpose of control (see section 6.2, p.201 and subsection 6.3.1, p.205). In other words, the Audan Director, who was educated by the Communist Party, and who served as a Head of the *Raiono* during the Soviet period, knew how to make good use of rule governed activity systems in order to make teachers work as efficiently as clockwork and how, over a quarter of a

century, to maintain Audan gymnasium's position as a high-performing school. This suggests that the school organisational structure and the role of the school leadership in Kazakhstani schools have not been challenged or questioned since the collapse of the Soviet Union.

The findings from Aimak confirms the above assertion, as, despite the potential advantages of Aimak school in setting up a more collaborative school-organisation structure and culture, there was still a lack of criticality towards how things are and how they are managed. That is, there was no integration between the official rules as dictated by the Ministry of Education (*pedsovet*, SMUs) and school-collective choice within the school organisational culture (eg. methodological days, creative-group sessions). In other words, two parallel systems had been created. The first was about, for the sake of school inspections, complying with the rules dictated from the Ministry of Education - that is, filling in the minutes of the *pedsovet* and keeping SMU documents in order as required (see subsection 7.3.1, p.245). The second aimed to develop an organisational structure and create a collective culture based on the real needs of the teaching staff and administrative team. In other words, the Aimak administrative team strove towards more distributed leadership; and teachers were allowed to have platforms to address issues based on their occurrence, rather than waiting for the official SMU meetings or the *pedsovet* to be held (see subsections 7.3.1-7.3.2, pp.245- 252). Hence, referring back to the notion of *kollektive,* I argue that the historically established compliance-mentality, as well as the school hierarchical management structure and the organisational culture inherited from Soviet schooling, purpose they serve, should be questioned and challenged for their fitness to meet the purpose of the new reform initiatives.

As discussed in Chapter Two, researchers (Bolam et al., 2005; King & Newman, 2001; Louis, 1994) suggest the following important contributors in developing professional learning communities: putting a lot of effort into working out clear strategies by bringing together everyone in the school to work towards common goals to improve teaching; experiment with and receive helpful feedback; and

perform enquiry-minded and distributed leadership. For example, the findings from Aimak suggest that piloting the new skills-based curriculum provided teachers with a platform and thus a degree of shared purpose. Also, there was a recognition among the Aimak leadership that a greater degree of power-sharing and distributed leadership was needed in the school to fulfill the full potential of the school's autonomy and engender a greater sense of collaboration (see section 7.3.1, p.248). Moreover, some of the feedback sessions following the daily lesson observations were very constructive and thoughtful in terms of the lesson content and approaches used (see subsection 7.3.2, p.251). Unfortunately, this was not the case in either Audan gymnasium or Auyl school. The evidence from Auyl demonstrated the superficiality of conducting subject decades and Open lessons; and in Audan they functioned more as control mechanisms rather than platforms for collaboration and sharing.

Bolam et al. (2006) argue that headteachers can only create the conditions fostering commitment to the collective good: they cannot ensure it will happen. In other words, for teacher collaboration to become embedded in school culture, 'the process of activity, reflection, emotion and collaboration should be supported, legitimated, and nurtured in a community or culture that values such experiences and creates many opportunities for them to occur' (Shulman, 1997, p.101). For example, the work of the creative-groups in Aimak looked more productive and better fitted to their purpose than in the Audan gymnasium, as there was a link between the active methods of teaching that teachers discussed at the creative-group sessions and the new subject programmes that required student-centered teaching (see section 7.4.2, p.255). On the other hand, the Audan teachers were constrained by the existing knowledge-based curriculum and school-leaving exam. The Audan Director was thus critical of the idea of using active methods of teaching, because she thought they did not fit the purpose of the current programme (see section 6.3.2, p.215). Moreover, my own experience of working with teachers, as discussed in the introductory chapter, showed that teacher collaboration does not come easily: it requires time and effort to create appropriate

professional conditions and establish the infrastructure to support teacher collaboration.

Researchers (Bolam et al., 2005; King & Newman, 2001; Louis, 1994) also suggest that better results are achieved if there is development of other resources; management of structural resources, such as time and space; and the bringing in of external agents to support such a culture, as was the case in my own experience with the NIS schools (e.g. working with the trainers from Cambridge, see subsections 1.2.2 and 1.2.3, pp.8-12). Among the three case-study schools, the Aimak teachers had the best possible environmental conditions, facilities and resources. They enjoyed extensive financing; state-of-the-art laboratories; fully equipped classrooms with up-to-date technology; and a library. Teachers were motivated to stay in the school to learn new things (see section 7.1, p. 235-239). They made time available for interaction in the form of a methodological day, which provide teachers with opportunity to get to know each other and exchange experiences.

The Audan gymnasium environmental facilities were not as advanced as in Aimak; but they were very organised, warm and welcoming for teachers who wished to remain beyond teaching hours. Although its library did not offer many resources for teachers to use, it provided computers with access to the internet (see section 6.1, pp.194-198). The Auyl teachers were the most disadvantaged in terms of the environmental facilities and conditions. The environmental conditions were not free from the impact of external and internal factors. For example, I argue that the weak position of the school leadership and teachers' proximity to the community led to the low results achieved in the school-leaving test; and this in turn had an effect on school funding. With little funding available for heating the school, the physical infrastructure had deteriorated, making it uncomfortable for teachers to stay beyond their teaching hours (see section 5.1, p.154-158).

That said, the findings nevertheless also suggest that all three case-study schools have the capacity to internalise and assimilate teacher collaboration for professional learning, as there is a tradition of peer evaluation and peer observation in the system, with teachers expected to observe and be observed by other teachers on a frequent basis, within appropriately defined school organisational platforms for collaboration (e.g. the *pedsovet;* SMUs; subject decades; and Open lessons). Moreover, a high level of trust among teachers as members of the school *kollektive* and a commitment to the ideal of a better education system can be said to have the potential to internalise teacher collaboration linked to the purpose of learning for all.

Hence, I argue for the importance of building on the momentum of the recent reform initiatives and helping teachers to develop agency by providing the support and conditions conducive to the continued development of professional-learning communities based on teacher collaboration for learning. In other words, it may be suggested that Kazakhstani schools have very stable school structure and culture; and that these could be appropriated to the needs of the new reform initiatives if the reforms are communicated clearly to teachers and school leadership. It is particularly important, therefore, to build on the lessons learned from the pilot projects implemented in the NIS, where the trainers from Cambridge advocated the building of an approach based on enquiry-oriented learning and leadership (McLaughlin et al, 2014, p. 240), with the support of 'knowledgeable others' and using 'pull and push' strategies.

Finally, the process of making teachers engage in collaborative professional learning is delicate because it deals with the various personal, professional and emotional characteristics of individual teachers while trying to bring about change related to the structures, traditions and routines of their working lives (Hargreaves, 1998, p.562; Evans, 1996; McLaughlin, 2003). The following subsection will address the implications of human agency and interrelationships for teacher collaboration.

8.4.1.3. Implications of human agency and interrelationships for teacher collaboration

In the preceding subsection (8.4.1.2), I argue that the secondary education system of Kazakhstan preserved the achievements of the Soviet era due to the dedication of teachers to the ideology of helping the state achieve its goals. In subsection 8.4.1.1, I asserted that all three case-study schools had high levels of trust among teachers as members of the school *kollektive*, generated partially by the school organisational culture, the hierarchical structure and the activity-systems which have all been preserved as a legacy of Soviet schooling. In general, the findings show that these two aspects had had a huge impact on how power was used, conflicts were negotiated and teacher interdependence was developed in the case-study schools. The evidence does suggest, however, that the implementation of the ideology and the level of trust differed across all three case-study schools, depending on their location, the diversity of the teaching community and the status of the schools.

In general, when asked about the priorities of the secondary education system nationally, many of the research-participants across all three case-study schools made reference to the Annual Address of the President of the Republic of Kazakhstan to the Nation, entitled 'Kazakhstan 2050 Strategy'. This strategy aims to bring the country into the ranks of the thirty most developed economies in the world by the middle of the century. Across all three schools, there was an understanding that one of the priorities of the 'Kazakhstan 2050 Strategy' is the development of 'human capital', through the process of the modernisation and internationalisation of the education system. For example, in the case of Audan, the whole *pedsovet* meeting was dedicated to the discussion of this Strategy, with the participation of a guest speaker representing the country's ruling party '*Nur Otan'* (see subsection 6.3.1, p.206). This confirms that, at least in their way of thinking, teachers are dedicated to the ideology of helping the state achieve its goals. However, in practice, each school's vision was shaped by its context; and the

immediate demands of the current policy environment which shaped in turn how individual teachers and groups manage issues of power, trust and conflict.

For example, Auyl, a very low-performing school, was striving to improve students' results in the UNT exam (see section 5.4.1, p.181). However the evidence demonstrated that it was very problematic for Auyl to achieve the desired results in the UNT exam as there was a shared feeling of mistrust among the school *kollektive* towards the current school-leaving exam. Unfortunately, there was also a shared perception among teachers and parents[47] that 'able children do well anyway; and less-able children cannot do better than able children'. This is linked to the fact that success in the school-leaving test depends solely on students memorising a wide range of factual knowledge, thus supporting the above perception. The teachers and the Auyl administration were therefore convinced that higher results could be achieved if only some arrangements could be made for students to get help from their teachers during the exam (see subsection 4.4.8, p.143). As discussed in subsection 8.4.2, one of the reasons for this mistrust occurring was the highly regulated bureaucratic type of school organisation, which left no room for schools and teachers to think for themselves, imposing a high level of compliance mentality. That is, the content and the format of the workings of the *kollektive*, be it in terms of the *pedsovet* or the SMUs, were both restricted to what was required by the Orders of the Ministry of Education and the *Raiono*. There was no clear vision uniting all the teachers in Auyl. As a result, there was a lack of confidence among teachers and school administration on every aspect of their work.

[47] A primary-school teacher said that many children in the village live with their grandparents while their parents live and work in city to support the family. In this regard, it is not surprising that grandparents raised by the Soviet system trust teachers. Findings from studies (Ablezova, Nasridinova & Rahimova. 2008; Myrzabekova, 2015) conducted in the post-Soviet Republics suggest that most children left with grandparents experience difficulties in their studies and have poor academic performance. One main reason is that grandparents are not able to provide sufficient assistance, considering the fact that the education system has changed drastically, and the older generation is less aware of sophisticated and effective approaches to child development.

To compound this, Auyl was located in a relatively poor area; had a highly homogenous teaching staff; and was closely identified with the village community, so that a teacher was also seen as a mother or father, a sister or brother, a cousin, a daughter-in-law or a son-in-law, and a member of the same clan. This all created a strong attitude of uncertainty-avoidance in the school *kollektive,* leading to group thinking and lack of criticality about what and how should be taught and learned. In this system, young teachers were made to show respect to older teachers and 'go along their way of working without much questioning' (see subsection 5.3.2, pp.170-171). Moreover, when the large power distance and high level of uncertainty avoidance was coupled with the fear of punishment and sanctions, the result was that Auyl teachers felt compelled to protect the school *kollektive* image against all the odds, something of which they were well aware.

For example, the only teacher who dared to talk to me about the collection of money by the school administration as a way of preventing the school being inspected chose not to be identified, asking also that no reference should be made to her in my dissertation except for one quotation (which is cited in subsection 4.4.3, p.121). In addition, no teacher interviewed challenged or questioned the fact that the Auyl Director had been appointed through her connections among high-up officials. In other words, no one dared to 'bite the hand that feeds them'. The Auyl teachers' attitude towards collaboration is thus best explained by referring back to the Kazakh saying as used by the Auyl teacher: 'He who separates himself from the *collective* will be eaten by a wolf' /'*Bölíngendí börí žeidí'/.* This saying also demonstrates a high level of loyalty to the school *kollektive* on the part of the teaching staff, dictated by the lack of teacher mobility in the location.

By contrast, the findings from Audan demonstrated that its *kollektive* was extremely disciplined in following the vision set by its leadership: that is, to maintain the status of Audan as one of the high performing and the best school in Kazakhstan. As mentioned above the Audan Director had a deep-seated belief that she was there to serve as a bridge between the policymaker and teachers. Hence,

she continued extending the legacy of the Soviet hierarchical system, by serving and meeting the demands of her immediate management, the *Äkímat* and the *Raiono,* in turn demanding obedience and devotion from her teaching staff. While the leadership style of the Audan Director was seen to be that of someone who was professional and trustworthy, helping her staff develop the required skills in achieving high student results, little attention was paid to teachers' work-life balance and their psychological and emotional states. There was evidence of teachers' psychological and emotional exhaustion (eg. p.208; p.217). Undoubtedly, the mental state of teachers has an effect on their relationship with their students and the way in which they deliver their lessons.

Nevertheless, no teachers objected openly to the rules: all of them instead complied with the very strict rules without questioning the decisions made by the school administration. Sometimes this limitation seemed to be present not because of the school leadership but by the teachers' own choice. The Audan Director was convinced that teachers want to be led and told what to do instead of taking responsibility for experimentation and innovation (see subsection 6.3.1, pp.207-208). Just as in Auyl, the Audan teaching staff showed great respect for authority and a high level of uncertainty avoidance - as punishment and 'naming and shaming' would follow if one failed to comply with the rules and deliver results. Even the teachers' decision to boycott the Audan school administration after their successful completion of the CoE course was not free from requiring the approval of a higher authority. That is, the boycott was a result of the CoE trainers' approval, as noted by a Audan teacher (section 6.3.2, p.213).

Despite this fact, the evidence from Audan and Aimak shows that, if teachers are liberated from strict rules and given the platform to innovate, they can be creative and develop a shared purpose. In both Audan and Aimak schools, teachers exposed to the CoE course had created their own platforms, termed by them 'creative groups', where they could share their knowledge and practice. Also the Aimak teachers talked very articulately about reflective practice; action research; the role

of the teacher-researcher; the constructivist learning approach; and the criteria-based assessments used to evaluate students' work (see section 7.3.2, pp.249-250). They were ready to take advantage of opportunities to join, on a voluntary basis, different projects, such as those related to developments in textbooks; assessment rubrics; and subject content. As such, it is evident that, where there is a clear sense of shared purpose, as is the case with the 'creative groups', teachers choose to collaborate, instead of competing. In other words, this is in line with the argument of researchers that teachers collaborate when there is a shared vision and sense of purpose (Bolam et al., 2006, p.8).

It must however be conceded that not all the teachers who took the CoE course were enthusiastic about being accountable for the results. Instead, some of them wanted to be told how and what to do (see subsection 7.2, p.242). For example, the data from Aimak suggests that there was a difference between the attitude of teachers from the Soviet generation and those from the independent generation as far as their attitude towards learning and sharing was concerned. Interestingly, the Soviet-generation teachers mostly wanted to be told what and how to do (see section 7.2, pp.242-243). This correlates with the outcomes reported by the Kazakhstani educational observers and activists (Kalikova, 2015; Smirnova, 2015, Akhmetzhan, 2016), where they contended that in some schools teachers lacked the interest to engage in meaningful discussion about new ways of teaching and learning despite being exposed to the CoE courses (see section 1.3, pp. 19-20). One of them further argued that the classroom is a 'black box'; and that what the school administration and inspectors observe in the Open lesson as the result of the CoE course does not always demonstrate teachers' every day pedagogical repertoire (Smirnova, 2015). This example again suggests that simply providing teachers with a PDC will not be enough to change practice and not everyone in the collective will benefit from collaboration.

In general, the data from all three case-study schools confirmed that Kazakhstani teachers are restricted in their ability to think for themselves and that they are

permitted little voice in basic education-policy decision-making (OECD, 2014; Burkhalter & Shengebayev, 2012; McLaughlin, 2012). It is evident from the discussion of the forms of teacher collaboration in Auyl, Audan and to some extent Aimak that teachers employ little or no systematic questioning of their own practices. The findings show that the research-participants' perception of their own professional learning was more driven by policy than by concern for students' learning. Many of them found it difficult to detach their professional development and collaboration from the formal system of teacher attestation and for the upgrading of their professional qualifications. I argued that the reason for that is that the system for upgrading teachers' professional qualifications is the most important determinant for Kazakhstani teachers in obtaining a higher salary. Unfortunately, teachers saw PDC, as well as the teacher-attestation system, as having no part to play in teachers becoming extended professionals. The findings from observing Open lessons, daily lessons and feedback sessions in Auyl and Audan, and to some extent Aimak, confirm Chichibu's (2014) assertion that 'the teacher delivering an Open lesson received little formative feedback and an opportunity is missed to increase the effectiveness of classroom observation in order to improving pupil learning and teaching'.

In other words, micropolitical theorists recognise schools as political entities where the members develop micropolitical strategies in an attempt to achieve their own personal and the school's goals (Kusturuba, 2008, p.59, in reference to Iannoccone, 1975). According to my findings, those micropolitical strategies also vary depending on the school context; the specific leadership role; the group dynamics; and individual teacher disposition. This assertion can be best demonstrated if we refer back to the three forms of teacher collaboration for learning that were identified across all three case-study schools.

The evidence demonstrates that each form of teacher collaboration for learning across all three schools had been developed by teachers differently in each school context, in reaction to different aspects of teacher professional life, and were

dependent on teachers' own motivations. For example, teacher collaboration for learning as a compliance strategy in Auyl was driven by the need to comply with the external rules; whereas in Audan, it was mainly used to comply with the internal rules strictly regulated by the school administrative team; and in Aimak, the teachers had chosen to ask the school-leadership team to develop disciplined and compliance-based collaboration platforms in order to make the rules of the game clear for them.

The second form of teacher collaboration for learning, teacher collaboration for learning as a survival strategy, also differed from school to school, based on teachers' motivation and context. In Auyl, this form of teacher collaboration was used mainly by young teachers to remain in the profession by looking for a like-minded teacher to collaborate and learn from, usually as young as themselves and with little experience. In Audan, the survival strategy was used by supervisors and subordinates, mentors and mentees as a way of avoiding punishment from the school administrative team for non-delivery of results. So, while they worked in collaboration to deliver desired results, they also became uncritical through trying to comply with the internal rules. In Aimak, sharing and collaboration was valued by teachers as a way of being competitive in an already very competitive environment of elite teachers. For many, it was one way to remain in the school and obtain an extension for their contract to continue to work in Aimak.

Finally, teacher collaboration for learning as part of job responsibility is the form of collaboration among the three forms of collaboration that has the most potential to change and transform teacher agency. For example, in Auyl, when the Deputy Director organised a schoolwide seminar to share practice as a part of her job responsibility, there were signs of teachers' willingness to take responsibility and collaborate on discussing issues of teaching and learning to improve students' results. In the case of Audan, the job responsibilities of everyone in the school were organised in line with the twin categories of supervisor and subordinate or mentor and mentee; and this made teaching staff collaborate with colleagues,

depending on the tasks assigned and as part of their job responsibilities. Although, as mentioned above, it lacked criticality, it still has the potential for transformation, if, instead of punishment, teachers could be provided with more support to be open about the issues and problems they encounter. Finally, in Aimak, teachers are obliged to participate in discussion on the methodological day and in the creative-group discussions, as well as joining projects related to subject content, assessment, developing resources and textbook writing. Teacher collaboration was therefore part of the job responsibility for the Aimak teaching staff; and, above all, this allowed them to accumulate new knowledge and construct better approaches to teaching, thus remaining competitive within a very competitive environment.

8.5. Conclusions, implications of the study results and policy recommendations

This research study has focused on generating an understanding about the nature of teacher collaboration for professional learning in three case-study schools in Kazakhstan, exploring key enabling and inhibiting factors; and the implications for the development of a culture of collaboration for professional learning in Kazakhstani schools. In this concluding section I offer an answer to the third final research question: What are the implications of the study for the development of a culture of collaboration for professional learning in Kazakhstani schools?

Examining teacher collaboration for learning from three perspectives (sociocultural, organisational culture and micropolitical) allowed me to come to an understanding that the nature of teacher collaboration is dependent on multiple factors outside and inside of the school settings. The case-study approach to the study allowed for an appreciation of the richness of the context of each-case study school; and an appreciation of the differences and similarities across all three perspectives. For example, it might be expected that the teachers who have completed the CoE course would create a critical mass by training other teachers in their own school settings, which would in turn encourage the exponential

multiplication of learning and development; and thus speed up the implementation process and maximise the reach of the key drivers of the reform process in the secondary education system in Kazakhstan. In other words, it was intended that teachers trained in the CoE course would act as agents of change and facilitate the development of professional learning communities based on sharing and collaboration in each school in Kazakhstan. This intention was also supported by an assumption about the potential for a highly centralised top-down system to monitor and control this process, as proposed by OECD experts. However, this study suggests that in a top-down reform teachers might equally choose to act as agents of change or as the forces inhibiting change (Kalikova, 2015). It also suggests that teachers and schools do it consciously and unconsciously. The factors that impact on them in making this choice are very complex, multifaceted and multilayered, as I am going to show below. In general, therefore, it can be concluded both the three-fold theoretical framework and the case-study approach to the research were fit-for-purpose approaches to the task of examining teacher collaboration for professional learning.

I would like to argue that, if we are to see success with the current reforms which are intended to professionalise teaching and which encourage teachers to take ownership of innovation and change, there is a need to work on a number of processes both inside and outside schools which make the link between the individual and the collective. I therefore wish to focus on three levels where the study results have practical implications for the development of a culture of collaboration for professional learning:

i) the macro level of policy formation, as a result of the findings from the sociocultural perspective;
ii) the meso level policy interpretation, as a result of the findings from the organisational culture perspective; and
iii) the micro level of policy enactment, as a result of the findings from the macropolitical perspective.

The implications for each level will be presented in the form of mediations within a proposed model of an activity system for teacher collaboration for professional learning, as illustrated in Figure 8.2. This model was developed based on the triangular model of cultural-historical activity theory. The model brings together the implications of the study and policy recommendations. The suggested implications and recommendations are framed in the context of Kazakhstani policy and practices; but the general conclusions can be extrapolated to other contexts.

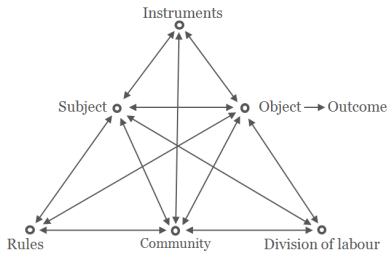
Instruments/Artefacts/Tools:

Policy formation:
De-construct and construct notions such as 'school *kollektive*'; teacher learning and collaboration;
Ensures coherence with the State Standards, subject programmes, assessment system;
Develop teacher standards, school leadership role and its appointment, teacher attestation system, school ranking;
Ensure support form *Raiono/Oblono/Gorono*, school inspection;

Policy Interpretation:
School organisational culture, structure and hierarchy to be developed based on local needs;
School leadership to be appointed with the participation of teaching staff;
School environmental facilities and resources to be managed by the school;

Policy enactment:
Analysis, criticality, reflective practice, action research, conflict and tension to be embraced, avoidance of groupthink

Subject:
School *kollektive*



Object:
Teacher collaboration for learning

Outcome:
Improve teaching and learning

Rules:
External and internal norms, rules and regulations

Community:
School community
Oblono/Raiono/Gorono/Äkímats
Teacher Professional Development Institutions/Ministry of Education

Division of labour:
Teachers' role
School leadership
Methodological specialists
Teacher trainers

Figure 8.2: A proposed model of an activity system for teacher collaboration for professional learning.

i) Mediating artefacts at the macro level of policy formation

If, as advocated by the Ministry of Education, teachers should act as the agents of change and take ownership of reform and innovation, there is a clear need for policy documents for teachers to be guidelines, de-constructing the notions and belief systems antithetical to the promotion of the constructivist view of learning and helping to construct new ways of thinking. The key notions that were identified across all three case-study schools include: the school *kollektive;* teacher learning and collaboration; lesson observation; the Open lesson; feedback sessions; providing feedback; subject decades; young-teacher mentoring; and mentor and mentee. It is important that these guidelines are not decrees, orders or rules: rather, they should be a guiding framework and living documents to which one can introduce changes and additions as required. However, as mentioned earlier, I do not wish to advocate for a position of complete school or teacher autonomy, characterised by a lack of regulation. Instead, I emphasise the importance of clearly stated regulations and norms as long as they fit with the purpose of the planned changes and innovations.

Hence, in the proposed model of an activity system for teacher collaboration, fit-for-purpose rules and regulations should be developed as required. For example, there is a need for rules and regulations to ensure coherence between the State Standard, subject programmes and the assessment system in such a way as to require the teacher competences necessary to teach in line with the constructivist view of learning. It is also essential to develop a standard for teachers that will allow teachers to develop their professional identity. In addition, the role of the school leadership and how appointments are made at that level; the teacher attestation system; and the rules governing the system of ranking schools should all be revised to meet the objectives of the new reform. There is a need for professionalisation of the school-inspection system; and for the methodologists at *Raiono/Oblono/Gorono* to support teachers and work on quality assurance instead of quality control based on norms and regulations. Overall, there is a need for

critical reflection at the policy level by challenging the taken-for-granted assumptions of teaching and schooling practice and imagining alternative perspectives for the purposes of changing conditions (Achinstein, 2002).

ii) Mediating artefacts at the meso level of policy interpretation

Researchers (Bolam et al., 2005; King &Newman, 2001) argue that high-quality instruction depends upon the competence and attitudes of each individual teacher. But, in addition, teachers' individual knowledge, skills and dispositions must be put to use in an organised, collective enterprise. That is, social resources must be cultivated; and the desired vision for social resources should be pursued. I therefore argue that there is a strong need to make explicit the emphasis on the professionalisation of teachers' work, focused on goals linked to the purpose of learning for all; and for which members are held mutually accountable not only in policy conception and regulations, but in practice.

Referring back to the notion of *kollektive,* I argue that the historically established compliance-mentality, as well as the school hierarchical management structure and organisational culture inherited from Soviet schooling, have never been questioned and challenged for their fitness to meet the purpose of the new reform initiatives. Hence, there is a need for the school *kollktive* to reflect on 'school culture' and its attributes such as: beliefs and values; understandings; attitudes; meanings and norms; symbols, rituals and ceremonies - all of which are very much dependent on how they are actively constructed and re-constructed by members of the culture. Researchers (Nias, Southworth, & Yeomans, 1989) advocate that culture does not change by regulation. Instead, it changes by the specific displacement of existing norms, structures, and processes by others.

Thus, the process of cultural change depends fundamentally on modeling the new values and behaviour that we expect to displace the existing ones (Stoll et al., 2006). In the context of the Kazakhstani school, there is a need for the teaching

staff to be included in reconsidering and developing a school organisational hierarchical structure and culture based on the needs of the school *kollektive.* That is, change should be introduced into the school organisational structure in a way that is conducive to a culture of learning communities; or by teachers devising their own distinctive model for moving toward collaboration - a model in which conflicts and tensions are embraced and debated in a constructive way (Nias, Southworth, & Yeomans, 1989; Cordingley et al, 2015; Smith & Scott, 1990; Achinstein, 2002a).

The concept of expansive learning could be used to help to establish the culture. Expansive learning is the extended form of the cultural-historical activity theory that I used to analyse the rule-governed activity systems. What expansive learning would allow is border crossing between the different levels of the activity-system; and the opportunity to learn from finding and fixing the tensions and contradictions across the different activity-systems. According to Engeström (2001), expansive learning is when an individual involved in a collective activity takes action to transform an activity system through a reconceptualisation of the object and the motive of activity, embracing a radically wider horizon of possibilities than in the previous mode of activity (pp. 30-31).

iii) Mediating artefacts at the micro level of policy enactment

The data from all three case-study schools confirms that Kazakhstani teachers are restricted in their ability to think for themselves and that they are permitted little voice in basic education policymaking and decision making (OECD, 2014; Burkhalter & Shengebayev, 2012; McLaughlin, 2012). Hence, there is a need to professionalise the teaching staff. In other words, there is a need to allow them to become extended professionals committed 'to systematic questioning of one's own teaching as a basis for development; the commitment and the skills to study one's own teaching; and the concern to question and to test theory in practice' (McLaughlin, Black-Hawkins, McIntyre, 2004, p.4, in reference to Stenhouse, 175,

p.143). One way of doing that is through a professional-development programme such as the CoE course. Thus, I argue for the importance of building on the momentum of the recent reform initiatives and helping teachers develop agency by providing the support and conditions conducive to the continued development of professional-learning communities based on teacher collaboration for learning. This could start with an initial conceptualisation of teacher collaboration for learning, to be implemented in schools, that could have the aim of developing teacher confidence in carrying out small and very focused action-research projects, as was the case in the pilot project in the Nazarbayev Intellectual Schools (as discussed in subsection 1.2.3, pp.10-12).

I would like to reiterate that the process of making teachers engage in collaborative professional learning is very complex, very delicate and takes time. It is complex, because in devising new policies for educational change, there is a need to understand that policy is not so much implemented as reinvented and redefined at each level of the system. It is delicate because it deals with the various personal, professional and emotional characteristics of individual teachers while trying to bring about change related to the structures, traditions and routines of their working lives (Hargreaves, 1998, p.562; Evans, 1996; McLaughlin, 2003). Hence, there is a need for on-going support for teachers to enable them to understand and internalise the meaning of teacher agency and their collective role in creating pedagogical knowledge. This is becoming an emerging discourse at the policy level in Kazakhstan (as discussed in section 1.1. p.4).

8.5.1. Policy recommendations

To sum up, the following policy recommendations are intended to address the issues identified in the conclusion. Particular attention has been paid to the ways in which the current education system could change to support collaborative teacher learning, as teachers respond to the demands placed upon them by the current reforms in Kazakhstani secondary education. While considering these recommendations, it is important to remember that the degree to which they are incorporated into the policy-making process or practice may depend on many other factors that might not have been considered within the scope of this particular study.

First, it is important build on the momentum of the recent reform initiatives and help teachers develop agency by providing them with a professional-development course, such as would be delivered by the Centers of Excellence. This would introduce teachers to the relevant strategies (eg. reflective practitioner, action researcher, teacher researcher, PLC) which will help build their confidence in analysing and learning about their own practice.

Second, for teachers to act as agents of change and take ownership of the reform initiative, as anticipated by the Kazakhstani policy-makers, it is not enough for teachers to learn to be reflective practitioners and learn how to conduct action research. Rather, there is a need for teachers to be included in the educational debate and develop a shared language about the reform initiatives alongside the policymakers. This frees teachers from a compliance mentality.

Third, it is important at the policy level to make the key educational values align with a constructivist approach. In other words, 'How do we enable students to learn?' rather than, 'What do we teach them?'; and for this to be properly reflected in the State Compulsory Standards; subject programmes; the assessment system; teacher professional development; teacher attestation and school inspection etc.

Fourth, there is a strong need to make explicit the emphasis on the professionalisation of teachers' work, linked to the purpose of learning for all; and for which members are held mutually accountable in policy conception and regulations. This is especially important in a highly centralised, top-down educational system such as in Kazakhstan.

Fifth, teacher collaboration for professional learning should be adequately conceptualised as 'a job responsibility', instead of leaving it up to the school leaders and teachers to decide to make use of collaboration as 'a survival strategy' or 'a compliance strategy', and communicated clearly to teachers and school leaders engaging them in the decision and policy making process.

Sixth, in order to embed the key educational values and principles of collaborative learning in school culture, it is important for each school to have its own development strategy, mission and vision, allowing the teaching community to devise their own distinctive model for moving toward collaboration. Currently, only autonomous schools have development strategies. This should allow school collective to take an action to transform activity systems in place through reconceptualising goal and motivations behind the activity system practices.

Finally, there is a need for professionalisation of the school-inspection system in line with the key values and principles of the new way of learning; for the specialists at *Raiono, Oblono* and *Gorono* to support and help teachers, and to reconceive their role in terms of quality assurance instead of quality control based on norms and regulations.

8.6. A final reflection, dissemination and directions for further research

I often think about my own experience and my own learning journey, which has been full of self-doubt, sometimes unknowingly being judgemental of the opinions of my colleagues. I also remember mainly my silence when facing those in power, just in order to avoid tension and conflicts. I think about challenging questions posed by knowledgeable others to which I reacted emotionally and took as a test of my ability and knowledge. In many of those situations, instead of allowing a meaningful conversation and discussion to occur, I hurried to give 'quick-fix' answers. Therefore undertaking this scholarly journey in order to pursue a PhD at the Faculty of Education at the University of Cambridge was for me very challenging and at the same time very rewarding. As mentioned in the Introductory Chapter, this journey changed me from being a strategic decision-maker who relied very little on research to an emerging researcher keen to create a deeper understanding of the process of evidence-based policymaking. However my acceptance of that particular stance happened in an environment supportive of such learning, with the support of knowledgeable others who willingly guided me and helped me to widen my own 'zone of proximal development' by scaffolding - pulling and pushing me to experience the bitterness and at the same time the sweetness of the meaning-making process.

My insider role was not without challenge throughout the study. In order to overcome these challenges, it was helpful to keep a reflective diary from the design stage and piloting of the study to the collection, analysis and presentation of data. I will continue writing reflective accounts after submitting the thesis. By acknowledging and reflecting on my existing beliefs and experiences, I have been able to adopt a level of reflexivity which mitigates the impact of my own professional autobiography and helps foster confidence in the validity of the research and my credibility as a researcher. As stated in the Faculty of Education manual (2012), I believe that good educational research is possible if there is

mutual respect and confidence between investigator and participants. Openness and gaining participants' trust have therefore been key principles from the start to the finish of the study. Regular meetings with my supervisors and completion of my research diary helped me track and record this process, enabling reflection each step of the way and the documenting and justifying each decision. Ethical guidelines have been closely followed in considering what exactly I could promise participants in terms of anonymity and confidentiality. Thus, whilst the location of the research could potentially be identified, I ensured individual-participant anonymity.

I again reflect on my role as one of the co-decision-makers in the context of the Nazarbayev Intellectual Schools' initiatives; and I understand that practitioners' voices are important for better policymaking to support the change and transformation process in secondary education in Kazakhstan. However for that voice to be constructive and for it to be supportive of development and innovation, there is a need to build individual and social capacity within an environment designed to facilitate that process. I am still strongly convinced that teacher-collaboration for professional learning can serve as a powerful force to sustain the current reform efforts in Kazakhstan. However the topic should be debated, discussed, constructed and de-constructed with the participation of the various interested stakeholders in education, including practitioners, by means of pull and push strategies as discussed in the previous section. In this way, it can be ensured that the concept fits with the context. I am therefore fully committed to sharing, collaborating, discussing, communicating, listening to others' opinions, and embracing tensions with criticality, all in the cause of the development of professional learning communities in Kazakhstani schools.

I understand that the point of view I now hold as an individual professional in terms of the theory in this area will not be immediately and fully transferable to my practical point of view without externalising what I have learnt. For this to happen, it is important to ensure that research is linked to appropriate

dissemination strategies. A variety of different communication techniques are recommended in the literature aimed at maximising the distribution of research results: from publishing research papers to engaging with policy makers through policy debates; presenting research papers at conferences; and holding open seminars and forums. For me, the appropriate strategy for dissemination of the research results revolves around two questions: how to communicate the research outcomes to practitioners and policy makers and how to close the gap between theory and practice.

In order to be able to communicate the research outcomes to a targeted audience, the full result of my study was presented during the '2017 Nazarbayev Intellectual Schools International Research-to-Practice Conference' in Astana. It is also planned to translate the results of the research into Kazakh and publish it as an article. I also plan to hold seminars for the CoE teacher trainers and teachers of the Nazarbayev Intellectual Schools engaged in disseminating their practices to the mainstream schools. I believe that combining my role of a decision-maker within the hierarchy of the Nazarbayev Intellectual Schools with the role of a teacher-trainer will allow me to set up an interactive process with practitioners and understand their research needs.

It is important to note that, by participating in various conferences, seminars and round-table discussions in Kazakhstan and internationally, a lot was learned about seeking feedback from the audience; ways of presenting the research results to different stakeholders; and preparing publications from the study. For example, at the start of the research journey, the research methodology of the study was discussed at the '2012 NIS International Research-to-Practice Conference' in Astana. In 2013, I had an opportunity to present the theoretical part of the study at the 'European Conference on Educational Research' in Istanbul. At the same conference held in 2015 in Budapest the preliminary results of the data analysis were presented and discussed; and in 2016 at the same conference held in Dublin, the first result of the study was submitted for discussion. Additionally, the Open

Seminar Series at the Cambridge Faculty of Education and the Annual Eurasian Research Forum were the platforms where I received constructive and critical feedback and ideas for considerable improvement of the research and of my own thinking. I shall continue looking for opportunities to present my study results locally and internationally.

In conclusion, the following implications for future research are the results of my reflection. It is of particular importance to build on the momentum of the recent reform initiatives in Kazakhstan, as I mentioned earlier, and continue the research in all three schools after teachers have undertaken the CoE courses and begun to implement the new skills-based curriculum. Since one of the biggest limitations of this study is its scale, I shall also seek to replicate the study by involving different types of schools and seeking for opportunities to work with various interested researchers. In other words, testing variables on a larger scale would help in having an impact on the policy level. These kind of studies should allow the creation of a database of case studies. The database should help various interested stakeholders to access data; and the 'theory and discussion which emerges from such work needs to be fully accessible to teachers' (Stenhouse, 1980, p.5; Goodson, 2012; Norris, 2012, p.6).

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APPENDICES

Appendix A: Letter sent to randomly-chosen teachers in different types of schools to collect pilot data to identify a fit-for-purpose unit of analysis

Dear Colleague,

My name is Nazipa Ayubayeva and I am a doctoral student at the Faculty of Education of the University of Cambridge. I wish to invite you to participate in the pilot phase of my study which is entitled: *'Collaboration in Kazakhstan: school teachers' practice'*. The purpose of the study is to investigate and understand the role of collaboration in your practice and the key factors which influence your collaborative practice within and outside of your school.

I hope you will wish to give your support to this study. If you have the time and willingness to help me with the data collection, please complete the table below with the types, kinds and forms of **professional and informal interactions** that you have in and outside your school, not restricted by your school boundaries and your professional responsibilities. Please feel free to add as many rows as are required.

Many thanks for your help! Best wishes, Nazipa

Name **(optional)**

_____

Subject you teach_____

Position held, if any _____

Qualification Category, if any_____

	Types/Forms/kinds of interaction/platform	**Where?**	**On Issues?**	**How Often?**
1.	e.g. School meetings			
2.				
3.				
4.				
5	e.g. Talking to teachers from other schools, etc.			
	Add as required			

Appendix B: Documents analysed

1. Law of the Republic of Kazakhstan 'On Education', 27 July 2007;
2. Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Teacher Attestation', No 323 of August 07, 2013; replaced by Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Teacher Attestation', No 83 of January 27, 2016;
3. Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Pedagogical Council', No 272, 16 May 2007;
4. Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Subject Methodological Unit', No 583, 29 November 2007;
5. Order of the Ministry of Education and Science of the Republic of Kazakhstan 'On Young Teacher Mentoring'.
6. Annual school plan:
    - Aesthetic education
    - Spiritual and moral education
    - Patriotic education and upbringing
    - Military education and upbringing
    - Family education and upbringing
    - Ecological education and upbringing
    - Self-cognition education and upbringing
    - Health and well-being education and upbringing
    - Internal upbringing component
    - Internal formative control
    - Professional orientation
7. Annual Pedagogical Council plan;
8. Annual Subject Methodological Unit plan;
9. Order of the School Director on Young Teacher Mentoring.

Appendix C: Letter to the Ministry of Education and Science of the Republic of Kazakhstan to obtain access to the case-study schools

LETTER

Министру образования и науки
Республики Казахстан
Жумагулову Б.Т.

Уважаемый Бакытжан Турсынович!

В связи с внедрением в Казахстанскую систему среднего образования новых трехмесячных курсов повышения квалификации, обеспечение практического применения полученных теоретических знаний наряду с традиционным изложением предметного содержания конкретных школьных дисциплин, приобретает особую задачу.

Особенность данных курсов, как вам известно, является научить педагогов обучаться и непрерывно повышать свою квалификацию посредством постоянного общения и обмена знаниями с коллегами, а также через представления собственного опыта для анализа критическим друзьям с целью улучшения педагогической практики.

В международных исследованиях отмечается, что анализ состояния разработанности научного знания по моделированию такого подхода повышения квалификации педагогов в западных странах, в частности в Великобритании, позволил выявить сущностные характеристики подхода. Например, наличие объединяющей цели, основополагающей идеи, единые задачи для всей школы, преимущественная роль горизонтальных взаимодействий, система аттестации, поощрения и признания вклада каждого педагога в развитии профессионального сотрудничества. При наличии таких условии, не ограничиваясь ими, данный подход к обучению и развитию педагогов может стать отличным стимулом для творческого и профессионального развития педагога и для повышения их самооценки.

Важнейшей задачей в этой связи является изучение имеющейся базы в Казахстанских школах, и каким образам данная база могла бы поддержать или препятствовать развитию сотрудничества и обмена знаниями между педагогами, а также

внедрению учителями тех инновационных идеи, которых они приобретают во время трехмесячных курсах.

Данный процесс в международных исследованиях описывается, как процесс адаптации новых идеи к новым социальным, ментальным и образовательным условиям.

Таким образом, на основе анализа собственного профессионального опыта и исследований, посвященных проблемам повышения квалификации педагогов, в рамках своего докторского исследования, я заинтересована изучить существующие типы, формы взаимодействия и сотрудничества педагогов друг с другом в условиях существующей школы и образовательной среды в Казахстане. Вместе с тем будет осуществлен сбор данных по поводу, какие основные факторы влияют на появление таких типов и форм сотрудничества. Тематикой докторской работы является «Обучение педагогов в сотрудничестве».

В соответствии с методологическими обоснованиями данного докторского исследования, предлагается провести полевые исследования в трех школах в Казахстане: в школе, расположенной в сельской местности, в районом центре и в областном центре. Предполагается, что данная докторская работа поможет определить сильные стороны взаимодействия педагогов и отработать рекомендации по адаптации иностранно-инновационных идеи в условиях Казахстанской школьной среды.

В связи с этим ***прошу Вас предоставить мне возможность провести полевое исследование по вышеуказанной тематике в [трех] школах Казахстана.***

Н. Аюбаева

Appendix D: Letter by the PSSD of the Ministry of Education to the *Oblono*/*Raiono/* selected schools to consider my request to grant access to the schools

Registration number: No1111

Date: 23 September 2013

TO: Regional Department of Education

District Division of Education

The gymnasium Aimak

The comprehensive school Auyl

The Department of Pre-School and Secondary Education of the Ministry of Education and Science of the Republic of Kazakhstan informs you that we have received a letter from Ms. Nazipa Ayubayeva, a candidate for PhD at the Faculty of Education of the University of Cambridge (registered under No. 06/839 on 12 August 2013).

In this regard, we request that you grant her permission to conduct fieldwork related to teacher professional-development in two schools in your region (the gymnasium Aimak and the comprehensive school Auyl).

Signed and stamped

Head of the Pre-School and Secondary School Department of the Ministry of Education and Science of the Republic of Kazakhstan

Appendix E: The Plan approved by the Director of the gymnasium Audan

AGREED
The gymnasium Audan Director

_____
«____»_____2014

Fieldwork PLAN

PhD candidate: Nazipa Ayubayeva, Faculty of Education, University of Cambridge
School Name: _____
Contact person: _____, Deputy Director

I. Weekly Plan

Activities	**13.01.14 - 25.01.14**	**27.01.14 – 01.02.14**	**03.02.14 – 08.02.14**	**10.02.14 – 15.02.14**
Knowledge-sharing sessions				
Interview with school administration, permission for taking photos, audio-recording				
Interview with Head of methodological associations, permission for taking photos, audio-recording				
Interview with subject teachers, permission for taking photos, audio-recording				
lesson observation of teachers who have attended Level 3 courses, permission for taking photos, audio-recording				
lesson observation of subject teachers, permission for taking photos, audio-recording				
Attending meeting of the methodological units, permission for taking photos				
Attending pedagogical-council meeting				
Observation of school events, permission for taking photos				
Observation in the Staff Room, permission for taking photos				
Focus group discussion with school administration, permission for taking photos, audio-recording				
Focus group discussion with Head of the methodological associations, permission for taking photos, audio-recording				
Focus-group discussion with the members of the methodological units, permission for taking photos, audio-recording				

II. Daily Plan (Sample)

Date	Day	Observation and document collection	lesson observation / School-wide event/ Meetings	Interviews
20.01.14	**Monday**			
	10:00	Meeting with the contact person: NAME, Deputy Director		
	12:00	Meeting with the Director		
	14:00 -17:00	Meeting teachers in the staffroom and observation		
21.01.14	**Tuesday**			
I – shift				
08:50 – 09:35	8:40 -11:30	Meeting teachers in the staffroom and observation Meeting with the Deputy Director and collecting documents: - lesson timetable - School plan - Information about staff		
09:55 – 10:40				
10:45 - 11:30				
11:40 - 12:25	11:30 – 12:30		Open school-wide event Grade 10 and 11 'Celebration of School's 90th Birthday'	
12:30 – 13:15	13:00 – 14:00		Pedagogical Council meeting 'Discussion of the Annual Address of the President of the Republic of Kazakhstan' with the participation of Political Party members	
13:20 - 14:05	13:00 - 14:00		Open school-wide Sports Event Celebration of the 90th anniversary of the gymnasium	
II – shift				
13.20-14.05				
14.15-15.00	Meeting with contact person to plan interview schedule and lesson observation			
15.10-15.55	- List of School Administration members - List of Heads of the Methodological Units - Monthly school work plan			
16.00-16.45				
16.55-17.40			Open lesson: physical training	
17.45-18.30				Interview Teacher B1
18.35-19.20				

Appendix F: Logically sequenced research-design timetable

RESEARCH STAGES	Month // Year	07 //13	08 // 13	09 // 13	10//13	11//13	12//13	01//14	02//14		03//14	04//14
INITIAL STAGE												
Sending official request to schools / local authorities and Ministry of Education and receiving permission to conduct the research		18/07/13 23/09/13										
Arrival at school sites Auyl, Aimak and Audan					Auyl 01.10.13			Audan 13/01/14		Aimak 20/02/14		
Meeting with the school principals / presenting aims and process of the research;					27/09/13			26/09/13 21/01/14		20/02/14		
Request for audio-recording of interviews and video-taping school events/meetings					Auyl			Audan		Aimak		
Discussing research time schedule					Auyl			Audan		Aimak		
Meeting with the teachers/presenting aims and process of the research/identify teachers to participate in the research/ discussing issues related to confidentiality and anonymity					Auyl			Audan		Aimak		
Signing consent letters with the schools/participants					Auyl			Audan		Aimak		
Requesting relevant research documents					Auyl			Audan		Aimak		
Piloting the interview					Auyl			Audan		Aimak		
Trial run of audio-recording					Auyl			Audan		Aimak		
Receiving feedback and making required procedural changes if needed					Auyl			Audan		Aimak		
DATA COLLECTION STAGE												
Interview administration					Auyl			Audan		Aimak		
Ensuring audio-recording					Auyl			Audan		Aimak		
Conducting observations					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
Collecting completed forms by teachers					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
Ensuring photo-taking					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
Note-taking					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
DATA RECORDING												
Transcribing interviews					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
Documentation of observation process					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
Transcribing interview/ translation					Auyl	Auyl	Auyl	Audan	Audan	Aimak	Aimak	Aimak
DATA ORGANISATION												

Appendix G: Presentation and materials used at the knowledge-sharing sessions

Аюбаева Назипа
BA, MBA, Mphil

UNIVERSITY OF CAMBRIDGE

Студент докторантуры по философии (PhD)
Факультета образования **Кембриджского Университета**

Nazarbayev Intellectual Schools NIS

НАЗАРБАЕВ УНИВЕРСИТЕТІ

UNIVERSITY OF CAMBRIDGE

Тематика исследования: «Обучение педагогов в сотрудничестве»

Сбор данных

Школа 1
Школа 2
Школа 3

Диссертация

Инструменты:

1. Наблюдение
2. Посещение уроков
3. Проведение интервью

- Аудио-запись
- Фотография
- Документация

Этические нормы студента Кембриджского университета

- Согласие МОН на проведение исследования
- Согласие Школы на участие в сборе данных для исследования
- Согласие учителей на участие в сборе данных для исследования
- Согласие школы на произведение аудио записи и на фото/аудио съемок
- Согласие учителей на произведение аудио записи и на фото/аудио съемок
- Согласие или несогласие школы на использование имени школы в диссертации и в публикациях
- Предоставление участникам права на ознакомление с цитатами
- Предоставление Школе права быть названной при публикации статьи в журналах и в отчетах

Плана работы

Мероприятия	1 неделя	2 неделя	3 неделя	4 неделя
Интервью с администрацией школы с возможностями фотографировать и произведения аудио записи				
Интервью с руководителями методических объединений с возможностями фотографировать и произведения аудио записи				
Интервью с учителями-предметниками с возможностями фотографировать и произведения аудио записи				
Посещение уроков учителями-предметниками уровневого обучения с возможностями фотогравировать и произведения ауди-записи				
Посещение уроков учителей-предметников с возможностями фотогравировать и произведения ауди-записи				
Посещение заседаний методических объединений с возможностью фотографировать				
Посещение заседания педагогического совета				
Наблюдение за разными мероприятиями в учительской комнате с возможностью фотографировать.				
Наблюдение за происходящими разными мероприятиями в школе с возможностью фотографировать.				

Nazarbayev Intellectual Schools NIS

НАЗАРБАЕВ УНИВЕРСИТЕТІ

UNIVERSITY OF CAMBRIDGE

Спасибо за внимание !

Согласие на участие в исследовании с целью написания докторской диссертации

Тема диссертации «Обучение учителей в сотрудничестве»

Диссертант: Аюбаева Назипа Алтынбековна

Имя участника:

_____

Я согласен/согласна принять участие в исследовании, целью которого является написание докторской диссертации.

Мне объяснили цели исследования.

Меня проинформировали о том, что я могу отказаться от участия в сборе данных в любой момент, просто заявив об этом.

Меня заверили, что моя конфиденциальность будет защищена, как этого требует руководство по этике Британской ассоциации исследователей в области образования.

Я согласен/согласна, чтобы информация которую я предоставлю была использована в образовательных или научных целях, включая публикации.

Текст из моего интервью не будет использоваться без моего разрешения.

Я понимаю, что в случае любых вопросов (или проблем), я могу обращаться к Аюбаевой Назипе Алтынбековне по email: nazipa5@mail.ru

Подпись: _____

Дата:_____

Ғылыми зерделеуге қатысуға Келісім

Диссретация тақырыбы: «Педагогтардың біліктілігін арттыру»

Диссертант: Аюбаева Нәзипа Алтынбекқызы

Қатысуға келісім:

Қатысушының аты:

_____

Мен ғылыми зерделеуге қатысуға келісім беремін.

Маған ғылыми зерделеудің мақсаттарын түсіндірді.

Маған ғылыми зерделеуге қатысудан кез-келген сәтте мәлімдеп, бас тарта алатыным туралы айтылды.

Менің жеке құпиялылығым қорғалады деп сендірді.

Мен берген ақпарат білім беру және ғылыми мақсаттарда, сондай-ақ басылымдарда қолданылуына келісім беремін.

Мен берген сұхбаттың мәтіні менің келісімімсіз қолданыла алмайды.

Мен кез-келген мәселе бойынша Аюбаева Нәзипа Алтынбекқызымен email арқылы байланысқа шыға алатынымды түсінемін: nazipa5@mail.ru.

Қолы:_____

Күні:_____

Appendix H: Letter of invitation to participate in interview

Dear Colleague,

My name is Nazipa Ayubayeva and I am a doctoral student at the Faculty of Education of the University of Cambridge. I wish to invite you to participate in a study entitled: *'Collaboration in Kazakhstan school teachers' practice'*. The purpose of the study is to investigate and understand the role of collaboration in your practice and key factors which influence your collaborative practice within and outside of your school.

I invite you to participate in a one-to-one interview at your convenience. The interview is expected to last 30-45 minutes, will be audio-recorded, and be guided by the following broad questions:

- What is your role in the school?
- Where did you study and what is your background?
- Do you attend the School Pedagogical Council meeting/ Subject Methodological Unit meetings? What do you usually discuss at the School Pedagogical meetings?
- Do you have an opportunity to talk to your colleagues during a working day? If yes, what do you usually talk about or discuss?
- How often do you attend professional development courses? Do you keep in touch with colleagues outside of your own school?
- Do you have opportunities to participate at Republican/Regional/District seminars/workshops and conferences outside Kazakhstan?

I may ask subsidiary questions to clarify issues as necessary. You have the right not to answer the question if you wish. The interview results will be used to write up a doctoral dissertation. The findings of the study may be published and presented at conferences. To safeguard your confidentiality and anonymity you will be given a pseudonym and all identifying information such as your school and department will be removed. Thus, confidentiality and anonymity will be strictly observed, unless you wish to be identified.

To volunteer to be interviewed or if you wish to ask questions related to my study, please contact me at +77701 6440393 and nazipa5@mail.ru.

Please read the consent letter below. If you are happy with the content of the consent letter, please sign and bring it with you to the interview. Thank you!

Thank you for your time!

Yours sincerely, Nazipa Ayubayeva

Informed Consent Form

Title of the dissertation: Collaborative teacher learning

Name: Nazipa Ayubayeva, PhD Candidate

Agreement to Participate

Research Participant's name:_____

I,_____(print name)

agree to take part in this research.

I have had the purposes of the research explained to me.

I have been informed that I may refuse to participate at any point by simply saying so.

I have been assured that my confidentiality will be protected.

I agree that the information that I provide can be used for educational or research purposes, including publication.

I understand that if I have any concerns I can contact: Nazipa Ayubayeva by email: nazipa5@mail.ru.

_____(Signature)

_____(Date)

Appendix I: Example of how the template for the daily observation was filled in

Date/Day 21/01/14/ Monday	**Observation**	**Description of event and nature of interaction**	**Comments and coding**
I – shift			
12:30 – 13:15 Photos are taken. Audio-recording was allowed	Pedagogical Council meeting All 130 teachers were present at the meeting Members of the Political Party '*Nur Otan'* and *Raiyon* Division of Education were invited. The setting of a meeting was very formal, school director and invited guests were sitting *in presidium*.	Theme for the meeting was: 'Discussion of the Annual address of the President of the Republic of Kazakhstan' - Speech by the School Director - Speech by the representative of the Political Party '*Nur Otan'* - Comments and additions by the History teacher, Kazakh language teacher and Geography teacher were made - Protocol was filled in and voted on by teachers to support the Strategy 2050 put forward by the President of the RK. At the end of the meeting, I was provided with an opportunity to present my research and invite teachers for knowledge-sharing sessions. No questions were asked after my presentation. Teachers preferred to approach me individually with questions and clarification while I was sitting in the staffroom.	The tone of the meeting was very **formal;** Commenting teachers talked to people at the *presidium*, rather than addressing their colleagues in the meeting room; Teachers **did not volunteer** to comment, rather they were named by the school director
13:20 - 14:05	Lunch time observation in the canteen	Those teachers who had no lessons stayed to have lunch after the Pedagogical Council meeting, making a group of six sitting around a table.	Canteen setting is very **formal**
II – shift			
13.20-14.05	Staff Room	Subject teachers working together to prepare open lesson	Staff room setting is also **very formal** No coffee and tea is allowed in the Staff Room
14.15-15.00		Two teachers working on a computer, younger teacher explaining to older teacher how to fill in the electronic journal.	

Appendix J: Focus-Group Interview semi-structured questions and protocol

Dear Colleague,
Thank you for taking time to participate in the Focus-Group Interview.

The interview is expected to last about an hour, will be audio-recorded, and be guided by the answers to the questions in the table to be filled in by you. I may ask subsidiary questions to clarify issues as necessary. You have the right not to answer the question if you wish. The interview results will be used to write up a doctoral dissertation. The findings of the study may be published and presented at conferences. To safeguard your confidentiality and anonymity you will be given a pseudonym and all identifying information such as your school and department will be removed. Thus, confidentiality and anonymity will be strictly observed, unless you wish to be identified.

Please read the consent letter below. If you are happy with the content of the consent letter, please sign and return it to me. Thank you!

Yours sincerely, Nazipa Ayubayeva

Subject: _____
Professional Qualification Category:_____
Position (if you are holding any position other than teaching): _____

With which of the following do you interact?	**What do you discuss?**	**Where do you usually meet?**	**How often do you meet?**
School Director			
Deputy Director on academic issues			
Deputy Director on methodological issues			
Deputy Director on pastoral work			
Head of the Subject Methodological Unit			
Psychologist			
Social Analyst			
Sociologist			
Librarian			
Teachers (*you may include as many teachers as you want* and *you may write their names*)			
Colleagues from other schools in Kazakhstan (*you may write the name of a school your colleague is from*)			
Colleagues from other schools outside Kazakhstan (*you may include as many teachers as you want* and *you may write the name of the country your colleague is from*)			

Informed Consent Form

Title of the dissertation: Collaborative teacher learning

Name: Nazipa Ayubayeva, PhD Candidate

Agreement to Participate

Research Participant's name:_____

I,_____(print name)

agree to take part in this research.

I have had the purposes of the research explained to me.

I have been informed that I may refuse to participate at any point by simply saying so.

I have been assured that my confidentiality will be protected.

I agree that the information that I provide can be used for educational or research purposes, including publication.

I understand that if I have any concerns I can contact: Nazipa Ayubayeva by email: nazipa5@mail.ru.

_____(Signature)

_____(Date)

Appendix K. Auyl comprehensive school: research-participants' background information

	Position	Subject Speciality	Background Higher Education	Years of experience	CoE Course Level	Qualification Category	Age Gender
I. School Administration:							
1.	Director A	History	Distance	15	No	Highest	49 F
2.	Deputy Director A1	Kazakh	Full time	16	No	First	37 F
3.	Deputy Director A2	Primary	Distance	10	No	First	33 F
4.	Deputy Director A3	Technology	Distance	6	No	First	31 M
II. Heads of the Subject Methodological Units:							
5.	Head of SMU A1	Music	Full time	36	No	First	57 F
6.	Head of SMU A2	Primary	Distance	22	No	Highest	55 F
7.	Head of SMU A3	Physics	Full time	22	No	First	49 F
8.	Head of SMU A4	Russian	Distance	26	No	First	46 F
III. Subject Teachers:							
9.	Teacher A1	Primary	Distance	29	No	First	54 F
10	Teacher A2	Maths	Full time	29	No	First	52 F
11	Teacher A3	Primary	Distance	34	No	Highest	54 F
12	Teacher A4	Primary	Distance	22	No	Second	52 F
13	Teacher A5	Kazakh	Distance	18	No	Second	37 F
14	Teacher A6	Kazakh	Distance	13	No	First	38 F
15	Teacher A7	History	Distance	14	No	Second	33 F
16	Teacher A8	History	Distance	13	No	Second	31 F
17	Teacher A9	Kazakh	Distance	9	No	Second	37 F
18	Teacher A10	Geography	Full time	8	No	Second	33 F
19	Teacher A11	ICT	Distance	8	No	Second	31 F
20	Teacher A12	Biology	Distance	3	No	NO	39 F
21	Teacher A13	Russian	Distance	2	No	NO	37 F
22	Teacher A14	Maths	Full time	2	No	NO	25 F
23	Teacher A15	English	Full time	1	No	NO	25 F
24	Teacher A16	Maths	Distance	1	No	NO	24 F
25	Teacher A17	PE	Distance	33	No	Highest	52 M

Appendix L. Audan gymnasium: research-participants' background information

	Position	Subject Speciality	Background Higher Education	Years of experience	CoE Course level	Qualification Category	Age	Gender
I. School Administration:								
1.	Director B	History	Full time	35	No	Highest	58	F
2.	Deputy Director B1	Maths	Full time	22	No	Highest	44	F
3.	Deputy Director B2	Chemistry	Full time	15	No	First	36	F
4.	Deputy Director B3	History	Distance	11	No	First	35	F
5.	Deputy Director B4	Kazakh	Full time	9	3-level	First	40	F
6.	Deputy Director B5	Geography	Full time	6	3-level	Second	27	F
7.	Deputy Director B6	Primary	Full time	13	No	Highest	36	F
II. Heads of the Subject Methodological Units:								
8.	Head of SMU B1	Maths	Full time	34	No	Highest	56	F
9.	Head of SMU B2	English	Full time	20	3-level	Highest	48	F
10.	Head of SMU B3	Technology	Full time	25	No	Highest	48	F
11.	Head of SMU B4	Primary	Distance	22	No	Highest	47	F
12.	Head of SMU B5	Russian	Full time	20	1-level	First	42	F
13.	Head of SMU B6	Kazakh	Full time	19	No	Second	42	F
14.	Head of SMU B7	PE	Distance	12	No	First	36	M
III. Subject Teachers:								
15.	Teacher B1	Maths	Full time	22	3-level	Highest	53	F
16.	Teacher B2	Kazakh	Full time	31	3-level	Highest	50	F
17.	Teacher B3	Physics	Full time	28	No	First	50	F
18.	Teacher B4	Kazakh	Full time	15	No	First	43	F
19.	Teacher B5	Kazakh	Distance	19	1-level	Highest	42	F
20.	Teacher B6	Self-cog	Distance	10	No	First	57	F
21.	Teacher B7	History	Full time	12	3-level	First	39	M
22.	Teacher B8	Physics	Full time	12	No	First	36	F
23.	Teacher B9	Kazakh	Distance	12	2-level	First	33	F
24.	Teacher B10	Self-cog	Distance	11	No	Highest	31	F
25.	Teacher B11	ICT	Full time	9	No	First	36	F
26.	Teacher B12	Technology	Full time	9	No	Second	33	F
27.	Teacher B13	Kazakh	Distance	6	3-level	Second	37	F
28.	Teacher B14	Biology	Distance	6	3-level	Second	31	F
29.	Teacher B15	Kazakh	Full time	6	3-level	No Category	28	F
30.	Teacher B16	English	Distance	6	3-level	Second	28	F
31.	Teacher B17	History	Full time	4	3-level	Second	29	F
32.	Teacher B18	BMSP	Full time	3	No	No category	27	M

Appendix M: Aimak autonomous school: teacher-participants' background information

	Position	Subject Speciality	Background Higher Education	Years of experience	CoE Course level	Qualification Category	Age Gender
I. School Administration:							
1.	Director C	Physics	Full time	6	NO	Moderator	29 M
2.	Deputy Director C1	Maths	Full time	11	NO	Moderator	34 M
3.	Deputy Director C2	Biology	Full time	20	3-level	Highest	43 F
4.	Deputy Director C3	Russian	Full time	14	PDP	No	33 F
II. Heads of the Subject Methodological Units:							
5.	Head of SMU C1	PE	Full time	40	3-level	Highest	59 M
6.	Head of SMU C2	Physics	Full time	27	3-level	Highest	52 F
7.	Head of SMU C3	Art	Full time	35	NO	Highest	43 F
8.	Head of SMU C4	Kazakh	Full time	15	3-level	Highest	41 M
9.	Head of SMU C5	History	Full time	17	3-level	Highest	41 F
10.	Head of SMU C6	Chemistry	Full time	8	3-level	First	37 F
11.	Head of SMU C7	Maths	Full time	15	3-level	Highest	37 F
12.	Head of SMU C8	English	Full time	9	3-level	Second	32 F
III. Subject Teachers:							
13.	Teacher C1	History	Distance	32	3-level	Highest	51 F
14.	Teacher C2	Art	Full time	28	NO	Highest	52 F
15.	Teacher C3	Physics	Full time	28	3-level	Highest	52 F
16.	Teacher C4	History	Full time	25	3-level	Highest	51 F
17.	Teacher C5	Kazakh	Full time	26	3-level	Highest	48 F
18.	Teacher C6	Chemistry	Full time	11	NO	First	49 F
19.	Teacher C7	History	Distance	25	3-level	First	48 F
20.	Teacher C8	Biology	Full time	21	NO	Highest	42 F
21.	Teacher C9	Physics	Full time	25	3-level	Highest	42 F
22.	Teacher C10	Physics	Full time	15	NO	First	40 F
23.	Teacher C11	Kazakh	Full time	13	3-level	Second	37 F
24.	Teacher C12	Kazakh	Full time	15	3-level	First	37 F
25.	Teacher C13	PBMS	Full time	8	3-level	First	35 M
26.	Teacher C14	History	Full time	8	3-level	First	32 F
27.	Teacher C15	Kazakh	Full time	7	NO	First	28 F
28.	Teacher C16	Biology	Full time	2	NO	No	27 M
29.	Teacher C17	English	Full time	3	3-level	No	28 F
30.	Teacher C18	English	Full time	2	Trainer 3-2-1	No	25 F
31.	Teacher C19	Physics	Full time	1	NO	No	28 F

Appendix N: Distribution of the workload (*stavka)* in Auyl school, as set out in the Model Study Plan for the school year 2012-2013, and number of teachers employed

№	Subject	Grades	Hours per week	*Stavka per week (18 hours)*	Number of teachers	Additional role
1.	Pre-school	G1 – 2 classes	32 hours	*2 stavkas*	3 teachers [1 maternity leave]	**1 Deputy Director**
2.	Primary school	G1 -1 class	18 hours	*1 stavka*	1 teacher	1 Lead teacher
3.	Primary school	G2 -1 class	18 hours	*1 stavka*	1 teacher [retirement age]	1 Lead teacher
4.	Primary school	G3 -1 class	18 hours	*1 stavka*	1 teacher [retirement age]	1 Lead teacher
5.	Primary school	G4 -1 class	18 hours	*1 stavka*	1 teacher [retirement age]	1 Lead teacher +Head of MU
6.	Self cognition	G1-G11	11 hours	*1 stavka*	2 teachers [1 admin work]	Physiologist
7.	Maths	G5-G11	35 hours	*2.1 stavkas*	3 teachers [1 retirement age]	1 Lead teacher
8.	ICT	G5-G11	7 hours	*0.4 stavka*	2 teachers	1 lab assistant
9.	Biology	G6-G11	10 hours	*0.5 stavka*	1 teacher	1 Lead teacher
10.	Physics	G7-G11	8 hours	*0.5 stavka*	1 teacher [retirement age]	1 Head of MU
11.	Chemistry	G8-G11	6 hours	*0.4 stavka*	1 teacher [military service]	-
12.	Geography	G6-G11	10 hours	*0.5 stavka*	2 teacher [1 maternity leave]	1 Lead teacher
13.	Kazakh History	G5-G11	13 hours	*1,4 stavkas*	7 teachers [4 admin work]	**1 Director** **1 Deputy Director** 1 Social analytic 1 Social pedagogue 1 *Pedsovet* secretary 2 Lead teachers
14.	World History	G6-G11	8 hours			
15.	Basic Law	G9-G11	3 hours			
16.	Kazakh and Literature	G5-G11	17 hours	*2 stavkas*	6 teachers	**1 Deputy Director** 4 Lead teachers
17.		G5-G11	17 hours			
18.	Russian and Literature	G3-G11	18 hours	*3.0 stavkas* [2 groups]	2 teachers	1 Head of MU
19.		G5-G11	8 hours			
20.	English	G1-G11	22 hours	*2.5 stavka* [2 groups]	2 teacher [maternity leave]	-
21.	Music	G1-G6	6 hours	*0.4 stavka*	1 teacher [retirement age]	1 Head of MU
22.	Arts	G1-G6	6 hours	*1.4 stavka*	1 teacher	-
23.	Technology	G1-G11	15 hours			
24.	Graphics	G9	2 hours			
25.	PT	G1-G11	33 hours	*2 stavkas*	3 teachers	-
26.	BMP	G10-G11	2 hours	*1 stavka*	1 teacher	-
Out of 42 teachers: 34 assigned to teach including 9 engaged in administrative jobs; 1 lab assistant; 3 on maternity leave						

Appendix O: The Auyl comprehensive school: the *pedsove*t plan for the school year 2013-2014

The *Pedsovet* Plan

Overall aim: To manage the pedagogical collective's work on the education and pastoral care of students

Tasks:

1) To unite the pedagogical collective in implementing the State Compulsory Standard for Secondary Education;
2) To unite the pedagogical collective in improving the teaching and the process of pastoral care;
3) To introduce into teaching practice the best pedagogical experiences and the latest research-findings.

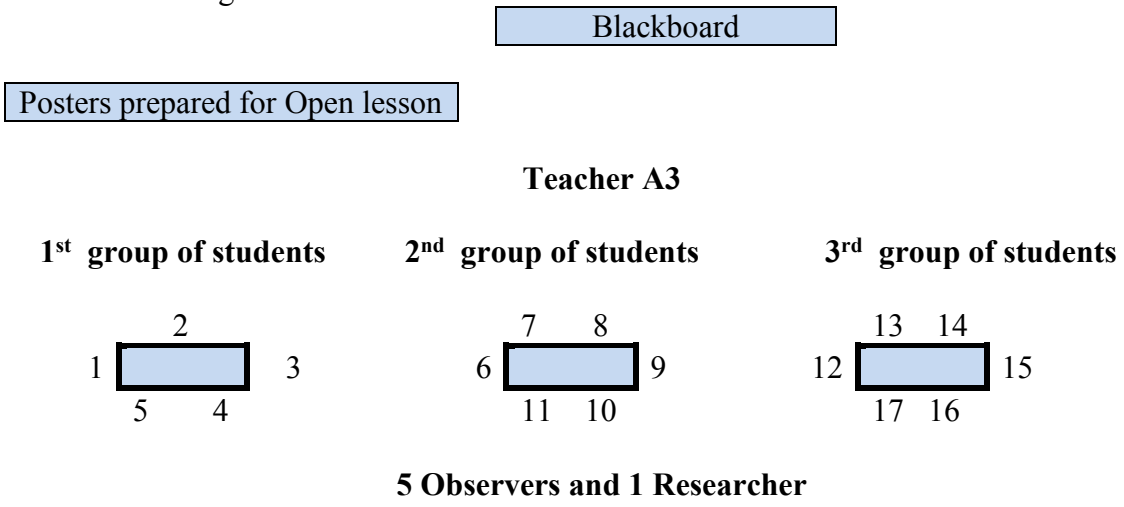
No	Plan	Timeline	Responsible person
1.	1) Analysis of the educational and pastoral care work performed for the school year 2012-2013 Preparation for the new school year: a) Report on preparing technical and material base for the new school year; b) Approval of teachers' workload and the Annual School Plan for 2013-2014; 2) Implementation of the State Programme for Education Development 2011-2020; 3) Approval of the annual plan for student pastoral work for 2013-2014; 4) Report on student summer school.	August	Director Deputy Director for Academic issues Deputy Director for Pastoral Matters
2.	1. To improve effectiveness of teaching by introducing more active-learning techniques in lessons; 2. Report on preparation of the students for the UNT; 3. Preparation of teachers for implementing the 12-year educational system; 4. Scientific and pedagogical bases for providing spiritual and humanistic education within Self-Cognition.	September	Deputy Director for Academic Matters Deputy Director for Methodological Matters Psychologist
3.	1. 'National spirit - source of wealth': a thematic pastoral activity to educate students about patriotism, tolerance, cultural sensitivity, human rights and freedom; 2. How to implement the Law of the Republic of Kazakhstan on 'Language'; 3. Biannual report on student attainments; 4. Issues regarding the implementation of the *pedsovet* decisions.	January	Deputy Director for Pastoral Matters Head of the SMU for Languages

No	Plan	Timeline	Responsible person
4.	1. Issues related to improving Grade 11 students' attainment and their preparation for the UNT; 2. Organising student pastoral work in accordance with the value system, principles and tasks declared in providing continuous education within the Republic of Kazakhstan; 3. Planning and organising in-school professional-development activities for teachers; 4. The impact of IT on students' learning of mathematics and sciences; 5. Monitoring results of pastoral work for the third term; 6. Issues on implementing the *pedsovet* decisions.	March	Deputy Director for Academic matters Director Deputy Director for Pastoral Matters Deputy Director for Methodological Matters Deputy Director for Academic Matters Director
5.	1. Finalising the school year, entering students for exams, and students' grade upgrade; 2. Monitoring of student results for the school year; 3. Organising summer school for students;	May	Deputy Director for Pastoral Matters Deputy Director for Academic Matters
6.	1. Issues on implementation of *pedsovet* decisions; 2. Discussion of exam results; Grade 9 results; 3. Organising students' holiday time;		Director Deputy Director s

Appendix P: The Record of the Open lesson conducted by Teacher A3.

Type of lesson:	**Open lesson**
Teacher:	Teacher A3
Date:	November 20, 2013
Class	Grade 3
Number of students:	17
Classroom resources:	Blackboard, Student desks, posters

Classroom settings:



Fixing time:	**Teacher's activities**	**Students' activities**
15:45	Warm up session	Students singing out loud
15:46	Checking Homework	Student 1/Student3/Student10/ Student 7/Student14/Student17 reporting on their homework
15:49	Card was distributed to work for 3 min Helps students to work with cards	Students working with cards
15:52	Starts a new theme/Reads a poem about a snowman	Listens to the teacher reading a poem
15:54	Assignment to build a snowman with pre-prepared parts out of carton (separate parts should be put together by reading the poem)	Students read a poem about a snowman and put together different parts of it on the blackboard
15:59	Physical exercise	Physical exercise for hands and legs by singing a short song
16:00	Asks questions on the snowman poem and calls on students to answer the questions	Three students answer the questions
16:02	Asks student to write about a snowman in their notebooks	Students working on their writing
16:05	Asks students to read about types of snow from the textbook	Students read one by one

Fixing time:	Teacher's activities	Students' activities
16:08	Working with cards to name all types of snow from the reading	Students working on their writings
16:11	If I were a snowman? Write a sentence.	Students working on their writing
16:14	Read what you wrote	All students read what they wrote
16:19	Lets work with the poster on board What do you see? Poster is about a winter scene and children playing outside	Students go to the blackboard and describe what they see on a poster
16: 26	Marking students and assigning home work	Students taking notes about home task
16:30	END of the lesson	

Feedback by observers	
Teacher A3's reflection	She is happy with the lesson and stated that she has done all she planned to do in the lesson
Head of the SMU A3	She felt that the children were very loud and noisy. She asked the teacher to pay more attention to children's behaviour. She instructed the teacher to read the instructions before giving any assignment to students.
Psychologist	She stated that the teacher spoke faster than usual. She added that this specific class has a lot of student-leaders, and all of them wanted to participate and be visible, therefore there was a lot of distraction.
Teacher 1	She liked the lesson and stated that she learns a lot from Teacher A3, but did not specify what exactly she learnt from the lesson.
Teacher 2	She also stated that she came to take something from the lesson and she liked it a lot. Again she did not specify what exactly she was going to take from this lesson.
Teacher 3	She just said it was a good lesson.

Appendix Q: UNESCO Transliteration table for Kazakh language

UNESCO (The United Nations Educational, Scientific and Cultural Organisation)	INDEX TRANSLATIONUM
Transliteration table KAZAKH	
А	a
Ә	ä
Б	b
В	v
Г	g
Ғ	ğ
Д	d
Е, Ё	e
Ж	ž
З	z
И	i
Й	j
К	k
Қ	q
Л	l
М	m
Н	n
Ң	ń
О	o
Ө	ö
П	p
Р	r
С	s
Т	t
У	u
Ұ	ū
Ү	ü
Ф	f
Х	h
Һ	ḥ
Ц	c
Ч	č
Ш	š
Щ	šč
Ъ, Ь	ʻ
Ы	y
І	í
Э	ė
Ю	ju
Я	ja

Appendix O: UNESCO Transliteration table for Russian language

UNESCO (The United Nations Educational, Scientific and Cultural Organisation)	INDEX TRANSLATIONUM
Transliteration table Russian	
А	a
Б	b
В	v
Г	g
Д	d
Е, Ё	e
Ж	ž
З	z
И	i
Й	j
К	k
Л	l
М	m
Н	n
О	o
П	p
Р	r
С	s
Т	t
У	u
Ф	f
Х	h
Ц	c
Ч	č
Ш	š
Щ	šč
Ъ	‘
Ы	y
Ь	‘
Э	ė
Ю	ju
Я	ja