# UNIVERSITY OF SZEGED DOCTORAL SCHOOL OF EDUCATION

# ASSESSING 6<sup>TH</sup> AND 8<sup>TH</sup> GRADES STUDENTS' READING SKILLS AND LITERACY IN KAZAKH, RUSSIAN, AND ENGLISH LANGUAGES IN KAZAKHSTAN

PhD Dissertation

## **AIGUL AKHMETOVA**

Supervisor: Prof. Dr. Benő Csapó



Szeged, Hungary 2022

## **Table of Contents**

DISSERTATION SUMMARY	5
ABBREVIATIONS	
LIST OF TABLES	
LIST OF FIGURES.	
CHAPTER 1: INTRODUCTION TO THE STUDY	
1.1 Context of the Study	
1.2 Problem Statement	
1.4 Dissertation organization	
2.1 Introduction	
2.2 Reading literacy and skills	
2.3 Individual differences of the learners in second language acquisition (SLA)	10
2.4 Reading in mother tongue for young learners	
2.5 Reading in English as a foreign among bilingual and monolingual children	20
2.6 Factors affecting students' reading achievements in mother tongue and in EFL	22
2.7 Attitude towards reading	
2.7.1 The impact of attitude on achievement	
2.8 Reading strategies and abilities of bilingual and monolingual	24
2.9 Motivation in reading comprehension.	26
2.9.1 Motivation as a key component to learn English	
2.10 Reading habits	
2.11 Reading assessment frameworks	
2.12 Reading and writing	
2.13 Assessment of young learners' reading skills	
2.14 Class room climate and engagement	
2.15 Education system in Kazakhstan	
2.16 Language or cultural differences in Kazakh vs. Russian orthography	
2.17 Bilingual situation in Kazakhstan	
2.18 Conclusion	
CHAPTER 3: AIMS OF THE RESEARCH AND EMPIRICAL STUDIES	
3.1 Research Aims and the Structure of Empirical Studies	
3.2 Research Questions and Hypotheses	
CHAPTER 4: METHODOLOGY	
4.1 Research Design	
4.2 Samples	
4.4 Procedures	
4.4.1 Data Collection	
4.4.2 Data Analysis.	
CHAPTER 5: RESULTS	
5.1 Assessment of reading skills in English and socio-economic background among learners i	
middle schools in Paylodar, Kazakhstan	
5.1.1 Introduction.	
5.1.2 Methods.	
5.1.3 Study Results	
5.1.4 Discussion	
5.2 Relationship between reading and writing skills of $6^{th}$ graders in English language and so	
economic background	
5.2.1 Introduction	
5.2.2 Methods	
5.2.3 Study Results	
5.2.4 Discussion	
5.3 Links between reading attitude and reading achievement in three languages: Assessments	
two age groups of young Kazakhstani learners	
5.3.1 Introduction	გი

5.3.2 Methods	86
5.3.3 Study Results	
5.3.4 Discussion	
5.4 Mediation effect of engagement between classroom climate and reading achievement in th	
languages among sixth- and eighth-grade students in Kazakhstan	
5.4.1 Introduction	
5.4.2 Methods	
5.4.3 Study Results	
5.4.4 Discussion	
5.5 Reading strategies and reading performances of 6 <sup>th</sup> and 8 <sup>th</sup> graders in Kazakh, Russian, a	nd
English: cross-sectional study	
5.5.1 Introduction.	
5.5.2 Methods	
5.5.3 Study Results	
5.5.4 Discussion	
CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS	
6.1 Introduction	
6.2 Study 1 Assessment of reading skills in English and socio-economic background among learne	
middle schook in Pavlodar, Kazakhstan	
6.3 Study 2 Relationship between reading and writing skills of 6 <sup>th</sup> graders in English language and	. 131
socio-economic background	
6.4 Study 3 Links between reading attitude and reading achievement in three languages: Assessmen	
in two age groups of young Kazakhstani leamers	
6.5 Study 4 Mediation effect of engagement between class room climate and reading achievement is	. 132 n
three languages among sixth- and eighth-grade students in Kazakhstan	
English: cross-sectional study	
6.7 Conclusions and further prospects for analysis	
6.8 Recommendations	
6.9 Limitations	
ACKNOWLEDGMENTS	
REFERENCES	
APPENDICES	
Appendix A: Item-Person Map of 6th grade students (2019)	. 157
Appendix B: Item-Person Map of 8th grade students (2019)	. 160
Appendix C: Unidimensional model of 6th grade students and items (2020)	. 163
Appendix D: Unidimensional model of 8th grade students and items (2020)	
Appendix E: Background Questionnaire (in Kazakh and Russian 6th and 8th grades) (Study 1)	. 169
Appendix F: English Reading comprehension test (6th grade) (Study 1)	
Appendix G: English Reading comprehension test (8th grade) (Study 1)	. 188
Appendix H: English comprehension tests: Reading and Writing skills (6th grade) (Study 2)	
Appendix I: Background Questionnaire (in Kazakh and Russian 6th grade) (Study 2)	
Appendix J: Background Questionnaire (in Kazakh and Russian 6th and 8th grades) (Study 3)	
Appendix K: Reading attitude (in Kazakh and Russian 6th and 8th grades) (Study 3)	
Appendix L: Self-developed Reading comprehension test – first draft (6th grade in English, Kazakh	
and Russian) (Study 3)	
Appendix M: Self-developed Reading comprehension test – first draft (8th grade in English, Kazak	
and Russian) (Study 3)	
Appendix N: Background Questionnaire (in Kazakh and Russian 6th and 8th grades) (Study 4)	
Appendix O: Reading attitude (in Kazakh and Russian 6th and 8th grades) (Study 4)	
Appendix P: Adapted Self-developed Reading comprehension test –second draft (6th grade in Eng.	
Kazakh, and Russian) (Study 4)	
Appendix Q: Adapted Self-developed Reading comprehension test—second draft (8th grade in Eng	
Kazakh, and Russian) (Study 4)	
Appendix R: Reading Strategy (in Kazakh, and Russian 6th and 8th grades)	
(Study 5)	
Appendix S: Permission letters from the Ministry of Education and Science of the Republic of	
Kazakhstan	. 272

Appendix T: Permission letters from the Department of Education of Pavlodar region	274
Appendix U: Letters of Request and agreement form	277
DECLARATION	279

#### **DISSERTATION SUMMARY**

This research study aimed to assess and explore the issue of poor reading literacy skills among young learners in the middle school in Kazakhstan. In particular, our broader goal is to develop a modified framework of recommendation and suggestions for teaching and learning reading skills in Kazakhstan in the native and second languages (i.e. Kazakh or Russian), and in English as a foreign language. Consequently, we firstly focused on assessing reading skills and literacy development in Kazakh and Russian languages as a native and/or second language (L1)/ (L2), and English as a foreign language (EFL). This could help us to define the core issue while teaching reading skills to young Kazakhstani learners.

Secondly, we revealed several factors in questionnaires regarding students' socio-economic status, reading attitude, classroom climate, engagement, and reading metacognitive awareness while reading process. The evidences may assure explanation of poor results in reading literacy among Kazakhstani 15-year-old students, which were below the average while performing international surveys like PISA, and PIRLS.

Thirdly, we assessed 6th and 8th grade students' reading skills in English, Kazakh, and Russian. In total (N=4,274) participants took part in the computer based assessment. Finally, the obtained results may track us to provide suggestions and recommendations for reading literacy, and further modification in the assessment process in the middle secondary education of Kazakhstan. Even young adolescents had positive reading attitude and insignificant gender differences (49.9% - boys, 51.2% - girls), the analysis showed that middle school learners in Kazakhstan had poor reading skills in the target languages.

In addition, we found that latent factors (i.e., classroom climate, engagement, reading attitude, and reading strategies) did not affect reading comprehension tests in English, Kazakh, and Russian languages. The weak relationship between classroom climate and engagement towards reading achievement might indicate insufficient learning environment, low teacher-student interaction, and scarce support from peers or parents towards reading skills in the target languages.

Moreover, the analysis highlighted several drawbacks among young learners while teaching and learning reading skills and developing literacy in the languages. Likewise, policy makers, teachers, parents, and other stakeholders should put serious attention to the content of core curricular programme for teaching reading skills in L1, L2, and EFL. The findings also suggested that reading for pleasure in and out of school might consider being a challenging activity for children in the middle school. Interestingly though, bilingual learners seemed to use more reading strategies in performing reading comprehension tests than monolinguals in the respected languages.

Therefore, to boost the importance of reading literacy for young learners in the middle school, appropriate programme are required to preparing young learners think critically, and improving the quality. Furthermore, the qualitative assessment of teachers and the school staff are necessary to explore the quality of teaching and assessing reading literacy skills in the respective languages.

#### **ABBREVIATIONS**

AMOS Analysis of Moment Structures

ANOVA Analysis of Variance

CFA Confirmatory Factor Analysis

CFI Comparative Fit Index CR Composite Reliability CV Convergent Validity

eDia Electronics Diagnostic Assessments
EFL English as the foreign language
EFA Exploratory Factor Analysis

IEA International Association for the Evaluation of Educational

**Achieve** ment

IRT Item Response Theory KMO Kaizer-Meyer-Olkin

MESRK Ministry of Education and Science of the Republic of Kazakhstan

NIS Nazarbayev Intellectual Schools

OECD Organization for Economic Co-operation and Development

PIRLS Progress in International Reading Literacy Study
PISA Programme for International Student Assessment

RCT Reading Comprehension Test

RMSEA Root-Mean-Square Error of Approximation

SEM Structural Equation Modeling

SES Social Economic Status

SPSS Statistical Package for Social Sciences SRMR Standardized Root Mean Square Residual

TIMSS Trends in International Mathematics and Science Study

TLI Tucker-Lewis Index

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations Children's Fund

UNT Unified National Test

VET Vocational Education and Training

#### LIST OF TABLES

- Table 1: The overview of the timeline and research activities
- Table 2: Parents' level of education for study 1
- Table 3: Parents' level of education for study 2 in Grade 6
- Table 4: Parents' level of education for study 3
- Table 5: Parents' level of education for studies 4 and 5
- Table 6: Samples of all studies
- Table 7: The overview of the scales and the instruments of the studies
- Table 8: Number of participants in the Grades 6 & 8 (2018)
- Table 9: The structure and the content of the reading tests in Grades 6 & 8 (2018)
- Table 10: Information retrieval VS Inference
- Table 11: Students' test performance in English (Grades 6 & 8)
- Table 12: Gender differences in tests performances
- Table 13: Language differences in tests performances
- Table 14: Goodness of fit indices in six-factor model CFA
- Table 15: Factor loading for grade 6 (2018)
- Table 16: Factor loading for grade 8 (2018)
- Table 17: Correlation Coefficients between Background Factors 6 grade
- Table 18: Correlation Coefficients between Background Factors 8 grade
- Table 19: Reliability and validity based on based on Fornell-Larcker Criterion
- Table 20: Regression analysis grades 6<sup>th</sup> and 8<sup>th</sup>
- Table 21: Number of participants in the Grade 6 (2018)
- Table 22: Tests booklet in L2 in Grade 6 (2018)
- Table 23: Parents' level of education (%) in the 6<sup>th</sup> grade (2018)
- Table 24: No. of books (%) in the 6<sup>th</sup> grade
- Table 25: Reliability of the tests
- Table 26: Results in English Test sub-scales
- Table 27: Correlations of Sub-scales in English: Kazakh native speakers
- Table 28: Correlations of Sub-scales in English: Russian native speakers
- Table 29: Correlations of Sub-scales in English: all students
- Table 30: Regression analyses in English test outcomes as the dependent with parents' level of education, number of books and reading and writing in L2 by Kazakh and Russian native speakers
- Table 31: Samples of the study (2019)
- Table 32: The reading tests in English, Kazakh and Russian in Grade 6 (2019)
- Table 33: The reading tests in English, Kazakh and Russian in Grade 8 (2019)
- Table 34: Reliability (Cronbach's alpha) of the reading tests
- Table 35: The performances in the reading tests (2019)
- Table 36: Gender differences in the English, Kazakh and Russian reading test performances
- Table 37: Correlations of Tests in Grade 6 and 8 (2019)
- Table 38: Factor loadings of Reading Attitude Grade 6 (2019)
- Table 39: Factor loadings of Reading Attitude Grade 8 (2019)
- Table 40: Samples of the study (2020)
- Table 41: The reading tests in English, Kazakh and Russian in Grade 6 (2020)
- Table 42: The reading tests in English, Kazakh and Russian in Grade 8 (2020)
- Table 43: Reliability (Cronbach's alpha) of the reading tests (2020)
- Table 44: Factor loading Grade 6
- Table 45: Factor loading Grade 8

- Table 46: Correlation of the Factors in Grade 6
- Table 47: Correlation of the Factors in Grade 8
- Table 48: Comparing performances in the reading tests in 2019 and 2020
- Table 49: Correlations of Tests in Grade 6 and 8 (2020)
- Table 50: Gender differences in the English, Kazakh and Russian reading test performances (2020)
- Table 51: Regression analysis
- Table 52: Correlations of MARSI factors of the whole sample (6 & 8, grades)
- Table 53: Correlations of reading strategies and reading tests in English, Kazakh, and Russian (6 & 8, grades)
- Table 54: Differences by Gender of the whole group (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)
- Table 55: Differences by Language performances (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)
- Table 56: Grade differences in reading strategies (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)

#### LIST OF FIGURES

- Figure 1: Reading literacy framework as a conceptual-cognitive model
- Figure 2: Structure of Education in Kazakhstan
- Figure 3: Regions of Kazakhstan
- Figure 4: Performance Distribution (Grade 6)
- Figure 5: Item-person map for English reading test Sixth Graders
- Figure 6: Performance Distributions (Grade 8)
- Figure 7: Item-person map for English reading test Eighth Graders
- Figure 8: CFA Grade 6
- Figure 9: CFA Grade 8
- Figure 10: CFA both grades after modification indexes, standardized factor loading and correlation
- Figure 11: Regression analysis on the English Reading of the 6<sup>th</sup> & 8<sup>th</sup> grades
- Figure 12: Grade 6: Wright map of persons and items in Reading comprehension test (English, Kazakh, Russian) for the unidimensional model (each 'X' represents 1.3 cases)
- Figure 13: Grade 8: Wright map of persons and items in Reading comprehension test (English, Kazakh, Russian) for the unidimensional model (each 'X' represents 1.0 cases)
- Figure 14: Development of young learners' reading skills in 2019 and 2020
- Figure 15: Performance difference in difference grade levels
- Figure 16: Mediation in Grade 6
- Figure 17: Mediation in Grade 8
- Figure 18: Confirmatory factor analysis of reading strategies in Grades 6 and 8 with five-factors (2020)
- Figure 19: Confirmatory factor analysis of reading strategies in Grades 6 and 8 with three-factors (2020)
- Figure 20: Structural equation modeling of reading strategies and reading achievements (the whole sample, 2020)
- Figure 21: Regression analysis of reading strategies and reading achievements of  $6^{th}$  and  $8^{th}$  grades (2020)

#### **CHAPTER 1: INTRODUCTION TO THE STUDY**

The importance of reading skills and literacy is crucial both for young, adult learners and for the society in general. The literature defines that reading skills as the "discrete unit of the curriculum that ought to be learned by students and taught by teachers" (Pearson, 2014 as referenced in Israel & Duffy, 2014, p. 7). While literacy "…is defined as basic or primary levels of reading and writing and their analogs across different media, activities made possible by a technology or set of techniques for decoding and reproducing printed materials" (Graff and Duffy, 2017 as referenced in Street & May, 2017, p. 33). Researchers claim that the key aspect of reading skills and literacy is in their benefit for design of program and curriculum construction, which is possible through appropriate instruction and assessment in a certain social and cultural context and "not just on pedagogic and cognitive factors" (see Street, 2017 as referenced in Street & May, 2017, p. 5).

#### 1.1 Context of the Study

Over the last two decades, Kazakhstan is under the great challenge to implement better education policy and international standards with an eye to improve the quality of education in each level of the system. Several review reports of the Organisation for Economic Co-operation and Development (OECD) such as, Review of Policies to Improve the Effectiveness of Resource Use in Schools, Review of Policies for Vocational Education and Training, the OECD Country Review of Early Childhood Education and Care (OECD, 2014a, p. 3) highlighted weak points in the education system of Kazakhstan. These international reports and surveys facilitate to intensify confirmation in school policies, teaching and training processes in early childhood education, middle, secondary, and higher education. Moreover, those documents have suggested the ways to narrow the gaps between schools in urban and rural areas in accordance of school management, resourcing policy, leadership, and teaching effectiveness.

To boost the quality of education system in Kazakhstan is the main purpose in the Core Curriculum standard of the Republic of Kazakhstan due to Article #56 "the Law of Education" from July 27, 2017 (MESRK, 2017). Besides, the Core Curriculum standard for secondary education has several requirements and objectives. One of them is the quality of education that should provide improvements in academic and practical areas. Another document is the decree #1080 from August 23, 2012 (MESRK, 2012) regarding which, Kazakhstan has listed the number of compulsory languages in Kazakh- and Russian-medium schools. Likewise, the level for teaching and status of Kazakh and Russian languages in Kazakh and Russianmedium schools are not the same. For example, in the schools with Kazakh instruction Kazakh is taught as a native (KNL) language, Russian as the second (RL2), and English as a foreign language (EFL). In Russian-medium schools, Russian is taught as a native (RNL), Kazakh as the second (KL2), and English as a foreign language (EFL). Additionally, due to decree #1080 education organizations should focus to the quality in teaching process, manage and provide necessary conditions to reveal the insights of the school, students' beliefs and viewpoints regarding policy, structure, accountability and assessment.

Assessment in Kazakhstan on international i.e., OECD, Programme for International Students Assessment (PISA), IEA [International Association for the

Evaluation of Educational Achievement] Trends in International Mathematics and Science Study (TIMSS), Progress in International Reading Literacy Study (PIRLS), and national e.g., Unified National Test (UNT) levels manifests education of what students know and can do. Data outcomes from TIMSS and PISA define that students in Kazakhstan are better "at imparting theoretical knowledge and ensuring that students remember, recognise and retrieve information" (OECD, 2014a p. 18), but cannot "acquire and practice higher-order thinking skills, such as applying and reasoning in maths, or reflecting on and evaluating texts when reading" (OECD, 2014a p. 18). Besides participating in these assessment surveys, Kazakhstan still has not defined an appropriate model and framework useful for accountability and evaluating criteria for students at various levels e.g., in the middle secondary schools. Likewise, an appropriate school environment, classroom climate, effective management to increase the quality of education, beneficial instruction between teacher–students–teacher–parents, principals and other stakeholders are still needed and required.

The third essential attention is targeting on the level of teaching and learning three languages (i.e., Kazakh, Russian, and English) altogether. Kazakh and Russian languages are obligatory languages in Kazakhstan and English is a compulsory foreign language that children start to learn from kindergarten and continue in secondary and postgraduate levels of education (MES, 2013; 2016).

In Kazakhstan, there are Kazakh- and Russian-medium schools, where the instruction is in two languages — Kazakh and Russian. However, since 2013 several innovative schools like Nazarbayev Intellectual Schools (NIS) have started to implement instruction in English language. Likewise, these NIS schools start to provide instruction and teaching most subjects in English except 'Kazakh Language and Literature' and Russian Language and Literature'. These subjects are taught in Kazakh and Russian respectively. Thus, the term "trinity of languages" has been widely used in NIS schools. However, both NIS and ordinary secondary schools have seemed not been fully benefited the reforms and requirements for students and teachers towards effective ways of teaching and learning in Kazakh as a KNL, Russian as the RL2, Russian as a RNL, Kazakh as the KL2, and English as a FL.

Kazakhstani students are struggling in the tasks of international surveys where to solve life problems properly are essential. The result of poor performance may occur because most students cannot appropriately apply their knowledge for the real life situations. For instance, most schools, teachers, and programme curriculum have still implemented holistic factorial ways in teaching, where students cannot think critically.

The level of education is one of the core indicators for country's development in economics and well-being of the citizens. The effectiveness of education system generally exposes the literacy rate of the society and children from international and national assessments. Although the effectiveness of education system of Kazakhstan in international and national assessments demonstrated relatively low results of 15-year-old students in reading literacy comparing to the average OECD countries. Therefore, in order to stimulate further modification for education framework it is necessary to reveal and define the evidences of low reading literacy level among students with the help of longitudinal assessment in this issue. The assessment substudies in this field may assure support where teaching and learning reading skills in mother tongue and EFL, students' background knowledge and abilities are interrelated. Hence, the determined outcomes can help Kazakhstan to foster the re-

structure the system in secondary education, which may propose a significant factor for further prosperity and quality in education.

Moreover, the tests in reading skills in mother tongue and EFL will provide a clear picture of the students' literacy level in both languages. The results will guide teachers, students, and other stakeholders to reflect on the way of teaching, learning, and monitoring processes. As reading is a cognitive process (Ehri, 2000, 2005; Kintsch, 2012; Cain, Compton, & Parrila, 2017; Perfetti, 2007; Perfetti & Stafura, 2014) it requires from the reader certain skills and abilities in order to gain information, understand, acquire knowledge, reflect and evaluate the written text (OECD, 2017, 2019, 2020). Thus, for example, regarding "PISA for development assessment and analytical framework: reading, mathematics and science" – "reading literacy" is simply defined as "reading" where "a wide range of cognitive competencies, from basic decoding, to knowledge of words, grammar and larger linguistic and textual structures and features, to knowledge about the world" (OECD, 2018, p. 28).

The assessment of reading skills and literacy will help us to define the level of students' literacy development and particularly provide the information for teaching and learning reading skills in mother tongue and EFL in Pavlodar, Kazakhstan. Therefore, the purpose of this study is to reveal the problem of low-stakes in reading literacy, which decreases every year (e.g., PISA-2018, OECD, 2019). Thus, in order to solve the current issue, an assessment of reading literacy skills among sixth and eighth graders is required. During three years of our data collection, the development of reading comprehension has been explored, as well as the outlined factors have been revealed, which may impede further proficiency in language abilities in the native and foreign languages while performing reading tasks in target languages. Applying data in this research study, five studies from Pavlodar city, northern part of Kazakhstan were set from seven randomly chosen secondary schools. The collection data were carried in the same schools, among 6<sup>th</sup> and 8<sup>th</sup> grade learners during winter (January-February) term of studying in 2018, 2019, and 2020 years. Every year the number of cohort groups in the cross-sectional study was varied.

#### 1.2 Problem Statement

The fact that students are suffering and struggling in reading and take a great effort for reading may let us understand and suppose, why the students from Kazakhstan start to lose their interests in reading from grade five and stop reading for pleasure in the upper grades. It is obvious that due to number of compulsory subjects in the study programme most textbooks and reading materials in the middle secondary education start to be challenging comparing to elementary education. Although reading is a fundamental basis in the process of teaching and learning the language, gaining meaning and/or increase the knowledge, the students straggle in the reading process as a practical activity in the middle school. For instance, at present young adolescents prefer using electronic devices and gadgets to reading activity. This may happen because of inappropriate instruction for reading activity in the classroom, complex texts, less support from teachers and/or peers, and more attention to grades (extrinsic motivation), the use of goal-performance tasks directed by the teacher (Guthrie & Davis, 2003; Ryan & Deci, 2000).

The results of Kazakhstani young learners in reading literacy are not comparable because they are among low average stage (OECD, 2009, 2014a, 2014b,

2014c, 2017). Incomparable results in reading literacy relate not only with the problem in literacy and reading skills altogether, it is a complex process absorbing internal and external factors in the way of problem solving. The government is struggling a lot in order to be among the members of well-developed countries. Likewise, applying various methods, models, and frameworks with less practical experience requires permanent training among teaching staff, policy makers, and other stakeholders in the country. Even though such changes as formative and summative assessments, grading system, and testing frequency in the studying process (i.e., midterm and final term), there is still a problem in the quality of education. Thus, the core curriculum for lower secondary education (i.e., 5-9 grades) in Kazakhstan is in need of modification and requires strong evidences to restructure the system.

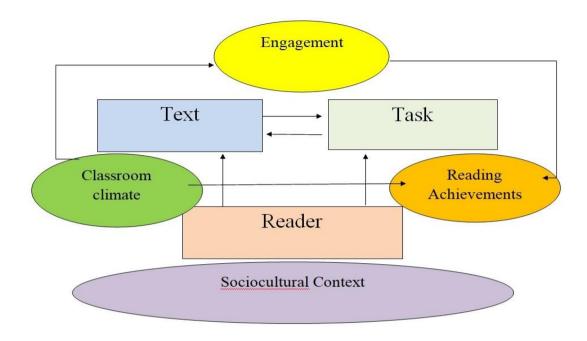
Overall, middle secondary education in Kazakhstan needs more practice in assessment and empirical experience regarding teaching quality and applying appropriate methods. For instance, most students learn by heart and study a lot of theory, which is very good in solving educational problems. However, less attention and rare use are given to the real-life situations in teaching and learning process. Textbooks are mostly oriented on theory and factual knowledge, although very few time is devoted to the workshops, creative activities, team, and joint works, where children have to think critically and find practical solution of the issue. As a result, the students are not confident of how to implement obtaining knowledge. This study may assist improvements to the process for building up a modified school framework of teaching and learning style in Kazakhstan, where frequent assessment provides data for appropriate school management in the classroom context. This research study estimated the reading skills in Kazakh, Russian and English languages via reading tests in those languages, defined socio-economic status of the students their reading attitude and reading strategies while performing the tests. Furthermore, the current study has orchestrated all above-mentioned issues and perspectives of learners in the middle school in five studies.

#### 1.3 Conceptual framework of the research

The research framework discussed several aspects in reading comprehension such as socioeconomic background, classroom climate, reading attitude, and engagement in the process of reading. In addition, the framework also determined the usage level of reading strategies in and while reading in three respected languages. The framework design was associated with conceptual and cognitive levels of reading activity and the factors that affectionate this complex process. An adapted framework implemented various resources, which is supposed to follow the research gap and the structure of the study. The framework provides PISA-2018 reading literacy framework, where reading fluency affects text processing, and task management. Moreover, the framework has also indicated reading literacy theories of Snow and the RAND Reading Group (2002) that establish factors and functions necessary for constructing the meaning and achieving comprehensive information. Likewise, the framework of the research adapted a conceptual framework model of Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012), where the role of student's engagement as a mediator between classroom emotional climate and academic achievement supports positive relationship. All these interactions promote a reader for active dimensions in the cognitive process, as well as better understand the texts and perform tasks successfully (see Figure 1).

Figure 1

Reading literacy framework as a conceptual-cognitive model (Adapted from PISA-2018, Snow and the RAND Reading Group, 2002; Reyes et al., 2012)



#### 1.4 Dissertation organization

The dissertation consists of six chapters. The first chapter introduces the context, problem of the study, and represents a brief structure format of this research thesis.

The second chapter focuses on review of the literature of the research. The chapter discusses a brief introduction to the problem and demonstrates the importance of assessing reading skills and reading literacy in the mother tongue and in English as the foreign language. The chapter defines factors that could affect the performance in reading skills such as attitudes and motivation and the strategies, which are vitally necessary for the development, improvement, better comprehension, and application of reading abilities by young learners in Kazakh, Russian, and English.

The third chapter defines research aims and structure of empirical study as well as provides research questions and hypothesis.

The forth chapter determines the structure of the research methodology, which introduces the outline and accomplishing process. The cross-sectional quantitative approach is applied which is considered useful regarding data and the model of research study. The research study model explains the mechanism of data collection, determines the organizing process, research area, and the field of the samples. Data collecting process is characterized the strategy of how the data and the instruments were validated and adopted.

The fifth chapter describes data analysis of the research within five studies. Each study defines appropriate research questions that facilitate and benefit the area of the study. Study 1 examines the performances of the sixth and eighth grades students in English reading comprehension tests as a foreign language, as well as

investigates the correlation of reading comprehension outcomes in English with several background variables (i.e., gender, mother tongue, classroom climate, student-teacher relationships, and engagement to learn English, anxiety and usage of ICT technologies in the school context).

Study 2 explores the relationship between reading and writing skills of sixth graders in English language as a foreign and impact of the performances of the students with their socio-economic status.

Study 3 focuses on relationship between reading attitude and reading achievement of the students in the tests in English, Kazakh, and Russian languages. The cross-sectional studies revealed the links of the factors from reading attitude and reading achievement.

Study 4 investigates the relationships between adapted reading achievement tests in English, Kazakh, and Russian languages and several background variables among 6<sup>th</sup> and 8<sup>th</sup> grade learners, where the mediation effect of engagement between classroom climate towards outcomes of the students was examined.

Study 5 examines reading strategies of 6<sup>th</sup> and 8<sup>th</sup> grade learners in mother tongue and their relationships with reading achievement tests in three languages (i.e., English, Kazakh, and Russian), reading attitude and background variables. The number of factors depicted from reading strategies, reading attitude, and background variables would plan to be analyzed regarding reading outcomes of the learners.

The sixth chapter summarizes the research study, provides the conclusion of the findings, highlights recommendations of the study, specifies limitations, and assigns suggestions and perspectives for further research study in the future. The references part comes after conclusion and follows by attached appendices of the instruments, copies of official letters of request and permissions from the Ministry of Education and Science of the Republic of Kazakhstan.

In this chapter, we primarily emphasize how our research survey and the consequence of national and international results can contribute the utilization and improvements of reading skills and literacy in the context of Kazakhstan. Specifically we believe expected results will take a scientific support and assist development of education quality in reading literacy among young learners in the respected languages.

The following chapter represents a brief review of the literature on our research.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1 Introduction

Reading skills are crucial components in the learning process that help learners to develop motivation and be proficient while studying school subjects or a foreign language. Reading is a complex cognitive process (Diaz et al., 2009; Hulme & Snowling 2013), where the performance of reading as a process is among essential issues. Researchers define (Coutinho, 2007; Flavell, 2004; Flavell & Hartman, 2004; Pishghadam & Khajavy, 2013) that reading activity is belonged to metacognitive awareness claiming that this factor in reading influences learning process much stronger. Reading skills are significantly important for the society, teaching and learning L1 and L2, crucial concept in a future career goal.

More than two decades in the applied linguistics and in the process of language learning a number of research works and studies examine various processes in the L1, L2 and/or EFL languages among children, adolescents, and adults. Improvements of learners' reading literacy level requires efforts and time, as well as well-developed scheme, appropriate instruction for reading strategy in teaching and learning processes. Organization for Economic Co-operation and Development (OECD) (2017), defines reading literacy as "an individual's capacity to understand, use, reflect on and engage with written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society" (p. 51).

This study focuses on assessing reading skills and examining the development of reading literacy among twelve- and fourteen-year-old students in Kazakhstan. A brief observation and investigation of researchers' viewpoints, principles, models, stages, and methods can help to reveal, and make efforts to define the clues of low results among young learners in reading literacy in the context of Kazakhstan.

#### 2.2 Reading literacy and skills

Reading is a very complicated decoding, cognitive (Meneghetti, Carretti & De Beni, 2006) activity with further interaction, comprehension and communication between the reader and the author of the script (Brantmeier, 2005; Grabe & Stoller, 2001). Reading is a core domain in any subject as "proficient reading comprehension is crucial for success in every academic domain" (Wigfield et al., 2016, p. 190). Researchers (Cunningham & Stanovich, 2001; Smith et al., 2000; Wigfield et al., 2016) identify that in later childhood and adolescents the reader has to be "fluent in decoding and recognizing words, continually expand their vocabulary and knowledge base, and learn to use elaborate cognitive strategies to make inferences and analyze text critically". However, National Assessment of Educational Progress (NAEP) observed a decline among 4th and 8th grade students in 2015. They investigated that the difficulties in reading comprehension of the children could be a reason of further decline of proficiency level in reading. This means that if the increase of illiteracy is observable it can cause lower reading comprehension, which later on prevents students in gaining academic achievements and career goals.

PISA pointes *reading* domain among the majors and represents it as "*reading literacy*". Reading literacy means "an individual's capacity to *understand*, *use*, *evaluate*, *reflect on and engage* with written texts, in order to achieve one's goals, to

develop one's knowledge and potential, and to participate in society" (OECD, 2018, p. 27). The word to "evaluate" means that students should have to assess a written text while reading. Thus, we may define that reading is a difficult cognitive process of decoding the written text and assessment of information, whereas literacy is an ability to interpret what the written symbols represent (Akhmetova et al., 2021a). "Achievement in reading literacy is not only a foundation for achievement in other subject areas within the education system, but also a prerequisite for successful participation in most areas of adult life (Cunningham & Stanovich, 1998; Smith et al., 2000)" (OECD, 2017). Hulme and Snowling (2013) describe learning to read as "a key objective of early education and difficulties in learning to read can have serious adverse consequences" (Hulme & Snowling 2013, p. 1).

Wigfield et al. (2016) claim that "Proficient reading comprehension is crucial for success in every academic domain". They also identify that in later childhood and adolescents a reader has to be "fluent in decoding and recognizing words, continually expand their vocabulary and knowledge base, and learn to use elaborate cognitive strategies to make inferences and analyze text critically" (p. 190).

Reading framework assessment of PIRLS identifies "Reading literacy is the ability to understand and use those written language forms required by society and/or valued by the individual. Readers can construct meaning from texts in a variety of forms. They read to learn, to participate in communities of readers in school and everyday life, and for enjoyment" (PIRLS-2021, 2019, p. 6). Pivotal aspect of "reading literacy" in PIRLS survey establishes to testify the instruction of the curricular standards in the certain educational programme as well as the foundation of academic prosperity among student's individual development.

Carver (2000) determines reading skills and reading as a global and active process of humans' development and defines them in his theory of input and storage where "the reading process was conceptually divided into two primary components, input and storage. The differences between being able to (i.e., input—the words in a sentence), and being able to comprehend or understand (i.e., store- the complete thought in the set of words which make up a sentence) (p. 3) have been taken into the very glance of Carver. For instance, Carver's book "The causes of high and low reading achievements" (2000), by name concentrates on some core factors that may influence students to read, such as what students can take from reading during the school year, and what the teachers are able and not able to do in order to increase students' rate and level of reading. Carver (2000) also confirms that the fusion of psychometrics and experimental psychology indicate the low and high reading achievements. Thus, one should say that reading literacy is the core development of the human being and a dependable part in education. Likewise, LaRusso et al., (2016) explain that beyond reading skills fluency and efficacy in the middle school to obtain a reasonable benefit and advantage at the end of reading process.

Learning to read mostly and primary depends on the literal awareness of the person to recognize the words, pronounce them correctly, and understand, able to explain, and interpret the meaning, carry out information and knowledge. Researchers and scholars offer various kinds of models and strategies while teaching to read and reading process. No doubt, most of them are very useful and helpful in order to build up a certain kind of framework for the reading acquisition, be familiar, and well informed with pseudo-words lexis while learning, and studying.

Reading plays a fundamental role in education and is significant in the development of general literacy. Reading enables us to make sense of a written text. A number of researchers claim that reading is a tool and a process that consists of

cognitive and perceptual parts (e.g., Grabe, 2009; Pourcin et al., 2016; Stanovich, 2000). Reading is an ability, which requires decoding written symbols from the reader, as well as understanding and reflecting on the meaning of the written symbols (Ehri, 2005; Perfetti, 2003). Thus, reading involves several complex stages, number of abilities, skills, components, and strategies, which are necessary for the comprehension and literacy development.

Previous research (Honchell & Schulz, 2012; Smith, 2011) has proposed several theories and models of the reading process. The main conclusion of the relevant studies is that there are several stages, positions and roles in reading activity, described by such terms as bottom-up and top-down reading, a mixture of bottom-up and top-down reading, constructivism and the transactional model. Reading is a dynamic cognitive process where models such as bottom-up reading (Craig, 2006; Gamboa-González, 2017; Honchell & Schulz, 2012), top-down reading (Smith, 2011) and metacognition (Carrell, 1991, 1998; Hassan, 2003) are distinguished. Some researchers define a combination of both bottom-up and top-down reading (known as cognitivism). The bottom-up model is noticed at the beginning of the reading process when a child is just starting to learn letters (in alphabetic languages), read the words in sentences, and then grasp the meaning involved. Top-down reading is a model in which the reader has already gained experience and knowledge and can use this to grasp the meaning of a text. Metacognitive theory considers how the reader thinks before, during and after the reading process.

The literature (see Craig, 2006; Hassan, 2003; Smith, 2011; Yang & Noel, 2006) describes reading as passing through several stages as "efferent" and "aesthetic" stances, where the former has an explanatory position and the latter deals with emotions. Reading is a communication between the reader and the writer/author, which is necessary to obtain information and meaning. Several researchers call this interaction process – transactional (Craig, 2006; Honchell & Schulz, 2012). The Transactional Reading Model (TRM) consists of syntax – word order, graphemes and phonemes – and pragmatics – i.e., the social and contextual level of the message or the information – that leads to semantics. These stages are crucial elements in reading process and are necessary for further literacy development. Another essential part of literacy development is an instructional process in which all these elements correspond to each other and maintain balance between themselves (Craig, 2006; Honchell & Schulz, 2012; Yang & Noel, 2006).

Diaz et al. (2009), denote reading process as "the most important cognitive milestones in the human social environment." (p. 441). Likewise, the researchers developed "Double-Route Cascaded (DRC) Model" which represents two reading strategies: lexical and sub-lexical. They confirm that this model could define reading process better and explain the problem. For this reason, Diaz et al. (2009) examined reading strategies of children in 3<sup>rd</sup> and 6<sup>th</sup> grades, who read well and with dyslexics. The findings later showed that children who read well could easily use lexical and sub-lexical strategies not gaining much effort, whereas the children with dyslexics were able to develop only lexical strategies, as it was very hard for them to use and change various tactics in reading. The main important advantages of DRC model is that it would a helpful technique of intervention for "Developmental Dyslexia" while teaching reading – denote Diaz et al. (2009).

Other researchers (Snowling, Gallagher, & Frith, 2003) reveal three stages in reading such as logographic where visual view of the words is defined; alphabetic – grapheme and phoneme rules are taken into account while the words are used; and orthographic where words are accepted as an independent concept. Ziegler and

Goswami (2005), depict three main skills in reading. The first is the "phonological processing" or phonological awareness is a certain kind of manipulating speech sounds into the words. The next is "letter-speech sound processing" – recognizing and match a letter to a certain kind of speech sound, and the last is "Rapid Automatized Naming (RAN)" which means the speed of reading, an automatic visual pronunciation, or call of the words into a sound. In Kazakhstan RAN or a speed limit of the children is checked and controlled at the beginning, and at the end of every period of children's studying only in primary school (from grades 1 to 4).

Ehri (2000; 2005), for example, defines four stages in her model such as prealphabetic, partial alphabetic, full alphabetic, and consolidates where the boundaries among phonological, morphological, and semantics have already formed. Share (2008), represents a "self-teaching" model where the recognition of words in reading directly depends on the phonological awareness of the words. Wolf (2008), represents five stages of reading development as a major factor of literacy from the very young age of the human being until the adulthood, beginning from 6 months. The first stage is called (1) "the emerging pre-reader" and has the duration of 6 months until 6 years old. The second stage starts from the age 6 and finishes at 7 and is named as (2) "the novice reader". Then comes the third stage as "the decoding reader" by name (from 7 till 9 years old). "The fluent, comprehending reader" comes next (among 9-15 years old), and finally ends up by "the expert reader" (16 years of age and older).

This model of dividing the stages of reading development let us come up to the conclusion that reading process is the life-long activity of person's achievements, intelligence, prosperity that makes him literate as "Becoming virtually automatic does not happen overnight and is not a characteristic of either a novice bird-watcher or a young novice reader. These circuits and pathways are created through hundreds or thousands of exposures to letters and words" (Wolf, 2008, p. 14).

Chall (2002), depicts six stages of reading developments that also as in Wolf's model starts from the 6 months till the adulthood and further proves that reading is the continues activity during the whole life of human being. Only one difference between Chall's and Wolf's models is that Chall's model is more detailed during the age of 9 till 13 (the third stage of her model but the fourth in number) as the reader between these ages is reading for knowing something new - "reading to learn".

Therefore, while representing just only few strategies and models of reading framework we would like to define that reading is a complex, cognitive process that requires thinking abilities from people. The ability to think, interpret ideas, give suggestions, or solve the problem are highly-developed levels of the human being but all these components are possible only if the person can read, and be literate. "Through literacy, children are able to construct meaning, to share ideas, to test them, and to articulate questions ... [and have] an active role in their own development" (Verhoeven & Snow, 2001, pp. 4-5).

In order to extent literacy development and proficiency in English as a foreign language, the reading process of young learners should be in mother tongue and in English. This could predict language development, and promote literacy, albeit a certain kind of "scaffolding" in reading instruction and reading intervention is the crucial factor of reading activity in general in the early stages of learning. "Literacy can be seen as dependent on instruction, with the corollary that quality of instruction is the key. This view emphasizes the developmental nature of literacy — the passage of children through successive stages of literacy, in each of which the reading and writing tasks change qualitatively and the role of the instructor has to change accordingly" (Chall, 1996 as referenced in Snow, 2006, p. 4).

#### 2.3 Individual differences of the learners in second language acquisition (SLA)

Individual differences in second language acquisition could be revealed in language aptitude and motivation (Dörnvei & Ryan, 2015). Although the fact, that bilingual people have an ability to obtain a proficient level in L2 "is not considered to be universal" (Dörnyei & Ryan, 2015, p. 5). These individual differences could be noticed in traits and conditions of the learners. In our current study, we focus on how these personal traits and states could be differentiated in 12- and 14-year-old Kazakh and Russian students while learning English as FL or L2. However, young learners cannot be proficient in L2 if the number of classes is limited and the required social communication is absent. Researchers assume and claim (e.g., Alderson, 2005; Johnstone, 2009; Nikolov, 2016) that early language learners could not be proficient in L2 as their language achievement frameworks are based on "developmental stages" (Nikolov, 2016, p. 7) and monitor how the learners pass from beginning level to intermediate. On the contrary, as mentioning before that the skills and abilities in L1 could be transferred to L2 (Cumming, 2013; Hirvela & Du, 2013; Koda, 2007; Nikolov & Csapó, 2010). How already developed skills in L1 could be transferred to L2, and what interference is supposed to prevent learners from developing language abilities and reading comprehension in L2, whether personal traits of the learners (Dörnyei & Ryan, 2015; Sparks, 2012) and the curriculum of FL learning are appropriate for the learners and significantly interacted in the classroom processes. This suggests that accountability assessment culture and the early language programs and curricular should and must be oriented on language and content of the knowledge for the learners. Learners' aptitude and the motivation are playing an important part in the success in L2 and in learning process in general, although in order to meet the requirements of the building framework a tasks for diagnosing the ability level in L2 should depend on the tasks that could be recognisable for learners. Thus, for young learners with a limited number of classes in L2 as in the context of Kazakhstan, they can define the words but cannot compose them into the sentences, they are able to define the letters and the words but cannot recognize the meaning in the sentence (Benigno & Jong, 2016 as referenced in Nikolov, 2016, p. 55; Nikolov & Csapó, 2018).

#### 2.4 Reading in mother tongue for young learners

Reading in mother tongue for young learners is vitally important and essential because through reading activity in mother tongue young learners obtain information, broaden knowledge, and increase literacy. Researchers underline that reading in mother tongue is crucial as "mother tongue promotion in the school helps develop not only the mother tongue but also children's abilities in the majority school language" (Cummins, 2003, pp. 62-63). While learning the second language or English as the foreign although mother tongue in the early years of schooling could be easily replaced as it is very "fragile".

Mother tongue and reading are in close connection because mother tongue is the natural tool of thought, communication of the group of people or inhabitants in a certain area (Ball, 2010). Mother tongue is the first language (L1) native or heritage language of the person. Researchers define that mother tongue is child's environment under which the verbal skills are constructed the language of the family (Cummins, 2000, 2009; Koda, 2007). UNESCO claims that teaching and learning should be in

mother tongue as this could be the best way to introduce literacy and be the better way for children to express and understand themselves freely without any doubts (UNESCO, 2008). Children learning in mother tongue have a better opportunity to understand the content than those where the teaching is in the second (L2) or in the foreign language (FL). As these could cause several problems with comprehension and understanding of the tasks and/or activities as well as could be an obstacle to achieve linguistic competence and master the content of the subject (Baker, 2003; Cummins, 2003, 2009). Education in mother tongue in the primary years offers the best introduction to literacy that eventually becomes useful in the acquisition of English as a second or a foreign language (Baker, 2003, 2007; Freeman, 2007). Reading in mother tongue for young learners is vitally important and essential because through this cognitive activity young learners develop phonemic awareness, letter knowledge, vocabulary, gain comprehension, obtain information, broaden knowledge, and increase literacy. Researchers claim that it is very crucial if parents read and discuss reading with their child in their mother tongue as this activity expands children's vocabulary lexis, better understanding, and comprehension of the text. In addition, children should have necessary reading resources and materials due to their reading levels, preferences, and interests. This could be a pathway for regular reading habit, which further increases and improves reading literacy.

Jim Cummins claims that mother tongue has a significant role in children's overall general development and language skills in L2 in particular. The term "common underlying proficiency" (Cummins, 2000) refers to cognitive academic proficiency underlying performance in both languages and the interdependence hypothesis states that proficiency transfers from one language to the other. This means that linguistic, metalinguistic, literacy knowledge and skills students have learned in their mother tongue or in L1 will bear on the learning of academic knowledge and skills in L2 or the second language for example, knowledge of how to approach a text and background knowledge of the world (Cummins, 2000). Therefore, children who speak more than one language are more flexible in their thinking process, because they have a deep understanding of how to apply different language effectively. Moreover, parents' should positively support their children's learning a new L2 language or a foreign language – i.e., EFL, because it further increases and causes their motivation.

Likewise, teachers should assess students' reading abilities and skills to change teaching methods regarding their results and outcomes as reading is not an instrument of learning but is a goal and a required means for learning. School administration, stakeholders, and the staffs should develop culture of reading while developing libraries, adopt digital technologies and improve learning environment as well as to create supplementary reading materials and facilitate reading process. Reading plays a crucial role in the development of academic and intellectual processes of human beings and should be properly learned and taught at the age of lower secondary school (e.g., Zimmerman, 2000a, 2000b; Zwiers, 2010). There is no doubt that solid foundation in mother tongue develops child's literacy while learning a foreign language (i.e. the learning a new language will be much easier).

#### 2.5 Reading in English as a foreign among bilingual and monolingual children

Bilingual and monolingual young learners while learning English as a foreign language may face problems with phonological awareness, sentence construction and

reading comprehension, as they experience limited communication in English and relatively little time for instruction (Cline & Shamsi, 2000; Singleton & Vincent, 2004). Researchers assume (Singleton & Vincent, 2004, p. 114) those students, who do not have a good "standard of English" and/or less experience at the word level, may be dyslexic and face serious problems with literacy. In order to solve the problem and assess reading literacy among bilingual and monolingual children in English, the tests should be "culture-free". Moreover, translating English language tests into the students' native language (Cline & Shamsi, 2000; Stanovich, 2000) should be out of the question, as those tests may not be appropriate to the context of the respondents. Consequently, the tests should be carefully prepared for a certain age group, take into account the context and the level of language preparation, which require time and effort from teachers, students and other stakeholders.

According to school teachers' observation and reports of PISA (see e.g., OECD, 2017, 2019a, 2019b), in Kazakhstan bilingual and monolingual students show poor reading skills in English in the middle school. These difficulties in English reading skills might be associated with several factors. For instance, PISA reports (OECD, 2017, 2019a; 2019b) specify socio-economic status (SES) and parents' level of education, which predict student achievement. However, 16% of students from modest – income families in Kazakhstan perform at the top level in reading literacy, "indicating that disadvantage is not destiny" (OECD, PISA 2018, 2019a, p. 4; Seidenberg, 2013, p. 334). Another issue could be the poverty of the students in rural areas with a weak Internet connection in the schools, as well as the scarcity of books in English in the schools' libraries. Moreover, the PISA results showed that students' reading attitude dropped significantly where only 24% of boys and 44% of girls said that reading was their hobby (OECD, 2019a, p. 32). Kazakhstan was among the countries where reading for pleasure was declining and where differences between boys and girls were statistically significant (OECD, 2019a, pp. 31–32).

Learning new languages on an unconscious level is much easier for children than for the adults who learn the new language on conscious level. "...you did not have to translate when you were small. If you were able to learn your own language without translation, you should be able to learn a foreign language in the same way" (Stern, 1970, pp. 57-58). However, according to the ideas of Jean Piaget –formal operational approach starts from the age of 12 till adulthood. This is a final stage of Piaget's cognitive theory of development, which indicates that children at the age of 12 start to think abstractly and such abilities as logical thought, deductive reasoning, and systematic planning occur and emerge during formal operation. Thus, English proficiency reading skills among young learners are under great interest to examine.

The next factor deals with the nature of the languages among the bilingual and monolingual students in Kazakhstan. Kazakh and Russian both have a shallow or transparent orthography, which is characterized by a one-to-one correspondence between graphemes and phonemes — as opposed to a deep or opaque orthography, e.g., that of English and French, where this correspondence is far less clear-cut. Researchers assume (Hanley et al., 2004; Seidenberg, 2013, pp. 337–338) that children who speak languages with a shallow orthography start to read and pronounce words correctly earlier than those who grow up with English as their native language. In shallow-orthography languages, comprehension comes later, whereas in deeporthography languages meaning comes first and then appropriate pronunciation. Other studies (Everatt et al., 2004; Perfetti & Liu, 2005) indicate the deficit of phonological awareness, which could cause difficulty in literacy skills in non–transparent–orthography languages.

## 2.6 Factors affecting students' reading achievements in mother tongue and in EFL

In reading foreign language, a motivation is a key component as it closely connects to the reading skills. Ríos & Valcárcel (2005) claim that while learning a foreign language the teacher has to know what the students' interest are in order to get enough input to young language learners. Protacio (2012) differentiates five factors influencing and plays an important role of motivation in English reading process as a foreign. The first one is a social cultural environment which means how the society and culture influence young language learners (parents' reading motivation, interaction with friends promote reading motivation). The second one is an integrative orientation – English Learners (ELs) use reading as a way to form bonds with their American, England, Canadian peers and learn more about their new culture (immigrants, foreign friends can talk to their peers, affiliate to them). Protacio (2012) says, "Reading can be a way for ELs to learn more about their new environment and allow themselves to be more familiar with American culture". The third one is an instrumental in this phase vocabulary, general knowledge, word buildings integrate via reading in English by language learners. The fourth is the perceptive competence (perception of students' English abilities) and the fifths is reading materials. The researcher suggests that the teacher and parents have to know their child's choices and interests through the way of communication.

Thus, Bowen and Marks (1994, p. 45) suggested seven strategies of reading while learning English as a foreign. The first is the sensitizing stage where the aim is to provide the reader with unfamiliar words, new structures, complex, or obscure sentences. The second is inferring which means to define the meaning of unknown elements with the use of syntactic, logical, and cultural clues. The third stage names prediction that implies confirmation of expectations accompanied the reading with the images, pictures, charts, etc. Skimming and scanning are the fourth and the fifth stages. Skimming means getting general idea of the text and scanning focuses on the specific information. Extensive reading (reading for your own pleasure without understanding every word) is the sixth stage, and intensive reading the act of reading short texts, pointing out some specific information) refers to the last stage. The order and the sequence of each stage depend on individual differences of the reader and can vary due to proficiency level.

Interestingly, Vygotsky's theory Zone of Proximal Development (ZPD) points that children should value this proficiency level or input their surroundings for instance, parents, friends, peers, etc. In addition, Vygotsky's ZPD has mentioned another aspect referring to the thinking process in reading where the student is readily prepared to solve some cognitive process but requires support and social interaction for further development. Thus, teacher, parents, peers, or other stakeholders are able to provide support or "scaffolding" to the students in order to evolve understanding and development of complex skills and knowledge in a certain domain. Collaborative learning, discourse, modeling, and scaffolding are strategies for supporting the intellectual knowledge and skills of learners and facilitating intentional learning.

#### 2.7 Attitude towards reading

Attitude towards reading mainly depends on learners' psychological state of mind and emotions (McKenna, 2001; Smith & Li, 2020). Attitude is defined as the

"predispositions to respond in a consistently favorable or unfavorable manner with respect to a given object" (Cunningham, 2008, p. 20). A learner's attitude can change due to environmental influence, conditions, interests and peers' motivation and influence, or the way the person currently feels. The "object" in the definition can be a thing, process or behavior, which has a direct or indirect effect on attitude with respect to a learner's personal experience and belief towards the object and the norms for this object in society (McKenna et al. 2012, p. 284). Reading attitude is an affective domain (Kush, Watkins, & Brookhart, 2005; Smith, 2011; Yamashita, 2004, 2013), which includes feeling, thought, belief and intention (McKenna et al., 2012; Yamashita, 2004, 2013). These constituents make up the basic construction of meaning.

No doubt regular reading activity can positively influence reading attitude and motivation, and a positive attitude towards reading supports reading achievement in the future (Ellis, 2005; Grabe, 2009; Yamashita, 2013). Researchers (McKenna & Kear, 1990; Smith, 2011; Stanovich, 2000) have shown that primary school learners show a positive attitude towards recreational and academic types of reading. Although when the students move to middle school, their attitude to reading becomes less positive and drops up significantly. Therefore, a teacher's instruction and skillful scaffolding in the classroom context, parents', and peers' motivation in reading in and outside of school should be underpinned, albeit this takes great effort and cooperation on the part of teachers, parents and other stakeholders.

In general, most research studies (Kush, Watkins, & Brookhart, 2005; McKenna, 2001; McKenna et al., 1995, 2012) confirm that girls usually have a positive attitude towards reading and achieve better results in reading than boys. International survey assessments, such as PISA and PIRLS, report that girls prefer to read more frequently outside of school than boys, which may be tied to the higher positive rate in reading attitude among girls, whereas boys' negative attitude towards reading is thought to increase in middle school and becomes clear in the upper grades.

#### 2.7.1 The impact of attitude on achievement

There are many discussions as to whether reading attitude affects reading achievement or whether it is mostly the other way round. Researchers (Cunningham, 2008; Kush, Watkins, & Brookhart, 2005; McKenna, 2001; McKenna & Kear, 1990) have demonstrated that the affective domain – i.e. attitude – could affect reading attainment positively if reading activity is well developed. However, poor reading skills and constant failures in reading achievement could negatively influence learners' attitude towards reading activity. Hence, this negative feeling could increase negative attitude in reading as the learner grows older (Kush, Watkins, & Brookhart, 2005; McKenna, 2001; McKenna & Kear, 1990). Although some researchers (Csapó & Nikolov, 2009; Nikolov & Csapó, 2010, 2018; Smith, 2011; Wigfield, Gladstone, & Turci, 2016) state that reading for pleasure and enjoyment can develop a positive attitude in reading, this only applies in an effective classroom context with appropriate instruction.

Some researchers (Ellis, 2005; Kush, Watkins, & Brookhart, 2005; Schatz & Krashen, 2006) assume that if the relationship between reading attitude and reading achievement is moderate and/or weak, this is not because of students' negative feeling towards reading, but because of a lack of practice and poor abilities in reading, which cause difficulties in achievement. However, other researchers (McKenna et al., 2012; Mullis & Martin, 2019, 2021) claim that a positive attitude in reading could affect

high achievement in reading. While yet other researchers (Graham, Berninger, & Abbott, 2012; Smith, 2011) maintain that reading attitude is primarily influenced by reading achievement. Hence, reading attitude and reading achievement could impact each other in the reading process.

Although Stanovich (2000) assumed that attitude and reading achievement, have double effect and influence each other, which could foster further learner's individual experience in reading process and/or extensive reading. It is obvious that regular reading activity provides proficiency level of the learner in the reading process, increase literacy, gain knowledge, and achievement in language and a certain field as not all poor performers have negative attitude in reading. Most of these poor performers are suffering from several factors such as essential classroom instruction, book accessibility, free choice of the books in order to increase intrinsic motivation from the children, etc (e.g., Day & Bamford, 2002; McKenna, 2001; Yamashita, 2004, 2013). The teacher should determine and put careful attention on individual differences of the learners as one of the essential factors, which could positively influence reading achievements and relate to further perspectives and success in reading.

#### 2.8 Reading strategies and abilities of bilingual and monolingual

As reading is a cognitive "unidirectional process" (Gough, 1972 as cited in Kong, 2006) depicting meaning through the letters to the comprehension, which involves several psycholinguistic functions as well. This complex process requires from the reader to utilize new information from the text regarding his or her background knowledge, language proficiency, linguistic features, vocabulary, semantic, and syntactic structures (Alsheikh & Mokhtari, 2011; Goodman, 2014; Lau & Chan, 2003). As during this cognitive, thinking process, a skillful reader implements a number of metacognitive reading strategies necessary for successful reading comprehension. Researchers determine (Alderson, 2005; Carrell, 1998) that these metacognitive reading strategies are usually being used both in the native language and in the second or the foreign language reading and are being contributed and supported reading comprehension in L1, L2 or EFL. Although some researchers (Kong, 2006; Parry, 1996; Zhang, 2001) claim that, different language scripts need different reading strategies regarding their writing systems and "literacy experiences" (Parry, 1996, p. 665).

Many researches towards reading domain refer reading process to the cognitive interaction of the "reader, the text, and the context" (Sheorey & Mokhtari, 2001). Sheorey and Mokhtari claim that later on, in order to understand the meaning of the text usefully, the reader has to "utilize metacognitive knowledge and must invoke conscious and deliberate strategies" (Mokhtari & Sheorey, 2002, p. 3). They also claim that the "metacognitive knowledge" of the reader has a number of reading strategies that affect the cognitive process of reading (Sheorey & Mokhtari, 2001).

Reading strategies play significant role in performing the tasks and define one of the main parts for students' better comprehension. Researchers define that reading strategies are among the substantial components of the text comprehension and the adequate knowledge recognition necessary for successful "interpretation of the meanings communicated in the text" (Van Gelderen et al., 2004, p. 19). Ríos & Valcárcel (2005) determined "Reading strategies are associated with different aspects

of language learning and cognitive processes, and the effects can only be observed if reading becomes a habit." in the way of learning English language.

The improvement of learners' reading skills requires the implementation of effective reading strategies in the learning process therefore, it is necessary to know and define what reading strategies the reader uses and how he or she applies them during the reading process (Sheorey & Mokhtari, 2001). Many researches towards reading domain refer reading process to the cognitive interaction of the "reader, the text, and the context" (Sheorey & Mokhtari, 2001). Sheorey and Mokhtari claim that later on, in order to understand the meaning of the text usefully, the reader has to "utilize metavognitive knowledge and must invoke conscious and deliberate strategies" (Sheorey & Mokhtari, 2001). They also claim that the "metacognitive knowledge" of the reader has a number of reading strategies that affect the cognitive process of reading (Sheorey & Mokhtari, 2001).

Reading strategies play significant role in performing the tasks and define one of the main parts for students' better comprehension. Researchers define that reading strategies are among the substantial components of the text comprehension and the adequate knowledge recognition necessary for successful "interpretation of the meanings communicated in the text" (Van Gelderen et al., 2004, p. 19). The improvement of learners' reading skills requires the implementation of effective reading strategies in the learning process therefore, it is necessary to know and define what reading strategies the reader uses and how he or she applies them during the reading process (Sheorey & Mokhtari, 2001). Researchers and educators determine that strategies are the "intentions of the reader", "skills under consideration" used as the "tools" (Afflerbach, Pearson, & Paris, 2008, p. 366; Paris, Wasik, & Turner, 1991, p. 611 as sited in Carrell, 1998, pp. 1-2) to compose the ways towards achievement of the goal. Reading strategies are certain tactics that readers use while performing the tasks in reading. It is claimed that skillful readers apply more sophisticated strategies than less skilled. Although in the process of reading, strategies are widely used both by skilled and unskilled readers. However, the variability, appropriateness, and the frequency of the strategies depend on several factors such as background knowledge, experience, skills and the usefulness of teaching instruction.

Lien (2016), points out that influence of several factors "such as cognitive, sociocultural, language aptitude, age, and affective factors" (p. 125) can prevent on achievements of foreign language learning and the learning process in itself. Concluding that low anxiety in reading predicts a better performance in learning foreign language and high anxiety derives low output in learning EFL. She also adds "...metacognitive reading awareness and strategy instruction are vital to achieve effective EFL learning and to reduce the anxiety of EFL readers" (p. 132).

To support Lien's observation of learning a foreign language Anderson (2003), denotes that according to "strong metacognitive skills empower second language learners" (p. 21) and presents five components of metacognition for effective reading such as (1) preparing and planning; (2) using particular reading strategies; (3) monitoring strategy use; (4) orchestrating various strategies (5) evaluating various strategies. He also explains that the revealed components cannot be used separately and one after another as all the mastery is definitely depends on the teacher (as he instructs), at first, and the learners as well. The appearance of several metacognitive features can be revealed at once or further the idea suggested Anderson that the strategies of metacognition should be in the active circulation as "This empowerment not only improves learning but also transfers to other aspects of the students' lives" (p. 22).

August et al. (2018), explore two ways of instructions while examining Spanish students of the second grade learning English as a foreign. In order to increase vocabulary in English language (EL) among young learners they offer four types of words (concrete cognate, concrete non-cognate, abstract cognate, and abstract non-cognate) were pronounced and checked separately using "embedded and extended instructions". Finally, findings showed that extended instructions build up better preparation and opportunity in "vocabulary acquisition" then the embedded instructions.

Another findings represented (Bellocchi, Tobia, & Bonifacci, 2017) longitudinal study on a transparent language while conducting an experience of reading abilities and comprehension among children of bilingual and monolingual language background. In the role of the transparent language was an Italian language as a foreign one (L2) for the children studying L2 at school. Both monolingual children (Italian), and bilingual (here the researchers explained that because of high immigration rate such nationalities as Albanian, Russian, Serbo-Croat, Spanish, Swedish, Finnish, Romanian, Urdu, Moroccan, and Sudanese) should have to do the test referred to reading achievements of decoding and comprehension skills in Italian. All children were doing the same test in Italian language (1 and 2 grades students), in conclusion the results showed that bilingual learners morphosyntactic comprehension would be the most crucial predictor for developing reading comprehension skills. Monolingual children performed better than bilingual did but the findings suppose that after 2 years of studying L2 the achievements of monolingual and bilingual learners can be the same as the decoding and comprehension skills are aligned (Bellocchi, Tobia, & Bonifacci, 2017).

In addition to the proficient reading in English as a foreign some researchers suggest to pay attention to the instructional point and early intervention as these components will be significant factor in developing and promoting further reading skills and comprehension. For instance, Grimm, Solari, and Gerber (2018) denote that early intervention and instruction is necessary in the middle school, as their findings have revealed that the development of English language is not promoting and stays at the same positions when the students go to the eighth grade (Spanish minority students were investigated in California while learning English as L2). Moreover, they also suggest that early studying of vocabulary skills in English and Spanish (mother tongue) only positively affect to the development of English language.

#### 2.9 Motivation in reading comprehension

As motivation can be among central issues of reading comprehension Snow (2002) claims that in order to understand the improvements in reading comprehension a research agenda should be developed where a number of "most-pressing issues" are shown. Of course the issues of reading comprehension should be engaged and be in a tight relationship with motivation as Verhoeven and Snow (2001), think and consider that literacy, thinking, and motivation are very closely connected to each other and cannot be observed separately. They depict that the crucial role in reading comprehension and literacy play talented teachers who help to motivate and engage children to read books in order to be literate as via literacy a child is able to think, shares ideas, constructs and builds up questions, argue and presents his or her own points of view, and interact with the society. Verhoeven and Snow (2001) claim that library is playing a significant role in the process of reading literacy and the support in

reading development. For example, in the USA, the organizations like *Reach Out and Read* (ROR), *Reading Is Fundamental* (RIF) motivate people into the reading process – they give books to children to read for free as well as prescribe a list of the books, the parents have to read.

Researchers (Grellet, 1981; McLaughlin, 2012) confirm that motivation plays an important role in reading comprehension because engaged readers pursue to find new or specific information as mostly they have an intrinsic motivation for the material they are interested in and would like to share and talk this knowledge with their peers because mostly those readers read for pleasure. In addition, the literature also defines that while people are reading they usually make predictions, which they further check and/or accept.

Guthrie et al. (2007), think that if the person is not aware with the text he cannot understand it by chance therefore, a constructive explanation is important in the process of reading activity as students have to understand the meaning during the reading process as "... reading motivation relates to reading comprehension growth" (p. 283). They also devote reading motivation to the man's goals and beliefs has a great impact on the person's performance, communication, and understanding of the text which can be revealed as the feature of correlation of motivation and cognitive processes in the comprehension. Wigfield (2004), suggests the domain-specific approach to reading where he explains several features and factors influencing the process of reading and divides reading motivation into several aspects such as (1) competence and efficacy beliefs; (2) achievements, values, and goals; (3) social aspects of reading. Wigfield claims that the research of reading and motivation should be examined in relation with cognitive skills as an achievement of child's literacy directly depends on the frequency and performance of the reading process. Likewise, this depicts that instruction, and clear explanation of necessity to read should be among main indicators of motivational reading.

#### 2.9.1 Motivation as a key component to learn English

English proficiency reading skills among young language learners is a widely used language in the world, because as English is an international people knowing and speaking in English language as a foreign will provide an opportunity to interact with foreigners under the basis of their reading literacy. In addition, Ríos and Valcárcel (2005) define that while learning a foreign language the teacher has to know what the students' interest are in order to get enough input of young language learners. For instance, Protacio (2012) differentiates five motivational factors influencing in English reading process as a foreign language.

First, social cultural environment (surrounding and society) influences person's ability to learn and know more. Second, integrative orientation, which means the way of making friend with foreign peers, while learning a new language or integrating into a new culture, affect significantly on motivation. Third, an instrumental motivation, when the learners realize the importance of reading as they start to understand that reading will provide them the information of learning. The forth is perceptive competence which is related to students' abilities to motivate them to read in English. The fifth is reading materials not only teachers but also the parents themselves have to be interested in what their child is reading or has read as this creates interest that is also pays an important part in motivation of reading literacy.

Another interesting finding towards motivation and learning English as the foreign language Kiss and Nikolov (2005) revealed that 12-year-old learners'

performances on aptitude, and proficiency tests in English from ten schools. In three schools, the results of aptitude scores were a little bit higher and sometimes equal, whereas in another schools, the proficiency results were higher. They concluded that this tendency was because of the quality of teaching, teaching process as well as lower motivational level to learn English, and even negative influence of the parents (educational level) could cause this problem (Kiss & Nikolov, 2005). Moreover, they examined children's relationship between motivation, aptitude test and the test of proficiency and there they discovered that the motivation scores were the highest among proficiency and aptitude tests thus, they came to the conclusion that this is also proved that the way of teaching (less quality) or the process in itself should prevent children be proficient in English. Further, the scholars would like to explore whether the length and time of foreign language learning play a significant role for children in performing English language tests as a L2/FL or not. Thus, we may suppose that this crucial point in learning the language as a "raw" material should be in motivation and embedded in active teaching process in order to engage young learners to be proficient.

#### 2.10 Reading habits

Reading as one of the best ways of gaining the knowledge and effective process of leaning requires constant study and experience. This "intellectual action" (Fisher, 2001) should be formed by the habit or reading habit, which is necessary to develop from the early school age and practice further in the later age. The basis for reading habits could start from the opportunity to reading books and the abilities to learn world through reading. Reading habits and the love to reading increase reading literacy, regular reading activity has a great impact on people's general knowledge such as vocabulary, speaking and communicative skills (Cain & Oakhill, 2011; Schatz & Krashen, 2006). The development of reading skills among young language learners in mother tongue and English as a foreign language can operate in both directions (e.g. Bialystok, 2002; Koda, 2007, 2012; Verhoeven, 2007) because the learners' previously acquired resources accelerate mastering new skills.

Researchers highlight that if the reading habit is formed "since childhood" and practices further then it successfully facilitates and benefits "studying skills" in academic achievements (Issa et al., 2012, p. 471). This is because "Reading strategies are associated with different aspects of language learning and cognitive processes, and the effects can only be observed if reading becomes a habit." (Ríos & Valcárcel, 2005). Therefore, from the young age in childhood, it is sufficiently important not to lose the opportunity to read for pleasure and make this kind of activity a hobby as this could be a solid baseline for literacy development and a source of knowledge. Regarding Zwiers (2010, p. 4) is convinced that reading habits refer to the "automatic and unconscious" activities which are required to comprehend the text material. He compares reading habits with reading strategies and highlighted several reading habits concerning strategies for quick and clear comprehension of the text material. In addition, Zwiers (2010) claims that reading habits are based on the level of welldeveloped reading literacy which is related to the parents' level of literacy, "easy access to books, good teachers" (p. 3) for further automatic reading proficiency habits. Literature determines that girls read more than the boys (OECD, 2017), however, certain evidences showed that gender difference is related to reading materials where girls mostly read emotional books and boys prefer adventure and science fiction to academics (Zwiers, 2008, 2010).

#### 2.11 Reading assessment frameworks

Pourcin et al. (2016) assume that "both oral comprehension skills and word-level reading skills are required. The process of comprehension is largely amodal: that is, it is similar regardless of mode of presentation (written or oral)" (p. 24). This means that reading literacy requires not only reading skills in the written form, but also listening skills, as the person obtains or al information through communication while interacting with society and/or digital online resources, such as TV, Internet and mobile phones. Thus, decoding, understanding, applying, evaluating, and interacting are the main features in the reading assessment framework. In later childhood, readers need to be "fluent in decoding and recognizing words, continually expand their vocabulary and knowledge base, and learn to use elaborate cognitive strategies to make inferences and analyze text critically" (Wigfield, Gladstone, & Turci, 2016, p. 190). Furthermore, Wigfield et al. (2016) consider reading literacy as vitally important in all areas of life, since being proficient in reading leads to success in life. This has also been confirmed by Hulme and Snowling (2013), who assert that "learning to read is a key objective of early education and difficulties in learning to read can have serious adverse consequences" (p. 1). Consequently, delays in reading development reduce literacy and may cause obstacles for student achievement, ways of thinking and/or problem – solving. Hence, regular monitoring and appropriate assessment frameworks are necessary to develop reading skills and literacy.

Thus, numerous frameworks have been widely implemented in the assessment process since 2000, in PISA surveys. Reading in PISA 2018 (OECD, 2019) mainly focuses on reading skills and literacy levels among 15-year-old students and is referred to as "global competency", where challenges in learning outcomes are "attainable" for children even from low SES. PISA 2018 defined reading literacy as "understanding, using, evaluating, reflecting on, and engaging with texts in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society" (OECD, 2019a, p. 34). However, between 2009 and 2015, reading as a cognitive process was defined as an "aspect", but the "aspect" was changed to a "cognitive process" in 2018 (OECD, 2019a).

The National Assessment of Educational Progress (NAEP), another reading framework, defines a reading framework as an "active and complex process", where students need to "understand the written text, develop and interpret the meaning, and use the meaning appropriate to the purpose and situation" (Wixson et al., 2013, p. 101). The NAEP reading assessment framework describes several aspects for assessing the reading domain. The first evaluates reading comprehension (with learners answering the question after they read the text in English). The second measures the meaning, so the text and passages will not be read aloud to the students. The third is formed under the "Governing Board policy", which indicates that primary attention should be paid to students' achievement and not to supporting "a particular pedagogical approach" (Wixson et al., 2013, p. 100).

The International Association for the Evaluation of Educational Achievement (IEA) launched the Progress in International Reading Literacy Study (PIRLS) survey in 2001, which examines the reading framework in the description of the curricular standards of a participating country and the instruction methods. Participants of

PIRLS are fourth graders, and comprehension of the written text is evaluated in terms of the "purposes [of reading] – literary and informational – by four comprehension strategies (retrieval, inferencing, integrating and evaluation)" (Mullis, 2019, p. 1). A pivotal aspect of the PIRLS survey brings into focus the term "reading literacy", as well as the foundation of students' individual development and academic success, which validate the instruction, curriculum, and standards of the educational program. The framework concentrates on identifying and exploring three dimensions in reading literacy: "processes of comprehension, purposes of reading and reading behaviors and attitudes" (Mullis & Martin, 2021, p. 2).

A more complex reading framework was devised for diagnostic assessments in the first six grades of primary school (Csapó & Csépe, 2012). It aims to evaluate the development of reading skills in three dimensions (psychological, application and content). Pivotal attention is paid to the psychological aspect, albeit application and content are significantly linked to the former. The main idea of the diagnostic reading framework is to explore ability and apply knowledge outside of school as "cultivation of the intellect and the fostering of thinking skills" (Csapó et al., 2012, p. 193). This framework recommends teachers monitor and facilitate students' development, especially in some often-neglected cognitive processes, while an online assessment system (i.e., the eDia, see Csapó & Molnár, 2019) supports them in carrying this out in their daily teaching practice. Thus, several research reports have drawn conclusions and provided recommendations for further development on reading assessment in terms of a number of reading skills and abilities.

Other approaches, such as the Elementary Reading Attitude Survey (ERAS), also consider affective issues and assess reading attitudes among primary pupils towards recreational and academic reading. A survey conducted by McKenna and Kear (1990) is essential for teachers, parents, school librarians and the learners themselves as it provides information on students' preferences, opinions and beliefs as regards the reading process, types of reading and reading activities. The earlier teachers, parents and other stakeholders know about those student preferences, the more appropriate intervention for planning reading instruction can be applied to facilitate reading process.

National Literacy Trust Survey (NLTS) reports an assessment of children and young people's reading habits, and preferences in primary and secondary schools in the United Kingdom. The results, published in 2005, established that reading for pleasure facilitates reading habits. However, reading enjoyment tends to decrease among young learners. The report concludes that teachers, parents, literacy researchers and other stakeholders should create a reading process culture in school to encourage all children to become enthusiastic readers, as well as to provide support for reading preferences, habits and processes in the classroom and outside of school (Clark & Foster, 2005, p. 93).

The National Reading Research Centre (NRRC) at the University of Maryland and University of Georgia (Alvermann & Guthrie, 1993) focuses on four main programs of instruction, learning, assessment, and professional development. These programs aim to improve literacy in secondary schools in the US and are committed to creating curricula beneficial for both teachers and researchers. All these projects include several aspects and concepts in the reading domain. Reading instruction distinguishes "literature and early reading, comprehension and cognitive strategies, knowledge – rich context, and social contexts of literacy instruction" (Alvermann & Guthrie, 1993, p. 129). Learning has three directions as "emergent literacy and language development, motivation for reading, and learning subject matter from text"

(Alvermann & Guthrie, 1993, p. 130). Assessment attempts to answer two main questions: (1) How do "traditional standardized reading tests and performance-based reading assessments" compare? (2) How do "performance-based reading assessments" influence the "instruction and learning of children" that have trouble in reading? Professional development is combining instruction, learning, and assessment "in literacy-related activities must engage teachers as well as learners" (Alvermann & Guthrie, 1993). Therefore, this reading framework assesses both teachers and students to create instructional programs for future success in the reading process combining cultural, cognitive, social, motivational, and affective factors to effect significant changes in reading instruction in the classroom context.

#### 2.12 Reading and writing

Reading and writing are two dynamic phenomena where critical thinking is the main element. Gebhard et al. (2013) define reading and writing relationship as the complex possess of person's individual perception, thinking ability, and community. Some researchers determine that reading and writing have "dual-identity" (Ehri, 2000; Perfetti, 2007). Furthermore, researchers declare (Hayes 2000, 2012; Hayes, Waterman & Robinson, 1977) that reading and writing are cognitive mechanisms because during these processes – a "map" appears from speech to script and/or from script to speech. Although some scholars assume that reading and writing skills are "two sides of the same coin" (Ehri, 2000; Perfetti, 2003) because these processes need comprehension while decoding (reading) and encoding (writing) the information. Another important issue of reading and writing is their relationship and interaction that play one of the significant roles in the process of language learning. However, researchers claim (Cumming, 2013; Hirvela & Du, 2013; Koda, 2007; Nikolov & Csapó, 2010) that this interaction is possible if a person has a certain proficient level in the heritage language. Thus, while transferring these skills from mother tongue or native language (L1) to the target language (L2) or a foreign language the learner's language level should be well-developed. Jim Cummins (2002) called this process a "threshold hypothesis", as the learner has already achieved "the level of competence" in L1 and has less "threshold" in L2.

Literacy in reading and writing is extremely essential for the society and the people's abilities to read, write, understand, apply, cooperate, or interact the written information. For example, Chall (1996 as referenced in Snow, 2006, p. 4) claims that literacy is sustained by the quality of instruction, which is pivotal for successful progress in reading and writing. Kramsch (2020) determines "literacy" as the core of communication where reading and writing, comprehension and practice, culture, language and society, competence and individual differences are in close interrelation and connection. Universal Grammar of Reading (Perfetti & Liu, 2005) defines reading as a "linkage" between language and the writing system. Besides, writing system depends on the language, which firstly being discovered through the spoken and/or the sound element (phoneme, morpheme), and then, encoded in the written form. In this period, an early intervention and instruction for further development of reading and writing skills are required. This intervention should be in mother tongue as researchers (Grimm, Solari, & Gerber, 2018; Wolf, 2008) assume that development of reading and writing components starts at the age of nine and is expected to be completed by the age of fifteen.

Assessment of reading and writing skills is among main approaches and the core issues to determine the level of knowledge, language lexicon, and literacy in general. Chomsky in Universal Grammar (UG) divides the lexicon in lexical and functional categories, where the former has the "content" words, and the latter – "grammatical" (as cited in Mitchell & Myles, 2004, p. 54). These categories, as "content of words", and "grammatical structure" should be well developed in L1 of the learner, so they could contribute to the outcomes in L2 (see e.g., Courtney et al., 2017; Sparks, 2012). In the assessing process the knowledge and the level of reading and writing skills can be noticed in learning L1 language and then further in L2, where the achievements of L1 has a key component in the development of L2. The theory in testing and evaluating reading and writing skills in language learning assumed to be frequently implemented and focused contextually in several studies (Carreira, Ozaki, & Maeda, 2013; Nikolov & Csapó, 2010; Wu, 2003).

Testing process is actually showing the effect of implementing the models in education program where several factors, such as, knowledge of the content, language, classroom climate, teacher's role, examinees' individual differences can affect the outcomes. These factors could be permanent and affect the achievements of young learners in reading and/or writing in L1 and L2, where vocabulary and the knowledge of words are essential. Moreover, researchers claim (Mullis et al., 2007; Netten, Droop, & Verhoeven, 2010; Verhoeven, 2000) that second language learners may have several difficulties in reading literacy skills while learning the language because of school instruction. Likewise, inappropriate instruction issue in the school can affect reading comprehension in the second language, such as English, which is not considered a home language for the learners. Thus, learner's individual differences in learning L1, L2, and/or EFL and while teaching or assessing reading and writing skills should be taken into account and investigated further in detail.

#### 2.13 Assessment of young learners' reading skills

Mundrake (2000) defines assessment as "... the term currently used to describe all aspects of evaluation and testing" (p. 45). Bachman (2004) notes that assessment "...has come to be used so widely in many different ways in the field of language testing and educational measurement that there seems to be no consensus on what precisely it means" (p. 6). Ghaicha (2016) admits that assessment is in close connection with such terms as evaluation, measurement, and testing as they are "used to gather information on student learning" (p. 212). Hence, "assessment" can have a changeable role from evaluation, measurement, and testing to information of learning process. Regarding to Castleberry et al. (2016) "Assessments used for learning are termed "formative", while assessments of learning are termed "summative" (p. 1). Castleberry et al. (2016) also mentioned that the right development of summative assessment could increase the abilities and works of instructors, students and the whole process in itself.

García et al. (2014), identify that if teaching and learning have acquiring competences the assessment must determine. According to their understanding, teaching learning and assessment have a strong relationship because assessment influences to what is being learned and taught. Linn & Miller (2005), assume that assessment is "the systematic and ongoing process of gathering, analyzing, and using information from multiple sources to draw inferences about the characteristics of students, programs, or an institution for the purpose of making informed decisions to

improve the learning process". McTighe & O'Connor (2005), confirm that assessments and grading system "have the potential not only to measure and report learning but also to promote it". Well-organized assessment is just like "...successful athletic coaches, the best teachers recognize the importance of ongoing assessments and continual adjustments on the part of both teacher and student as the means to achieve maximum performance" (McTighe & O'Connor, 2005, p. 11). They differentiate three types of assessment of evaluating students' achievements as summative, diagnostic (pre-assessment), and formative evaluations. Grading system is not enough for the teachers, systematic observation, attitude, regular survey of examinee's skills, and beliefs are important. Frequent feedback is necessary during the process of teaching and learning as this "constructive" dialogue between student and teacher is significant for guiding the knowledge.

Education system is one of the strategic factors of economical development of the country. School, teachers, parents, and other stakeholders have to know where the weak and strong sides of their education system, and how to make the application of the children's knowledge doable and possible. Csapó (2007) claims, "what school knowledge comprises in reality and where real learning processes on the rote learning - meaningful learning scale can be placed" (p. 199). The "meaningful learning scale" of learning should take into account while the assessment of education program, school, and the country as well. The reforms that are organizing by the country in the sphere of education should be feasibly and benefits students-teacher-parents requirements (Csapó, 2007, 2010). OECD (2009) review framework defines the policy reflection of various components that are assessed and evaluated are teachers, students, school, educational system and the country itself "the key aspect is to determine how the different components need to be interrelated in order to generate complementarities, avoid duplication, and prevent inconsistency of objectives".

The program and the assessment of education system of the program has to meet information that needs at system level, monitor key outcomes of the education system, and maximize the use of system-level information. This means that the country and the educational organization have to be in a close connection in order to foresee the weakness of the problem and to minimize errors in the evaluation process. In the school evaluation, the assessment level has to align external evaluation of schools with internal school evaluation, provide balanced public reporting on schools, and improve the data handling skills of school agents. Concerning the assessment system of educational system of my hometown Kazakhstan has been starting to change the system of its educational system since 2010 as becoming a member of Bologna process, as taking part in Programme for International Students Assessment (PISA- 2009, 2012, 2015).

To make the evaluation process more transparent and available usually the teacher is preparing a number of tests or is using some strategies of taking the exam then of course, the constructing test with a number of items should be carefully chosen and designed. Of course, the main goal of educational assessment for both teachers and students is not only to check but also to understand and be sure whether the material and new information is absorbed and ready to apply. Building up a well-made test with a certain set of clearly thought items is time-consuming. Stone (2001) identifies several points should follow the rule of writing the items while constructing a test. According to his viewpoint, a good item should "provide a fair of evaluation of what an individual knows, all test items should be referenced from standard texts or journals, wider geographical representation in test writers assists in eliminating regional differences". Stone's philosophy claims that: "Tests should be fair, reflect

essential special knowledge, and provide test-takers the best opportunity to demonstrate what they know. Tests should clearly differentiate between candidates with special knowledge from those that cannot demonstrate this ability".

Regarding Osterlind (1998), "An item is a single unit in a series or collection and is specified separately" (p. 22). Also in his book "Constructing Test Items" he represents his nomenclature of constructing test items where such terms as constructed-response, correct response, dichotomously scored, distractor, examinee, foil, graphic, item format, response alternative, response, selected-response, stem, stimulus, test item, test taker, and text are among crucial (p. 22). The most frequently formats in Osterlind's viewpoint of constructing test items are multiple-choice, truefalse, matching, sentence-completion, and short-answer. He also points that test item is not a question because an item expects a number of formats and thus, cannot be only interrogative but also "some of which are not interrogative" (p. 22).

Reja et al. (2003) identify that close-ended items have higher percentage for answer than open-ended items because in close-ended format respondents see "the alternatives offered on the close-ended forms, whereas on the open-ended question they produced a much more diverse set of answers" (p. 159). Further, Reja et al. (2003) explained that they also added some open-ended items into the close-ended because during their survey they found out that most of the open-ended items were blank or have not significant and short answers. Therefore, we consider that to construct and build a good-designed test that can meet a great number of requirements and be flexible is the test-maker's talent and creativity. In case of assessing students' educational knowledge, various formats of items should be included such as multiple choice, true or false, close and open-ended items.

From 2003, all students of compulsory, private and public schools in Kazakhstan have to pass Unified National Test in order to enter university and graduate secondary education. This final exam has the main criterion whether the students goes to take further education or not. Four main subjects were obligatory for every students and the student himself according to his interests and trends will choose the last fifth subject. In Kazakhstan, we have two types of schools – Kazakh and Russian, this happened because Kazakhstan was a part of Soviet Union till December, 1991. The result of this most Kazakh people can speak Russian fluently. Four obligatory subjects were Kazakh as a mother tongue, Russian as a second language of interethnic communication for students where Kazakh language is a form of teaching, Mathematics, and History of Kazakhstan. Absolutely the same subjects are passed by Russian students or the students where the form of teaching is Russian the difference was in languages Russian as a mother tongue, Kazakh as second foreign compulsory language.

Researchers (Davison & Leung, 2009; Nikolov, 2016; Roever & McNamara, 2006) claim that assessment in EFL among young learners is one of the complicated and complex processes, which significantly depends on beneficial relationships in the classroom. The skills, measuring in the assessment process will help the teacher to facilitate the effectiveness of teaching and learning activities towards students and clearly diagnosis the level of language of the students. Likewise, the literature emphasizes (Black & Wiliam, 2018; Nikolov, 2016; Rixon, 2016) that while reporting the strengths and weaknesses of young learners in English as the foreign, the research in classroom climate context, engagement, teacher, and peer support are crucial. Thus, for instance, Rixon (2016, pp. 20-21) claims that assessment for learning should lead, manage, and develop young learners' language skills and abilities in EFL as the main

role of assessment among young learners in the classroom context are to increase the quality of teaching and learning EFL.

#### 2.14 Classroom climate and engagement

Reading is a fundamental basis for academic achievements of the students and one of the core skills in teaching and learning languages. It is necessary to enhance engagement of young learners because a certain positive extent of engagement increases students' attention and motivation (Klem & Connell, 2004; Marks, 2000). Furthermore, literature identifies that students with high level of engagement have high achievements in learning than those who are disengaged (Fredricks, Blumenfeld, & Paris, 2004).

For instance, Woolley (2011, p. 148) determines that engagement in reading requires "deep involvement" from the reader and could be observed by behavior, attention, and interest. However, behavioral involvement cannot be cognitive and motivational as the reader may think of something else while reading. Thus, reader's behavioral engagement to reading requires *volitional control*, which maintains engagement besides internal and external obstacles during reading process. Although literature underlines that *volitional control* could also relate to self-determination of individual. This *volitional control* and wiliness to read mostly depend on the learner's behavioral factors and interests to comprehend learning material. Many researchers (Baker, Dreher, & Guthrie, 2000; Snow, 2002; Zimmerman, 2000a) claim that if the reader is showing a great desire and interest towards reading material the engagement can be deep and does not require full involvement in understanding reading material because the reader has already been motivated intrinsically. However, in case the learner is not motivated cognitively and behaviorally teacher's interaction with the learner is significant (Woolley, 2011, pp. 148-149).

In the classroom context where the relationship between teachers and students is inevitable, the interaction of classroom emotional climate in the school impacts learning process of children and in this case researchers consume that engagement mediates between classroom climate and student's outcomes (Ryan & Patrick, 2001; Pianta et al., 2008; Jia et al., 2009). Likewise, researchers (Pianta, Hamre, & Allen, 2012, p. 365) claim that classroom interaction "between teacher and student is fundamental to understand engagement". Therefore, the interaction of teachers and students in the classroom should be positive and/or neutral for better achievements, because if the interaction between student and teacher is low, or if the classroom climate is negative, the outcomes of students will be negligible and poor (Reyes, Brackett, Rivers, White, & Salovey, 2012). Researchers and educators (Wang & Eccles, 2011; Furrer & Skinner, 2003; Fredricks, Blumenfeld, & Paris, 2004; Zimmerman, 2000b) define that school engagement facilitates success and academic achievements in the school, which also involves several features as cognitive, emotional, and behavioral. According to them, all these indicators in engagement are significantly important for young adolescents and learners over secondary school learning. Because in the secondary school period the progress in academic achievement of the learners is mainly depended on the positive school classroom climate, teachers and peers' support on one hand, and the level of those indicators in engagement (i.e. behavioral, emotional, and cognitive) on the other. Way et al. (2007) propose that transition of the students from elementary to middle school could change students' beliefs and attitudes towards school climate, as well as behavioral and

emotional engagements. Furthermore, researchers define that vocational control relates to emotions and mediates between reading engagement and self-regulation. Emotions that reader performed in the reading process relate to the experience that reader has in his or her background knowledge and/or experience. Hence, the reader could produce that experience which was under the long practice and application while reading.

#### 2.15 Education system in Kazakhstan

International reports from PISA-2018 (OECD, 2019) underpinned lower results of Kazakhstani 15-year-old students in reading literacy, where mean performance in reading showed that only (35%) of the students reached Level 2, which is significantly lower than the OECD countries (77%) and comparing to 2009. Interestingly, that only negligible percent of Kazakhstani young learners were able to accomplish Level 5 or 6 in reading literacy, albeit still on average this did not influence the main results for the whole country. In Kazakhstan, there are three languages where Kazakh is an official language, Russian is a language of communication among people of various ethnic groups and minorities, and English is a foreign compulsory language. Most official documents in Kazakhstan are mainly represented in Kazakh, Russian, and English.

Over the last fifteen years, the system of education in Kazakhstan has become highly motivated because a great sum of money has been allocated for teaching and learning. For example, the country has begun to participate in several international assessment programs as PISA, TIMSS, and PIRLS. Every year the government is trying to increase financial support for education comparing to the previous year. Before these 15 years, Kazakhstan had a Soviet Union's system of education but then after the independency on December 16, 1991, several important issues in education system started to be solved. Core curricula for secondary and higher education in Kazakhstan were established in 1992, and in 1993. The main important objectives of these documents were to provide and obtain free general compulsory education for every citizen of Kazakhstan as well as to create certain conditions for teaching and learning process. Although the main purpose of teaching and learning is the quality, the part of education protocol still needs modification and reformation.

"Education for all, developing common system of education, well-being of the students, and active involvement of knowledge in the process" - are the main principles of "the Law of Education" in Kazakhstan in the Article #56 (MESRK, 2017). The process of teaching reading and writing skills in Kazakhstan traditionally starts in kindergarten and/or pre-primary school (age 5-6), and further continues in primary school from grade one (age 6-7). However, learning English, as a foreign became an obligatory subject in 2013 for all 7-year-olds children however regarding to the previous schooling program English was being taught from grade five (age 11). Traditionally Kazakhstani education system consists of mainly three stages such as, pre-primary (kindergarten), secondary (primary, middle, and upper secondary schools), and higher education (college, university). Vocational, technical schools and colleges can be entered after lower secondary school (age 15) and/or after graduating upper secondary (ages 16-18).

Basic secondary education is mandatory and free for all Kazakhstani citizens from (ages 7 to 15). The duration of studying in technical schools is 4 years – after grade 9, and 3 years – after 11–12 grades, respectively. High schools and universities

have three-tiered levels 3/4+2+3 — bachelor (three/four years of studying), master (one/two years), and PhD (three years) (see Figure 2). For teaching in secondary school, a bachelor's degree is enough, albeit the master's degree is appreciable, whereas in high school and university the master's degree is obligatory. The requirements of core curriculum and syllabuses for teaching and learning Kazakh, Russian or English languages, the reading skill is among essential. However, the number of hours being allocated for learning English for example, as the compulsory foreign language is relatively small comparing to Kazakh and Russian. Likewise, English has two hours per week - in primary school, three/four –in middle and upper secondary regarding the profile and type of schooling (i.e., humanities, science, or mathematics), whereas hours for Kazakh and Russian are twice higher.

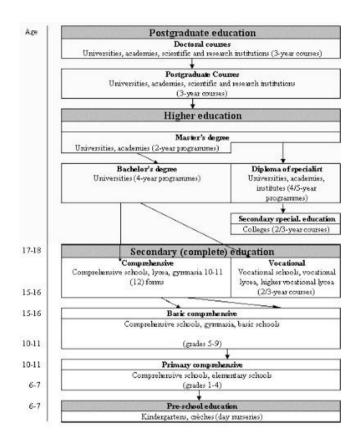
The development of reading process in Kazakhstan begins from pre-school at the age of five, and continues until grade 1 (7-8 ages). In grade 1 *Reading literacy* is called – "Sauat ashy" (from Kazakh language), "Chitatelskaya gramota" (from Russian language). Then starting from grade 2 and until the end of the secondary education (grades 11 and 12) the reading process "smoothly" transformed into two separate subjects like – language and literature (MES, 2013; 2017). Students begin learning language as a subject from the primary education, when they are in grade 2, and literature in the fifth grade. It should be noted that literature is only taught in Kazakh (for Kazakh- medium schools), and in Russian (for Russian- medium schools) (MES, 2013).

The Reviews of National Policies for Education in terms of assessment of learning outcomes and teaching quality [Organization for Economic Co-operation and Development] (OECD) (2014a) indicated that secondary education in Kazakhstan should refocus school education on developing and applying knowledge and skills into the real-life situations. These modifications should define the criteria for comprehensive evaluation the quality of teaching, develop a new professionalism in teaching as well as set up the school management, encourage teachers to develop research and creative skills of the students.

English language as a foreign has become a compulsory language and subject in schools of Kazakhstan (MES, 2013). A multilingual community and society play a key role in English proficiency factor in Kazakhstan however, there are several factors playing an essential role in learning English language under the basis of young language learners' background. Such as, parents' role in education; gender equality; type of schools; qualitative human resources; material and technical base, financial support, technical condition of the schools. As the implementation of English language started in 2010 in all secondary schools officially, the process began in 2013. Speaking English fluently is increasing every year in Kazakhstan, albeit only 30 per cent of the people around the age of 35 and younger can talk English fluently (see e.g., Bridges, 2014; Fierman, 2005; Kenzhekhanuly, 2012; Khasseneyeva, 2018). Even the percentage of the English speakers can vary in numbers and the region e.g., in the capital and big cities, as Almaty and Karaganda the percentage is relatively high comparing to Atyrau or Aktau (i.e., cities in the West part of Kazakhstan).

Figure 2

Structure of Education in Kazakhstan Source: UNESCO (2011), World Data on Education, Kazakhstan, UNESCO, Paris.



By School Resources Review (OECD/The World Bank, 2015) statement, Kazakhstan has embarked on profound reforms to improve the quality of the education system and is increasingly looking to international standards and best practices. Although the level of education attainment of the population is high, the performance of Kazakh 15-year-olds in PISA-2012 suggested that there was a considerable room to improve the quality of student learning outcomes. Kazakh students are on average two years behind their peers in OECD countries and about 45% of them are low performers, a proportion significantly above the OECD average (23%). The language of instruction in schools, school location, and the socioeconomic background of students and schools make a difference in student performance. National and international assessments suggest marked differences in education outcomes between urban and rural areas. Thus, the importance of PISA for Kazakhstan is obvious as the world measurement of the country could be valuable and crucial for further development of future generation and human beings in education, politics, and economics. Likewise, from 1993 kindergartens were optional but charged fee. Facing official regulations and requirements in 2000, the Law of Early Childhood Orphanage approved. However, only in July 2007, the Law of Education in Kazakhstan started to make several corrections towards the ways of using some European aspects in the system of education. For instance, after joining Kazakhstan in 2010 to the members of organizations i.e., Bologna process, when several changes in

the higher education have been implemented, such as academic mobility, grading system of assessment and obtaining number of credits for a certain discipline. Otherwise, comparing to European system of high education via Bologna process Kazakhstan is in the close way to a suitable model of European education, especially in teaching and learning three mainly dominated languages in Kazakhstan – Kazakh, Russian, and English. Thus, vast majority of high schools and universities will move to the European Framework of teaching and learning, systematic implementation new innovative technologies, secondary education should be on the focus of various changes as well. For instance, NIS in 2013 in Kazakhstan became one of the model schools of piloting European Framework in teaching and learning process.

## 2.16 Language or cultural differences in Kazakh vs. Russian orthography

According to Sebba (2018), orthography, is "The set of rules for adapting a script to write a specific language" (p. 8). Kazakh nation previously used Arabic script, and in 1929, the writing system was shifted into Latin letters, albeit under powerful influence of USSR on Kazakh nation, in 1940, the writing script was changed, and the letters in Kazakh language were adopted into Cyrillic scripts. At present, Cyrillic letters are still in use in Kazakh language, albeit some official documents in mass media and education have already started to apply Latin scripts. Since 1940, a number of literature works using Cyrillic script, in Kazakh language have been published so far, the problem of literacy development in Kazakh writing system is still existed. Therefore, Latin scripts for Kazakh language is significantly necessary as it "make spoken and written rules come together what orthography is required" (Sebba, 2018, pp. 11-12).

Kazakh language is an agglutinative Turkic language, belonging to the Kipchak group where the vowel system - "the law of synharmonism" is followed. For instance, if the word includes hard vowels, the ending suffixes will be hard, and if soft then soft vowels will be added (Kenzhekhanuly, 2012; Muhamedowa, 2015, pp. 273-283). On the contrary, Russian language does not have such kind of rule in its writing system. Kazakh language does not have a gender form in grammar but Russian has three gender forms and has the endings for each specific gender. Russian is an Indo-European language belonging to the Eastern-Slavic group. Russian language has a flexible word order and used Cyrillic writing script, "right-branching language" subject is in the head, whereas Kazakh is in the "left-branching structure"- subject (could be in the mid) and the predicate are in the end (Flynn, 2009, pp. 77-78).

Kazakh alphabet has been fully russified as all 33 Russian alphabet letters were included in Kazakh alphabet and nine pure Kazakh sounds were intentionally adapted following the order and rules of Russian alphabet. As the result, Kazakh alphabet in Cyrillic script has 42 letters, albeit the pure correct writing system in Kazakh language since 1940 has totally devastated, and the usage of Kazakh language has been properly kept in the spoken form. However, Kazakh intelligence (e.g., Akhmet Baytyrsynov, Myrzhakyp Dulatov, Magzhan Zhumabayev etc.) put great efforts to keep Kazakh literacy 70 years of Russification in Cyrillic script has played significantly for the development of Kazakh literacy to further young generation.

## 2.17 Bilingual situation in Kazakhstan

Kazakhstan is a bilingual country where two languages, Kazakh and Russian, are widely used. However, before 1940 Kazakhs were pure monolinguals and did not know Russian (Fierman, 2005; Kenzhekhanuly, 2012; Khasseneyeva, 2018). Even after World War II, the majority of Kazakhs only communicated in their native language. The process of intensive Russian influence on the Kazakh nation began in 1954, when many Russians were sent to Kazakhstan to cultivate the land in a process known as "Osvoyeniye tselinnykh zemel", which translates to "Virgin Lands Campaign". Then, during the *perestroika* period from 1983 to 1991, Kazakhs experienced the powerful impact of Russification as teaching and learning in most schools and universities shifted entirely to Russian. This caused a serious problem for Kazakh families, as it was only in rural areas where they enjoyed the opportunity to attend school in their native language, though there were very few Kazakh-medium schools there and they were also planned to be closed soon. As a result, most parents living in cities had to send their children to Russian-medium schools as part of a Russian propaganda campaign.

At present, since 1991, when Kazakhstan declared independence, 92% of Kazakhs could speak, read, and write in Russian. The proportion of Kazakhs who are proficient in reading, writing and speaking Kazakh has increased significantly from 2009 to 2019 from 55% to almost 80% (Statistical Agency of the Republic of Kazakhstan, 2018, 2019). However, the percentage of communities that only speak Kazakh is higher in southern and western Kazakhstan, where Russian does not play a part in everyday communication.

#### 2.18 Conclusion

The Ministry of Education and the National Center for Educational Statistics and Evaluation publish annual report of the schools outcomes among various regions naming a hundred top well-performed schools in Kazakhstan. This means that assessment and achievement are playing a key role in education system because the results promote challenges for schools, teachers, and students themselves for qualitative improvements in the working process. Thus, the Reviews of National Policies for Education: Secondary Education in Kazakhstan OECD (2014) listed a number of recommendations of how to improve and correct several weak points that prevented students to do well in PISA-test. Thus, assessment in education is necessary as it re-focuses and strengthens teaching process, develops professionalism as well as improves and encourages professional skills. Kazakhstan is a young government but with the long and great history regarding language, education, geography, politics, and nation. Active participation in a great number of global issues, hospitality, respect, and readiness in thoughtful and smart implementation of new standards and innovation technologies of European Framework in sphere of education make Kazakhstan to narrow the gap of poor results in reading literacy and develop the process of regular assessment as normal.

This chapter provided literature of reading domain, highlighted the importance of assessing process for the development of reading literacy and reading skills. Outlined the main features of reading process among young learners, defined the factors affecting cognitive skills. Differentiating crucial role of reading assessment, a number of revealed factors may be useful and beneficial for appropriate development

of reading skills. The description of education system in Kazakhstan was under the focus, where non-efficient curriculum in teaching and learning process and factorial method of testing could be defined as one of the obstacles and drawbacks of students' negligible results of reading literacy in international surveys. The findings indicated several models and stages the researchers determine in reading literacy. Reading abilities and reading comprehension, reading attitudes and reading achievements, reading strategies, reading motivation in mother tongue and in the foreign language, reading habits and vocabulary are significant issues that facilitate and benefit reading literacy as well as the classroom climate in the school context and engagement of young learners towards development and further proficiency in reading skills.

#### CHAPTER 3: AIMS OF THE RESEARCH AND EMPIRICAL STUDIES

## 3.1 Research Aims and the Structure of Empirical Studies

The main purpose of this research study is to assess reading skills and literacy level in mother tongue (Kazakh and Russian) and English as a FL of the learners in the middle secondary schools in Pavlodar, Kazakhstan. The assessment of reading skills will be a baseline to reveal the development of reading literacy among adolescent students and provide information for building up the framework and recommendations of reading literacy in the studying process and modifying the education system in Kazakhstan in general.

The significance of this study has several perspectives to improve and modify the middle secondary education in the Republic of Kazakhstan. First, the level of well-developed reading skills will promote literacy and be fundamental for advanced quality in education, which is significant for the wellbeing and job success in the future. Second, computer-based evaluation performances of the students in the languages should be beneficial for frequent assessment and professional testing treatment of the students that could influence the change for teaching and learning process in the schools. Third, since the results in reading literacy cycle of 15-year-old students in Kazakhstan are two years behind their peers from OECD countries. Thus, an earlier diagnostic assessment may facilitate to build up an efficient measurable framework for learners, teachers, parents, and other stakeholders in the school. Overall, one of the crucial ways to succeed in the development of the country's welfare, economy, and quality of education may be due to appropriate reading literacy level that follows international standards and requirements in education. Hence, the results of this diagnostic assessment can be useful to structure better tools to modify the standards and improve the quality in education of the children.

This study consists of five empirical studies in the area of reading literacy among young learners in Kazakhstan. The longitudinal study focused on development of a framework that may modify teaching and learning process of the learners in the middle grades. All studies were cross-sectional and conducted during three years (2018-2020) in the winter term in January-February in Pavlodar city via Electronic Diagnostic Assessment (eDia). The assessment were among 6<sup>th</sup> and 8<sup>th</sup> grade learners or 12<sup>th</sup>- and 14<sup>th</sup> -year-old students from seven randomly selected secondary public schools that took part in the online assessment surveys during three academic years. The research study aimed to investigate the difficulties and the gap of poor results in reading literacy in the respected languages as well as to reveal the factors, which can affect reading achievements.

Study one was the first online pilot examined the reading comprehension skills in English as the foreign (EFL) and the relationships of background variables impact on the reading achievements of sixth and eighth graders. Study two focused on the relationships of 12-year olds reading and writing skills and socio economic status. Study three explored and piloted self-developed online instruments in three languages for sixth and eighth graders and revealed the correlations of reading achievements in Kazakh, Russian and English and learners' reading attitudes. Study four investigated further the modified version of self-developed instruments exploring reading skills in Kazakh, Russian, English and the impact of students' certain background variables, reading attitudes between reading outcomes as well as the mediation effect of engagement between classroom climate and students' outcomes was tested. Study five

was focused on examining reading strategies of students in the sixth and eighth grades in reading process and their influences and effect on reading achievements in three languages. Furthermore, we examine the relationships between reading strategies, reading attitudes, and background variables. The procedure, timeline, and data collection of this longitudinal study are summarized in the following Table 1.

**Table 1** *The overview of the timeline and research activities* 

Timeline	Research Activities	Instruments	Samples
September, 2017	Planning the research Literature review		
January- February, 2018	Piloting the assessment instruments	Reading Comprehension Tests in English for 6 <sup>th</sup> and 8 <sup>th</sup> graders (Nikolov & Csapó, 2010) PISA-2015 Background Questionnaire Framework (OECD, 2017) eDia online platform	6 <sup>th</sup> and 8 <sup>th</sup> graders N=1206
September, 2018	Data analysis and	·	
January- February, 2019	results presentation Assessing students' reading attitudes and comprehension	Self-developed Reading Comprehension Tests in English, Kazakh and Russian for 6th and 8th graders (first draft) Adapted PISA-2018 Background Questionnaire Framework (OECD, 2019a, 2019b) Reading Attitude questionnaire modified from Clark, C., & Foster, A. (2005). Children's and Young People's Reading Habits and Preferences: The Who, What, Why, Where and When. National Literacy Trust. eDia online platform	6 <sup>th</sup> and 8 <sup>th</sup> graders N=1505
September, 2019	Data analysis and presenting results in the seminars and conferences		
January- February, 2020	Large scale assessment of the students	Adapted Self-developed Reading Comprehension Tests in English, Kazakh and Russian for 6th and 8th graders (second draft validation of the modified version) Adapted PISA-2018 Background Questionnaire Framework (OECD, 2019b) Adapted Reading Attitude	6 <sup>th</sup> and 8 <sup>th</sup> graders N=1563

		questionnaire modified from Clark,
		C., & Foster, A. (2005). Children's
		and Young People's Reading
		Habits and Preferences: The Who,
		What, Why, Where and When.
		National Literacy Trust.
		Metacognitive Awareness of
		Reading Strategies Inventory
		(MARSI) Version 1.0 by Kouider
		Mokhtari and Carla Reichard (c.f.
		Mokhtari & Reichard, 2002)
		eDia online platform
September,	Data analysis and	
2020	results presentation	
	in the seminars and	
	conferences	
April, 2021	Data analysis and	
	the presentation of	
	the results	

# 3.2 Research Questions and Hypotheses

Research questions and hypotheses for each respective study are represented further. Thus,

# Research Questions for assessment of reading skills in English and socio-economic background among learners in middle schools:

- 1. How well do 6<sup>th</sup> and 8<sup>th</sup>graders perform in English reading test?
- 2. How do performances of 6<sup>th</sup> and 8<sup>th</sup> grade students differ in English reading test?
- 3. What are the gender differences between students of  $6^{th}$  and  $8^{th}$  graders?
- 4. Which reading skills do the students acquire better, information retrieval, or inference?
- 5. How valid are the latent factors in classroom climate and engagement according to EFA and CFA to measure students' reading skills in EFL?
- 6. How reliable are the latent factors in classroom climate and engagement according to internal consistency using Cronbach's alpha and Composite reliability (CR)?
- 7. Are there any differences of the students' reading skills in English as a FL towards classroom climate and engagement?

# Hypotheses for assessment of reading skills in English and socio-economic background among learners in middle schools:

H1. 6<sup>th</sup> and 8<sup>th</sup> graders' performances in English reading tests are moderate (e.g., Csapó & Nikolov, 2009; Nikolov & Csapó, 2010, 2018).

- H2. The 6<sup>th</sup> and 8<sup>th</sup> grade students' performances in the English language differ significantly (e.g., Csapó & Nikolov, 2009; Nikolov & Csapó, 2010, 2018).
- H3. There are not any differences in gender between the students of the 6<sup>th</sup> and 8<sup>th</sup> grades (e.g., Kush, Watkins, & Brookhart, 2005; McKenna, 2001; OECD, 2017, 2019a, 2019b).
- H4. The students in both grades perform better in information retrieval than in inference (e.g., OECD, 2017, 2019a, 2019b).
- H5. The latent factors in classroom climate and engagement are valid to measure reading skills the models in EFA and CFA are fitted well to the data (Protacio, 2012; Smith, 2011; Wigfield, Gladstone, & Turci, 2016).
- H6. The latent factors in classroom climate and engagement are found reliable the composite reliability is higher the acceptance rate (e.g., Reyes et al., 2012; Ryan & Patrick, 2001).
- H7. There not any differences in students' reading skills towards classroom climate and engagement regarding measurement model (e.g., Reyes et al., 2012; Ryan & Patrick, 2001).

# Research Questions for relationship between reading and writing skills of 6<sup>th</sup> graders in English language and socio-economic background:

- 1. How does the effect of mother tongue influence the results of learners' performances in English as a FL?
- 2. What is the relationship between reading and writing skills in L2?
- 3. To what extent do socio-economic variables, reading, and writing in L2 predict outcomes in L2 of bilingual and monolingual learners?

# Hypotheses for relationship between reading and writing skills of 6<sup>th</sup> graders in English language and socio-economic background:

- H1. The effect of mother tongue influences the tests performances of 6<sup>th</sup> graders (Koda, 2007; Nikolov & Csapó, 2010).
- H2. There is a strong relationship between reading and writing skills in L2 performances of the  $6^{th}$  grade students (Hayes 2000, 2012; Koda, 2007).
- H3. Socio-economic variables will contribute positively to the students' achievements in L2 (Cumming, 2013; Hirvela & Du, 2013).

# Research Questions for links between reading attitude and reading achievement in three languages: Assessments in two age groups of young Kazakhstani learners:

- 1. What are the correlations between the tests in Kazakh, Russian, and English in 6<sup>th</sup> and 8<sup>th</sup> grades?
- 2. To what extent does the mother tongue influence the results of learners' performances in the tests?
- 3. How does the reading attitude of learners influence the reading achievements in Kazakh, Russian, and English?

# Hypotheses for links between reading attitude and reading achievement in three languages: Assessments in two age groups of young Kazakhstani learners:

- H1. We expect moderate correlations between the tests in Kazakh, Russian and English in the grades as the languages belong to the different language group (e.g., Cline & Shamsi, 2000; Cummins, 2000; Fierman, 2005; Stanovich, 2000).
- H2. The influence of the mother tongue will be strong in reading tests' outcomes, as the one of the tests is students' native language (Kong, 2006; Zhang, 2001).
- H3. Taken into literature review reading attitude on reading achievement is moderate and could be strong if the student have mainly have positive attitude (Ellis, 2005; Grabe, 2009; McKenna et al., 2012; Yamashita, 2013).

# Research Questions for mediation effect of engagement between classroom climate and reading achievement in three languages among sixth- and eighth-grade students:

- 1. How well do the 6<sup>th</sup> and 8<sup>th</sup>graders perform in the reading tests of English, Kazakh, and Russian?
- 2. How do parents' level of education and variables of SES affect students' performances in the reading tests of English, Kazakh, and Russian?
- 3. What are the relationships of the reading attitudes, background variables, and reading achievements in three languages?
- 4. How many factors are revealed from background variables in 6<sup>th</sup> and 8<sup>th</sup> grades?
- 5. What are the relationships between background factors?
- 6. To what extent do the classroom climate and engagement predict the outcome variables?
- 7. What is the mediation effect between independent and dependent variables?

# Hypotheses for mediation effect of engagement between classroom climate and reading achievement in three languages among sixth- and eighth-grade students:

- H1. Based on our previous research results, we expect significant differences in the performances of the students in the self-developed reading tests in three languages (e.g., Dörnyei & Ryan, 2015; Csapó & Nikolov, 2009; Nikolov & Csapó, 2018).
- H2. Consider literature review, parents' level of education and SES influence significantly on the reading achievements in the respected languages (Kong, 2006; Lien, 2016).
- H3. We hypothesize moderate relationships between background variables, reading attitudes, and reading achievements in English, Kazakh, and Russian among 6<sup>th</sup> and 8<sup>th</sup> grade students (Kush, Watkins, & Brookhart, 2005).
- H4. There are eight factors are revealed from the background variables in both grades (e.g., Lien, 2016; Smith, 2011).
- H5. There are strong relationships between background factors (Smith, 2011; Wigfield, Gladstone, & Turci, 2016).

H6. Classroom climate and engagement highly predict reading outcomes of the students (e.g., Csapó & Nikolov, 2009; Nikolov & Csapó, 2010, 2018; Smith, 2011; Wigfield, Gladstone, & Turci, 2016).

H7. There are full mediation effect between independent and dependent variables in both grades (Reyes et al., 2012; Ryan & Patrick, 2001; Zimmerman, 2000b).

# Research Questions for reading strategies and reading performances of $6^{th}$ and $8^{th}$ graders in Kazakh, Russian, and English:

- 1. How often do the adolescents apply reading strategies while reading?
- 2. How many factors are revealed in reading strategies among 6<sup>th</sup> and 8<sup>th</sup> grade students?
- 3. To what extent reading strategies affect reading tests in mother tongue (Kazakh and/or Russian) and English as the foreign?
- 4. What are the relationships between reading strategies, reading achievements, reading attitudes, and several background variables in 6<sup>th</sup> and 8<sup>th</sup> grade students?

# Hypotheses for reading strategies and reading performances of 6<sup>th</sup> and 8<sup>th</sup> graders in Kazakh, Russian, and English:

- H1. We predict that adolescents frequently use reading strategies while reading (Lien, 2016; She orey & Mokhtari, 2001).
- H2. We hypothesize more than four factors in reading strategies in the 8<sup>th</sup> and 6<sup>th</sup> grades (e.g., Afflerbach, Pearson, & Paris, 2008).
- H3. We expect strong impact of the reading strategies on the reading tests in mother tongue and EFL (e.g., Kong, 2006; Parry, 1996; Zhang, 2001).
- H4. We expect moderate or weak relationships between reading strategies, reading achievements, reading attitudes, and background variables in each grade (Alsheikh & Mokhtari, 2011; Goodman, 2014; Sheorey & Mokhtari, 2001).

#### **CHAPTER 4: METHODOLOGY**

### 4.1 Research Design

This research was designed to follow the requirements of doctoral programme, which means that collecting and analyzing data were frequently organized on a certain time. The current study was cross-sectional because students from grades 6<sup>th</sup> and 8<sup>th</sup> participated in the assessment. As mentioned in chapter one Kazakhstan has started to participate in the international surveys such as PISA, TIMMS, and RILRS. Due to international reports (e.g., OECD, 2019) the outcomes of 15-year-olds in reading literacy are declining every time, concluding that students from Kazakhstan are two years behind their average peers from OECD countries. For this reason the research study was mainly focused on (1) facilitating reading skills and literacy of 12<sup>th</sup> and 14<sup>th</sup> –year-old students in native (Kazakh and Russian) and second (Kazakh and Russian) languages as well as English as a FL.

Moreover, this study is a cross-cultural one because of diverse ethnic groups and nationalities (i.e, Russian, Ukraine, Polish, German, Korean, Belarusian, Kyrgyz, Uzbek, Tatar, Chechen, Azerbaijani, etc.) live in Kazakhstan. Although there are mainly Kazakh— and Russian—medium classes and schools in most parts of Kazakhstan. In addition, this study is (2) providing features and evidences for further efficient application and implementation of the adapted frameworks for teaching and learning reading skills and literacy in the middle school. The design was considered appropriate because the samples were assessed from Kazakhstan every winter break during my studying in Hungary from 2017-2021.

However, in the last academic year 2020-2021 we did not conduct data collection due to pandemic time in the world. Thus, we collected the data three times (2017/2018, 2018/2019, 2019/2020 – academic years) during January-February in the same randomly selected urban schools in Pavlodar. The assessment period was during winter term (January-February) in each school of the respected years. This period was very significant and useful for the obtained outcomes because this was the third term of studying and more than a half of the teaching and studying abilities have already learnt by the learners in the respected grades. Traditionally schools in Kazakhstan have four terms in the academic year (early autumn, late autumn, winter, and spring). The children were in their winter term (the longest) during the assessment. On the one hand, we hypothesized that sixth and eighth grade students would have already received and developed certain abilities from the studying materials. On the other, this could pursue benefits for learning process and teaching instruction.

#### 4.2 Samples

Before planning our research framework regarding samples, the focus of international assessment reports like PISA-2009, 2012, and 2018 were underpinned. Diagnostic report on development of Strategic Directions on Education Reforms in Kazakhstan for 2015-2020 (Sagintayeva et al., 2014, pp. 30-33) defined the weaknesses related to the insufficient ways of assessment process, teaching and learning English language, and mother tongue, which cause relatively low performance of the tasks in reading literacy skills on international level by 15-year-old learners. For this reason, the research and the samples were carefully planned, and governed.

First, several letters of request were sent to the Ministry of Education and Science of the Republic of Kazakhstan to allow us to conduct the research. In order to make the research results appropriate for further assessment framework the participants were 6<sup>th</sup> and 8<sup>th</sup> graders from ordinary randomly selected middle secondary schools in Pavlodar city, located in the north part of Kazakhstan as displayed in the map below (see Figure 3).

Figure 3

Regions of Kazakhstan Source: https://en.wikipedia.org/wiki/Regions\_of\_Kazakhstan



After official approval from the Ministry of Education, a collaboration work was organized with the Departments of Education of Pavlodar region and the city. School principals, managements, and teachers were informed about the assessment survey several months before so this assessment did not disrupt any academic activities in the targeted schools. "The choice of which strategy to adopt must be mindful of the purposes of the research, the time scales and constraints on the research, the methods of data collection, and the methodology of the research" (Cohen, Manion, & Morrison, 2007, p. 117).

In Pavlodar, the population regarding the data of the United Nations (2017) was 335.272 people. These samples represented 16% of ordinary secondary schools in Pavlodar city from the 43 schools with approximately 1000-3000 attending students in each school. In addition to, apart from ordinary secondary schools there are 10 more secondary schools in Pavlodar for gifted children (e.g., NIS is also belonged to them), which are supported by the government as well. Most schools for gifted children charge fees for teaching and learning, albeit have their own budget and scholarships to study free as well. Students who want to compete for those vacant places in these schools should already be fluent in English, reading literacy, mathematics, physics, biology, and/or chemistry.

These schools for gifted students have several additional requirements in the standard and teaching programs for instance, some subjects (e.g., mathematics, biology, geography, and physics) are taught in English language. Therefore, it is challenging to study in these schools for an ordinary student. The assessment of children from gifted schools was not under the scope of our study. The focus of this research was to provide a framework for effective program in assessing reading skills

and literacy in L1, L2, and EFL in Kazakhstan. The evidences could be useful for the development and improvement of teaching and learning process in the middle school level in Kazakhstan, Pavlodar while teaching, learning and assessing reading skills and literacy. In Pavlodar, most schools have two shifts: morning and afternoon. The morning shift begins at 8.00 a.m. and finishes at 13.00 p.m. whereas the afternoon starts at 14.00 p.m. and ends at 18.00 p.m. Nonetheless, it was feasible that participants from both shifts performed the assessment due to administration in all schools that set and managed a convenient timetable for sixth and eighth grades.

The measurement of parental attainment level in education was taken into account, as this socio-economic variable could be one of the indicators to affect the achievements of the students' reading literacy (Snow, 2002, 2006; Myrberg & Rosén, 2009; van Bergen et al., 2017). Tables 2, 3, 4, and 5 indicated the categories of the parents' education. However, several other factors such as number of books at home, home environmental conditions, reading activities in the family, reading habits, activities, and genetics could influence reading outcomes as well. The highest level of parents' education in each study was different because of the sample size of the students and the research purposes. In all studies, most children did not know their parents' level of education. Although those who knew pointed that, both parents had a Bachelor degree, albeit the fathers had a tendency to obtain vocational and technical education, whereas the mothers tended to study further for Master's degree.

In Study 1, a total number of N=1,206 (female 50.4% and male 49.6%) grade six ( $N_6$ = 572) and eight ( $N_8$ =634) students performed background questionnaire and the reading tests in English (Table 2). These students were studying in the middle secondary school in Pavlodar and participated in such assessment survey for the first time on the computer. The mean age of the students was ( $N_6$ = 572, M=11.99;  $N_8$ =634, M=14.00) and standard deviation ( $N_6$ = 572, SD=.22;  $N_8$ =634, SD=.21). Before the survey, all participants were instructed as we determined to define substantial findings from background questionnaire and reading comprehension tests for further statistical analysis in the context of Kazakhstan.

**Table 2**Parents' level of education for study 1

	6 <sup>th</sup>	grade	8 <sup>th</sup> grade		
Parents' level of schooling	Mothers	Fathers (%)	Mothers	Fathers	
	(%)		(%)	(%)	
Did not go to school	.3	.6	.3	.3	
Grades 1-9, middle school	7.0	7.0	7.5	8.8	
Grades 1-11, secondary	14.9	14.4	18.6	12.5	
school					
Vocational and technical	8.1	12.0	15.5	17.0	
schools					
Bachelor de gree	19.5	13.8	26.8	22.8	
Master degree	3.2	1.6	4.2	3.4	
PhD degree	1.6	1.1	1.6	.4	
I do not know	45.3	49.4	25.5	34.7	

For Study 2, the sample of 282 (female 52% and male 48%) Grade 6 students performed the reading and writing tasks altogether in year 2018. The mean of the age was M=12.00 and standard deviation SD=.21. The participants were young adolescents in their early years of middle school level and even though that in the

same year (i.e., 2018) we were able to analyze and collect sample for reciprocal and productive skills in English, which would be useful for the more sophisticated analysis of development and relations between respective skills in English. In Study 2, a great number of people did not perform the writing part of the reading comprehension test thus; those samples were not included in the study analysis rather than those who conducted reading and writing skills (Table 3).

**Table 3**Parents' level of education for study 2 in Grade 6

Parents' level of schooling	Mothers (%)	Fathers (%)
Did not go to school	.4	1.2
Grades 1-9, middle school	9.6	10.8
Grades 1-11, secondary school	18.1	18.8
Vocational and technical schools	9.2	14.6
Bachelor de gree	19.2	10.8
Master degree	4.2	1.9
PhD degree	1.9	1.2
I do not know	37.3	40.8

In Study 3, the questionnaire and the reading tests were administered to a sample of 1505 (female 49% and male 51%) six and eight grade students (Table 4). The participants were from the same seven middle schools in Pavlodar. The mean age of the students in the data collected in 2019 was M= 12.91 and the standard deviation showed further SD= 1.12. The measurement of reading attitude and the prediction of the reading comprehension tests in English, Kazakh, and Russian were defined.

**Table 4** *Parents' level of education for study 3* 

	6 <sup>th</sup>	grade	8 <sup>th</sup> grade		
Parents' level of schooling	Mothers (%)	Fathers (%)	Mothers (%)	Fathers (%)	
Did not go to school	.2	.5	.3	.4	
Grades 1-9, middle school	9.1	8.6	7.5	8.8	
Grades 1-11, secondary school	15.6	13.8	18.4	12.5	
Vocational and technical schools	8.9	14.7	15.7	17.3	
Bachelor de gree	19.3	14.8	26.9	22.4	
Master degree	3.5	1.4	4.2	3.6	
PhD degree	1.1	1.1	1.7	.6	
I do not know	42.3	45.1	25.3	34.4	

For Studies 4 and 5 a sample of N=1,563 students (females 52.6% and males 47.4%), responded to the background questionnaire, performed reading comprehension tests in English, Kazakh and Russian, replied to several additional measurement like questionnaire for metacognitive reading strategies were collected in 2020 and analyzed further (Table 5).

In Study 4, reading attitude, classroom climate, and engagement towards reading achievements were examined among young adolescents in three respected languages.

**Table 5** *Parents' level of education for studies 4 and 5* 

	6 <sup>th</sup> grade		8 <sup>th</sup> grade		
Parents' level of schooling	Mothers (%)	Fathers (%)	Mothers (%)	Fathers (%)	
Did not go to school	.2	.5	.3	.3	
Grades 1-9, middle school	6.9	6.8	7.4	8.7	
Grades 1-11, secondary school	14.3	13.9	18.5	12.4	
Vocational and technical schools	8.7	12.6	15.6	17.2	
Bachelor de gree	19.4	14.0	27.1	22.8	
Master degree	3.2	1.9	4.1	3.4	
PhD degree	1.6	1.1	1.6	.4	
I do not know	45.8	49.3	25.3	34.7	

For Study 5, reading strategies were implemented for the first time in 2020 to the middle school students of Kazakhstan. Before the reading tests, students performed questionnaire and replied to the questionnaire in reading strategies. Overall, 4274 students participated in this research during assessment processes detailed and summarized information of the samples is presented in the following Table 6.

**Table 6**Samples of all studies

Study	Sample	Instruments
Study 1	Grades 6 & 8, N=1206 students	<ul> <li>Reading Comprehension Tests in English for 6<sup>th</sup> and 8<sup>th</sup> graders (Nikolov &amp; Csapó, 2010)</li> <li>PISA-2015 Background Questionnaire</li> </ul>
Study 2	Grade 6, N=282 students	Framework (OECD, 2017)  - Reading and writing skills from Reading Comprehension Tests in English for 6 <sup>th</sup> grade (c.f. Nikolov & Csapó, 2010)  - Background Questionnaire variables (OECD, 2017) (parents' education and number of books)
Study 3	Grades 6 & 8, N= 1505 students	<ul> <li>Self-developed Reading Comprehension Tests in English, Kazakh and Russian for 6th and 8th graders (first draft)</li> <li>Adapted PISA-2018 Background Questionnaire Framework (OECD, 2019a)</li> <li>Reading Attitude questionnaire modified from Clark, C., &amp; Foster, A. (2005). Children's and Young People's Reading Habits and Preferences: The Who, What, Why, Where and When. National Literacy Trust.</li> </ul>
Study 4	Grades 6 & 8, N= 1563 students	- Adapted Self-developed Reading Comprehension Tests in English, Kazakh and Russian for 6th and 8th graders (second draft validation of the modified version)

		- Adapted PISA-2018 Background
		Questionnaire Framework (OECD, 2019b)
		- Adapted Reading Attitude questionnaire
		modified from Clark, C., & Foster, A. (2005).
		Children's and Young People's Reading Habits
		and Preferences: The Who, What, Why, Where
		and When. National Literacy Trust.
Study 5	Grades 6 & 8,	- Metacognitive Awareness of Reading
•	N= 1563 students	Strategies Inventory (MARSI) Version 1.0 by
		Kouider Mokhtari and Carla Reichard (c.f.
		Mokhtari & Reichard, 2002)
		- Adapted Self-developed Reading
		Comprehension Tests in English, Kazakh and
		Russian for 6th and 8th graders (second draft
		validation of the modified version)

#### 4.3 Instruments

In order to provide evidences in development of modified education framework for improving literacy skills in the middle schools in Kazakhstan several instruments were used in the each research study. One of the aims in the Study 1 was to define socio-economic background of the students, which has several items and variables like students' feelings towards school, classroom climate, engagement, learning aspect of English language, and the attitude towards the importance of English as FL. In addition to the background variables, the assessment consists of performing reading comprehension tests in English adopted from Nikolov & Csapó, (2010; 2018) for students in Kazakhstan.

Study 1 included background questionnaire, which examined background variables related to classroom climate in school, student-teacher relationship (responded by the students), engagement to learning English, anxiety and the usage of ICT technologies in the classroom context. The factor loading of the exploratory factor analysis revealed six factors from the questionnaire and showed a good fit to the data. However, the revealed factors effected very low on achievements of reading tests in English in both grades.

In Study 2, the focus was made on the reading and writing skills of the sixth graders who performed the tests in reading comprehension in English. Even though the results of the tests were poor in reading and writing there was very weak relationship between receptive and productive skills. Likewise, parents' level of education and number of book at home indicated that these socio economic variables did not influence the outcomes of the learners. Even the tests in reading comprehension had good reliability the impact of background variables was very low. It could be because the tests were in English and the questionnaire was in mother tongue (Kazakh or Russian). Therefore, to construct self-developed reading tests in English, Kazakh, and Russian would define the assessment of reading literacy and reading skills sufficiently clear.

As a result, for Study 3 first draft of self-developed tests in assessing reading skills in three languages were used. The implemented tests were appropriate for the Kazakhstani young learners as several language experts in Kazakhstan analyzed and evaluated the tests in the respected languages. Before applying the tests into the

system, the content and the type of the construction were considered to the topics of the core curriculum for secondary education of the targeted grades in Kazakhstan. After feedbacks and the suggestions from the experts, some corrections were included.

Additionally, a questionnaire assessing reading attitudes of the learners were involved (c.f. Clark & Foster, 2005) in parallel to same demographic items regarding the samples. Even though the reliability of tests ranged from .88 to .90 the effect of the reading attitude towards reading was not high. It seemed obvious that reading attitude tended to decline in the middle stage of the schools (McKenna et al., 1995) for Kazakhstani learners as well.

In Study 4, the self-developed tests were modified and several items were added to each language so the numbers of items in all three languages were the same in grades six and eight. In addition to reading attitude questionnaire, several modified background variables were include as classroom climate, engagement, learning English language etc., as used in Study 1, and some items regarding the sense of belonging to school of the students.

The measurement in Study 5 designated the significance of reading strategies and the way students think metacognitively while performing the tests in reading comprehension in a foreign language (English), mother tongue (L1), and L2. Therefore, the widely used questionnaire in the mother tongue (Kazakh and Russian) was applied. The original version of the reading strategy questionnaire Metacognitive Awareness of Reading Strategies Inventory (MARSI) (c.f. Mokhtari & Reichard, 2002) was in English. Thus, it was decided to translate the questionnaire from English into Kazakh, and Russian languages, and make the instrument suitable and allocated for students in Kazakhstan. Five language expert, who were proficient and fluent in Kazakh, Russian, and English translated the questionnaire twice back and forth in Kazakh and Russian languages.

**Table 7** *The overview of the scales and the instruments of the studies* 

Saala & Instruments		Study				
Scale & Instruments	1	2	3	4	5	
Socio-economic background						
(c.f. PISA: Background Questionnaire						
Framework (OECD, 2017, 2019a, 2019b)						
Demographic information						
(age, gender, grade, mother tongue, parents'	X	X	X	X	X	
level of education, number of books at home,	Λ	Λ	Λ	Λ	Λ	
desk, computer)						
Classroom context						
- Classroom climate	X			X		
- Student-teacher relationship	Λ			Λ		
- Feeling at school						
Engagement						
-Positive attitudes of EFL						
-Attitudes of English learning	X			X		
-Anxiety of new technologies						
-Interest of using new technologies						
·						

Reading Attitude					
(c.f. Clark, C., & Foster, A. (2005). Children's					
and Young People's Reading Habits and			X	X	
Preferences: The Who, What, Why, Where and					
When. National Literacy Trust)					
Reading Strategies					
(Metacognitive Awareness of Reading					
Strategies Inventory (MARSI) Version 1.0 by					X
Kouider Mokhtari and Carla Reichard, c.f.					
Mokhtari & Reichard, 2002)					
Six grade cognitive skills					,
Reading comprehension tests in English					
(c.f. Csapó & Nikolov, 2009; Nikolov & Csapó,	v	v			
2010;	X	X			
Nikolov & Csapó, 2018)					
Reading comprehension tests in English					
(self-developed, 2019, first draft)			X		
Reading comprehension tests in Kazakh					
(self-developed, 2019, first draft)			X		
Reading comprehension tests in Russian					
(self-developed, 2019, first draft)			X		
Writing skills in English					
(c.f. Csapó & Nikolov, 2009; Nikolov & Csapó,					
2010;		X			
Nikolov & Csapó, 2018)					
Reading comprehension tests in English					
(self-developed, 2020, modified version)				X	X
Reading comprehension tests in Kazakh					
(self-developed, 2020, modified version)				X	X
Reading comprehension tests in Russian					
(self-developed, 2020, modified version)				X	X
Eight grade cognitive skills Reading comprehension tests in English					
(c.f. Csapó & Nikolov, 2009; Nikolov & Csapó,	X				
2010; Nikolov & Csapó, 2018)					
1 ' /					
Reading comprehension tests in English			X		
(self-developed, 2019, first draft)					
Reading comprehension tests in Kazakh			X		
(self-developed, 2019, first draft)					
Reading comprehension tests in Russian			X		
(self-developed, 2019, first draft)					
Reading comprehension tests in English				X	X
(self-developed, 2020, modified version)					
Reading comprehension tests in Kazakh				X	X
(self-developed, 2020, modified version)					
Reading comprehension tests in Russian				X	X
(self-developed, 2020, modified version)					

After the final versions were approved, they were implemented to the eDia online system. Confirmatory factor analyses revealed several factors and they had strong correlation to each other. In addition, Structural Equation Modeling (SEM) was used in the tests and the background variables as well, in terms of defining the relationship of the factors to the reading literacy achievements of the students in Kazakhstan. All background questionnaires had 5-point Likert scale. A detailed overview of the instruments in each study is summarized in Table 7. Although the process of collection data and the analysis we used during the analysis are further explained in this chapter.

#### 4.4 Procedures

#### 4.4.1 Data Collection

Taking into account low results of Kazakhstani learners in reading literacy, the necessity of improving the framework in core curriculum for teaching and learning reading skills, and literacy in the middle school were among priorities. Thus, the obtained results from assessment would provide the clues and evidences for assisting the issue and define the problem. Upon all these requirements the requests from the Ministry of Education and Science of Kazakhstan for collecting the data in the secondary schools in Pavlodar was the core issue. After permission letters from the Ministry of Education were approved, an official confirmation was sent to the Department of Education in Pavlodar region and city.

The collaboration of seven randomly chosen secondary schools started from September 2017 and the first official assessment survey started in January-February, 2018. Data collection for Study 1 and Study 2 conducted in 2018. As the collection pursued computer-based assessment (CBA), the schools administration and the teachers of ICT labs smoothly organized flexible timetable for the children in each grade so there were no any problems in the procedures and the internet connection was good.

ICT facilities in each school provided several computer rooms, so the students were able to enter and perform the tests through the Electronic Diagnostic Assessment (eDia) online platform (Csapó & Molnár, 2019). The school administration and several teachers deemed the technical adjustment during the process of collecting the data in each study although the instructional part was under my personal responsibility. The timetable and the time for instruction were clearly prepared beforehand in detail because of the winter period and location of each school.

As Pavlodar is in the north part of Kazakhstan, the climate in Pavlodar is very continental (i.e. hot summers and cold winters). January and February are usually the coldest months in winter. Thus, the temperatures could be below zero from -25°C to -30°C and it is really very cold, freezing, and with lots of snow. In addition to, each school had a different location and it took almost 30-40 minutes on our way to visit each school. Thus, it was challenging to collaborate with teachers and the school staff a week before for making a flexible timetable for each school and classes.

The collection for Study 3 was administered on the same online platform in 2019 (January-February) in the same seven schools. Most teachers and ICT managers in the schools were already familiar with the process that happened in 2018 thus, the academic activity in schools was not disrupted. After first data collection, which was performed in 2018 the results of the analysis were sent to each school administration

and the principals. Likewise, the report analysis of students' outcomes was posted to the Departments of Education in Pavlodar region and city as well.

Before sending, the report was translated into Kazakh and Russian languages in order to reveal and comprehend the issues clear. Furthermore, in 2021 the final report is planning to send to the Ministry of Science and Education of Kazakhstan, Departments of Education of Pavlodar region, city, and schools. This could be one of the efforts to modify the framework for teaching and learning, assessment and development of reading literacy skills among young learners in the middle school. We hope that this would be beneficial and useful for education reform system in Kazakhstan.

For Study 4 and Study 5 that was administered in 2020 the same selected schools participated in the assessment and the respondents as in the previous years, performed the tests and questionnaire online. Every year the students were instructed before the tests, and after the instruction, a password was given for entering the platform. I was in a part of an instructor, and assist computer labs if the students had a problem. Although it was difficult to guide all classes simultaneously, thus, several ICT assistants in the labs were instructed before the assessment project so they assisted some classes. However, the main guidance of each class was under my personal responsibility in each school, especially when some schools had a new teaching staff in ICT subjects, which required time and effort to explain, albeit those schools that had the same ICT managers could help a lot, as they had already known the procedure.

## 4.4.2 Data Analysis

Regarding our main goal of the research to assess reading literacy skills in mother tongue and English as the foreign in middle schools in Kazakhstan, to build and construct an effective educational framework for sufficient learning and teaching process, was one of the opportunities in the statistical analysis of the data. The data from CBA were analyzed by using various programs and software for statistics, as Statistical Package for Social Sciences (SPSS), Mplus (Muthén & Muthén, 2017), IRT (Wu & Adams, 2007), and the Analysis of Moment Structure (AMOS) version 24. All five studies provide descriptive methods that estimate the reliability of the responses and the tests performances, as well as factor analysis, which confirms the correlation of the factors and the effect of the factors towards reading achievement.

Exploratory factor analysis (EFA) in Mplus was used towards defining the number of latent factors regarding background questionnaire in Study 1. Six-factor model was defined as the good factor loading and the model fit indices fit well. Therefore, confirmatory factor analysis (CFA) was applied in order to confirm the number of factors in the background questionnaire. Maximum likelihood estimator was used and the indices showed a good fit to the model. In addition, in Study 1 in order to examine the convergent validity and composite reliability of the instruments AMOS was applied. Thus, concluding that the background questionnaire items correlated and related well to the samples in the context of Kazakhstan.

In Study 1, 3 and 4 Item response theory (IRT) program was applied in order to see students' abilities to the items of the test difficulties. IRT statistics "generally provide a table of estimated item parameters, and a table of estimated person parameters, as well as information about the fit of the data to the model, and other characteristics of the items" (Wu & Adams, 2007, p. 63). Rasch measurement with IRT program estimates the scale of the students' abilities regarding the raw scores that

orchestrate the test's items. Rasch analyses were required in constructing and implementing self-developed tests in three languages for 6<sup>th</sup> and 8<sup>th</sup> graders.

In Study 2 multiple regression analyses was applied stepwise method was used to fit the choice of predicting the students' achievements regarding their SES variables as mother's and father's highest level of education, and number of book at home. In addition to this regression analysis paired-sample t-test were used to ascertain which type of the tests did the students performed better, whether there were any differences between the types of the tests (i.e. information retrieval, inference, and reflection).

For Study 3 and 4 Analysis of variance (ANOVA) was used to explore the differences of students' outcomes regarding their mother tongue, gender, and grades. Post hoc defined the differences between the groups' variables of the participants due to their native languages. Further, the analysis of the data were compared between year 2019 and 2020, the results showed that they were significant differences in 2019 and 2020 in reading achievement in terms of mother tongue and gender.

Structural equation modeling (SEM) we used in Study 1 and 4 to test the conceptual model determining that engagement could be a mediator between classroom climate and the students' achievements. The measurement was conducted by Mplus program software. In Study 4 we conducted RStudio computer software to define the classroom climate and the level of engagement of the students in grades sixth and eighth.

SEM analysis actually has two stages measurement model and structural model where the former model used "...for both CFA and SEM is a multivariate regression model that describes the relationships between a set of observed dependent variables and a set of continuous latent variables" (Muthén & Muthén, 2017, p. 55). The latter model "describes three types of relationships in one set of multivariate regression equations: the relationships among factors, the relationships among observed variables, and the relationships between factors and observed variables that are not factor indicators" (Muthén & Muthén, 2017, p. 56).

Study 5 demonstrated the adaptation of the MARSI test to the new cultural environment while testing students' metacognitive awareness of reading strategies during reading process. The application of reading strategy questionnaire was used to investigate how the validated instruments could be verified. Confirmatory Factor analysis was applied after exploratory factor analysis revealed the factors in the context of Kazakhstani young learners. CFA was used to confirm the factors in the structure of the metacognitive awareness of reading strategies within its original form. The goodness of fit indexes of CFA should provide the following values to the model as chi-square  $(X^2)$ , p< .05; comparative fit index (CFI) >.90; Tucker-Lewis index (TLI) >.90; root mean square error of approximation (RMSEA) <.08; standardized root mean square residual (SRMR) <.08. These are the evidences of appropriate model fit that meet statistical criteria in SEM and CFA analysis (Marsh, Hau, & Wen, 2004; Campbell, 2015).

To sum up, this chapter provides a detailed outline of data collection in all research studies. Statistical analysis for each study seemed appropriate (Cohen, Manion, & Morrison, 2007) to achieve reliable outcomes and evidences for further framework suggestions in the assessment process, quality, and the equity adjustment for education system in Kazakhstan. The overview of the instruments, research questions, and the usage of suitable quantitative methods to assess students' reading skills and reading literacy in Kazakh, Russian, and English languages were relevant. All these particulars of the research study were in detail characterized in the current

chapter. The following chapter provides the findings and discussions of the results that determine the point of this dissertation.

#### **CHAPTER 5: RESULTS**

# 5.1 Assessment of reading skills in English and socio-economic background among learners in middle schools in Pavlodar, Kazakhstan

#### 5.1.1 Introduction

Low results of Kazakhstani 15-year-old students in the reading literacy in Programme for International Students Assessment (PISA) (M=390 in 2009 to M=387 in 2018) could be worrying in terms of literacy development and the quality of education (OECD, 2019b) because students have not received enough "key knowledge and skills essential for full participation in society" (PISA, 2018). One of the ways to understand the issue of these negligent results in reading literacy is conducting frequent assessment, and be aware of the data results in a certain issue. Therefore, the first pilot study was conducted in Kazakhstan, in 2018. Validated tests in English reading comprehension were applied. In Kazakhstan, English is a compulsory foreign language and is widely used in every part of modern society by million people all over the world. Previously the tests had been validated in Hungary (Csapó & Nikolov, 2009; Nikolov & Csapó, 2010, 2018) among students of 6<sup>th</sup> and 8<sup>th</sup> grades. Hence, these reading comprehension tests in English were implemented in the context of Kazakhstan for the first time in 2018 to explore reading skills in English of 6<sup>th</sup> and 8<sup>th</sup> graders. These tests are the diagnostic tests as they refer to the achievement type of the tests and provide teacher and the learner a clear image of the gaps in the process of teaching and learning. Diagnostic tests help both to differentiate the problem that has to be changed, and the progress that is supposed to be developed (Johnson, 2017).

No empirical experiences assessing reading literacy, reading attitude, and reading comprehension among young learners in the secondary schools of Kazakhstan conducted before. Thus, conducting the first pilot study in Kazakhstan will help us to reveal the issue, and develop a research framework for further analysis and recommendations to teachers, parents, students, and other stakeholders. The Reviews of National Policies for Education: Secondary Education in Kazakhstan Organization for Economic Co-operation and Development (OECD) (2014a) reports that teachers are not frequently apply and implement research assessment in the classroom. Likewise, international surveys have showed that 15-year-old students in Kazakhstan are two years behind of the average from OECD countries. In order to understand the gaps of poor results of the students in the subject constant assessments might highlight the weak sides that jeopardize the results and outcomes.

Interestingly, the results of the questionnaire survey in both grades revealed the same factors regarding variables of classroom climate and engagement. Although we conducted assessment survey for the first time, young learners in both grades of the targeted schools indicated low achievement in reading skills of English as a FL. We suppose that this might be one of the reasons for weak quality of education in the middle education and not appropriate development of reading literacy in particular.

These randomly obtained results of the learners underlined the clues to solve the existing issue. In addition to, we suppose that several latent factors that can be revealed from the classroom climate and engagement will indicate the challenges in the issue of teaching and learning EFL and reading skills in particular. Hence, through validation and assessment of the instruments will be determined as one of the pivotal directions for quality improvement in education system of Kazakhstan.

#### 5.1.2 Methods

## 5.1.2.1 Participants

The participants were sixth and eighth graders randomly selected from seven middle schools in Pavlodar, the city in the northern part of Kazakhstan. The total number of the students was (N =1,206). However, some of the data were not recorded in the online questionnaire thus, we conducted data screening for checking outlier and missing data and then the final dataset had N=906 students of both  $6^{th}$  and  $8^{th}$  grades. The demographic sample of the study is represented further in the Table 8.

**Table 8** *Number of participants in the Grades 6 & 8 (2018)* 

Grade 6	Grade 8
369	537
37.8	62.2
11.99	14.00
.22	.21
32,0	25.9
66,9	73.7
1.1	.4
	369 37.8 11.99 .22 32,0

#### 5.1.2.2 Instruments

The validated instruments (Nikolov & Csapó, 2010; 2018) for evaluating the performances of reading skills among 6<sup>th</sup> and 8<sup>th</sup> graders have been adapted for the context of Kazakhstan. The original battery of reading comprehension tests in English were modified for the students of middle school in Kazakhstan. Thus, sixth graders performed two tasks in English and eighth graders did four tasks. Furthermore, PISA 2015 background questionnaire variables were implemented (OECD, 2017) to understand the development of reading skills in EFL. In particular, classroom climate reported by students involved (5 items), student-teacher relationship (5 items), interest and like of English (5 items), attitude in English learning (5 items), usage of ICT (5 items), anxiety of ICT (3 items). The items were measured by 4-point Likert scale from strongly disagree to strongly agree. The instruments for background questionnaire included items used in PISA background questionnaire of 2018, 2015, and 2012 for Kazakhstan. Official translation of the questionnaires were presented in PISA cites (OECD, n.d.), albeit some simple modification in Kazakh and Russian languages were accomplished by five language experts from Kazakhstan in order to make language appropriate for young adolescents.

### 5.1.2.3 Procedures

Data were collected using eDia platform, the online system for learning and instruction from University of Szeged (Csapó & Molnár, 2019). The students were required to answer PISA background questionnaire in their mother tongue (OECD, 2017). After finishing background questionnaire sixth and eighth grade students had to perform the tests in English, assessing reading skills and abilities (Csapó & Nikolov, 2009). The respondents performed different reading comprehension tests due to different level of English language as the foreign but answered similar

background questionnaire in their mother tongue. An immediate feedback was given to the students after performing Reading Comprehension Test (RCT) in English. Before entering the online platform, students were instructed and obtained a personal password, which was eliminated after the survey. The duration time for the tests and questionnaire depended on student's reading abilities, logical thinking, and comprehension in English and background questionnaire in his or her mother tongue. Approximately 30 minutes took the tests in English, and 20-35 min. – the background questionnaire. The analysis was conducted with the help of IBM Statistical Package for the Social Sciences (SPSS) Version 23 and the Analysis of Moment Structure (AMOS) version 24. The process of our analysis started from checking common method bias, exploratory factor analysis, confirmatory factor analysis, invariance analysis, and regression. In addition to, the reliability and validity of the instruments were showing further. Tests performances of 6<sup>th</sup> and 8<sup>th</sup> graders were not compared to each other and were analyzed separately although while defining factors in the model the results of both grades were merged and analyzed together.

## 5.1.3 Study Results

5.1.3.1 Psychometric properties and differences in cognitive operational types

# Reliability and Validity

The Cronbach's alpha of the tests and the background questionnaire variables in both grades showed good measurement indicator from .91 to .96 respectively (Table 9). The structure and the content of the tests for 6<sup>th</sup> and 8<sup>th</sup> graders as well as the subscales of the questionnaire assessing background that are explored in the current study revealed several factors, which could impact and foster achievements in reading comprehension skills in English.

**Table 9** *The structure and the content of the reading tests in Grades 6 & 8 (2018)* 

Grade	Test	Tasks		Cronbach's
			of items	Alpha
	Reading test 1 in	Match the title of the book	10	.923
6	English			
U	Reading test 2 in	Match the missing part of	10	.898
	English	the text		
	Reading test 1 in	Match words with the	10	.893
	English	definition		
	Reading test 2 in	Match notices with the	9	.897
8	English	meaning		
0	Reading test 3 in	Match the question to the	9	.871
	English	answer		
	Reading test 4 in	Match the question to the	8	.904
	English	passage		

Classroom climate, students-teacher relationship, positive attitudes towards learning EFL, interest, and anxiety of using new technologies were hypothesized as factors, and could influence students' reading and language achievements in EFL. Moreover,

poor academic achievements in reading skills of the learners in the middle school partly or indirectly depend on these factors (Lee & Schallert, 2014; Reyes et al., 2012).

Reading comprehension tests have several tasks (Reading test 1, 2, 3, 4) and by the cognitive operational type the tests, in both grades, refer to Information Retrieval (IR) and Inference (Inf.) tasks. IR task defines the way of retrieving and determining information — "a corpus of stored information the portions which are relevant to particular information needs" (Sembok et al., 2008, p. 460). Inference task needs a conclusion from the various recourses and key words around the context in order to understand the meaning of the word. Inf. task requires acquisition of a new meaning from the context the performer needs to make a conclusion and insert the required information.

The tasks "Match the title of the book", "Match words with the definition", "Match notices with the meaning" were referred to IR. The tasks "Match the missing part of the text", "Match the question to the answer", "Match the question to the passage" were regarded to Inf. tasks. The results showed that the students did better in Information Retrieval (IR) tasks than Inference (Inf.). However, in the eighth grade the mean differences were non-significant. During our instruction and the observation the way of teaching and learning in various languages in the schools, we noticed that most English language teachers use various textbooks and resources published abroad and the frequency of applying IR and Inf. is supposed to be implemented more than in teaching Kazakh or Russian languages (Table 10).

 Table 10

 Information retrieval vs inference

Grade	Paired sample t-test	Language	M <sub>diff</sub> (%)	t	p
6	Information retrieval –	English	5.97	5.94	<.001
	Inference				
8	Information retrieval –	English	.14	.21	n.s.
	Inference				

## 5.1.3.2 Grade performances

At present in Pavlodar Kazakh-speaking community occupies 52% of population, although 33% is Russian people, and 15% includes the diversity of other ethnic groups (e.g., Ukrainians, Germans, Tatars, Chechens, etc.). Kazakh people are bilingual and are able to speak, read, and write in both Kazakh and Russian languages, albeit it could be observable mostly in the northern part of Kazakhstan and partly in the east. Although in the west and south parts of Kazakhstan the percentage of people, speaking in Kazakh towards Russian is significantly higher. Reading comprehension tests in English showed moderate ability level of 6<sup>th</sup> and 8<sup>th</sup> graders (Table 11).

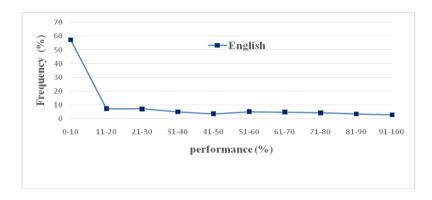
**Table 11**Students' test performance in English (Grades 6 & 8)

Reading Comprehension Test in English				
Grade	M (%)	SD (%)	Min. (%)	Max. (%)
6	23.44	29.09	.0	100
8	45.81	30.84	.0	100

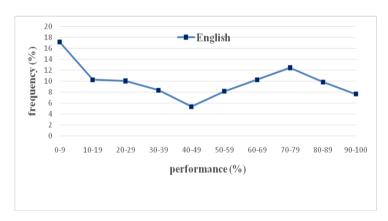
This could suppose to be poor reading skills in English, difficulty of the tests as well as inappropriateness of the tests to Kazakhstani young learners' background and their socio-economical environment. In addition, the performances in English could depict the hypothesis of students' age and duration of learning English (i.e. some classes in the schools have started to learn English from the 5<sup>th</sup> grade).

The reading tests in English language were appropriate for both grades there were no items of lower or higher ability level. Several high ability items should be included in the tests in both cohorts. The distribution in Grade 8 positioned better than in Grade 6, although in general both grades performed poor in the tests of English (see Figures 4 and 5).

**Figure 4** *Performance Distribution (Grade 6)* 



**Figure 5** *Performance Distributions (Grade 8)* 

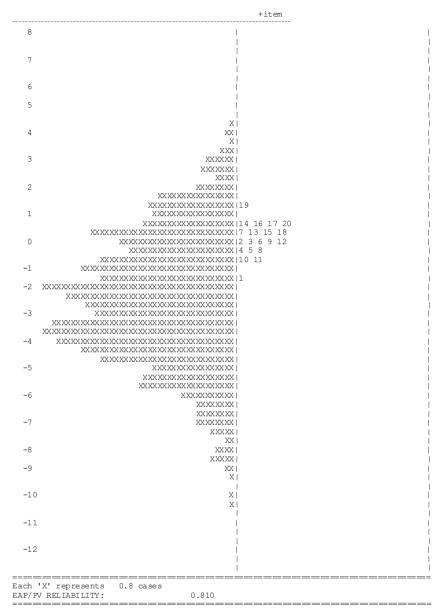


Item person map (see Figures 6 and 7) revealed that the tests for Grade 6 were relatively appropriate. Students' ability level and the tests' difficulties distributed well, although it seemed to add several items to the test of English for grade 6.

The distribution could clearly demonstrate the tendency of reading skills in English in Grade 8 (see Figures 6 and 7).

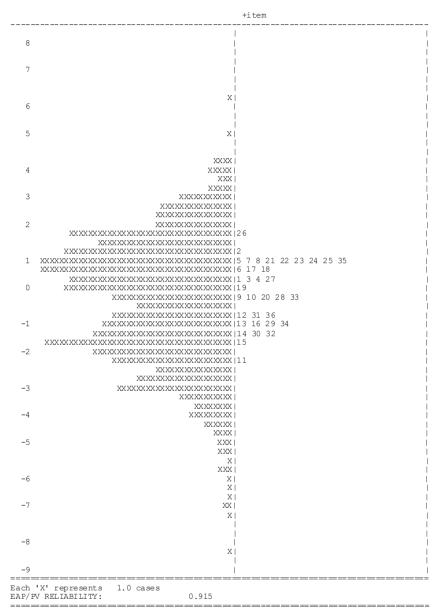
One-parameter Rasch model analysis revealed the detailed picture of the tests for sixth and eighth grades (see Figures 6 and 7). Although the results of the students in Grade 8 comparing to the students in Grade 6 were higher, although low. It seems that weak results in English language may suggest of problem in the quality of teaching and learning English language and the skills in a FL. Low rate in reading comprehension and literacy among students in targeted schools is obvious.

**Figure 6** *Item-person map for English reading test – Sixth Graders* 



65

Figure 7
Item-person map for English reading test – Eighth Graders



5.1.3.3 Reading comprehension in English as FL within gender and language differences

## Gender differences

Both sixth and eighth graders showed no gender differences while performing the tests as the percentage was almost the same. In Pavlodar, in the North part of Kazakhstan the differences between boys and girls in secondary schools is usually the same so we cannot depict that boys performed better than the girls. Although while talking to the teachers from the assessed schools, girls usually show better results in primary and lower secondary grades than the boys but the tendency that most boys start to perform better in the upper grades was often obvious as well (see Table 12).

 Table 12

 Gender differences in tests performances

Grade	Girl		Boy			
Grade	N	Mean (SD)	N	Mean (SD)	t	p
6	199	14.06 (12.06)	170	14.04 (11.82)	0.02	.98
8	257	19.32 (9.99)	280	19.07 (9.78)	0.29	.77

Comparing the results of reading comprehension tests in English, the t-test showed significant difference in the sixth grade, whose first language is Kazakh, performed better than those, whose first language, and/or the language they speak at home is Russian. However, in grade eighth the difference of Kazakh and Russian students performing reading tests in English was negatively insignificant (Table 13).

 Table 13

 Language differences in tests performances

Grade	First language: Kazakh		First language: Russian			
	N	Mean (SD)	N	Mean (SD)	t	p
6	171	15.38 (12.24)	198	12.89 (11.57)	1.99	.04
8	209	19.06 (10.24)	328	19.27 (9.65)	-0.24	.84

5.1.3.4 Latent factors and reading achievements in EFL

#### Common method bias

Harman's single factor was applied and tested, as in common method bias (CMB) analysis all variables in the construct define if a single variable appears in the covariance between the measures using principal axis factoring extraction (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). 21.175% is the result of the cumulative variance indicating less than 50 per cent of the threshold. Hence, our study is free of bias issue.

#### Exploratory Factor Analyses

Exploratory factor analysis (EFA) is applied in order to define the relationship between variables observed in the instrument in case of uncertainty (Thompson, 2004; Brown, 2015). EFA measures students' answers to the PISA questionnaire variables referring to certain background items and composing six factors based on classroom climate and engagement. The results from EFA is testifying that the means of Bartlett's test of sphericity derived from  $x^2 = 11983.557$ , df =378, p < 0.001 and KMO measure of sampling adequacy, KMO =0.864 is showing that the instrument is distinct and reliable with factors and pointing good quality for further analysis (Cohen, Manion, & Morrison, 2007; Field, 2009). Maximum likelihood extraction with Promax rotation for factor analysis was applied, data computation of the items with 28 items in six latent factors were not extracted as having an absolute value of the threshold was above 0.5 (Hair, Tatham, Anderson, & Black, 2010; Kock, 2014) (see Table 14).

## Confirmatory Factor Analyses

Confirmatory factor analysis (CFA) showed that the model fitted well to the data with the six-factor model in both grades. The reason for combining the grades was to check the model fit in general for both grades (see Table 14 and Figures 8, 9 and 10). Based on the results we could conclude that factors classroom climate and engagement met the criteria of fit indices (e.g., Hu & Bentler, 1999, p.6; Thompson, 2004, pp 129-132; Brown, 2015, pp. 71-73), according to them  $x^2/df > 1$ , CFI/TLI>0.95, SRMR <0.08 RMSEA <0.06 and p-value >0.05. This means that the factors in both grades fit to the model. Table 14 represents a set of relationship of the variables we performed Confirmatory Factor analysis (CFA). The model fit was acceptable when we conducted CFA for the background variables in six and eight grades.

**Table 14**Goodness of fit indices in six-factor model CFA

	X	df	CFI	TLI	RMSEA
Grade 6	649.671	335	.953	.947	.042
Grade 8	542.916	335	.959	.954	.041
All 6 &	587.603	335	.957	.951	.041
8 grades					

Figure 8

CFA Grade 6

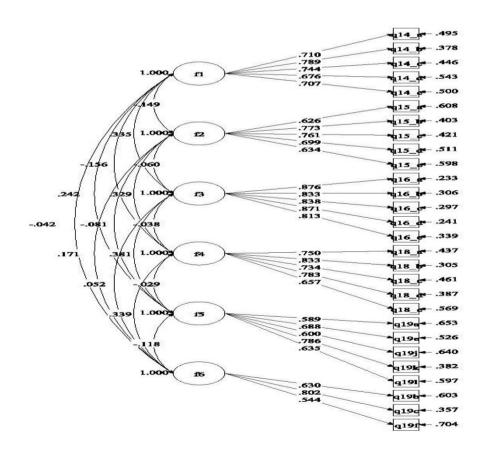
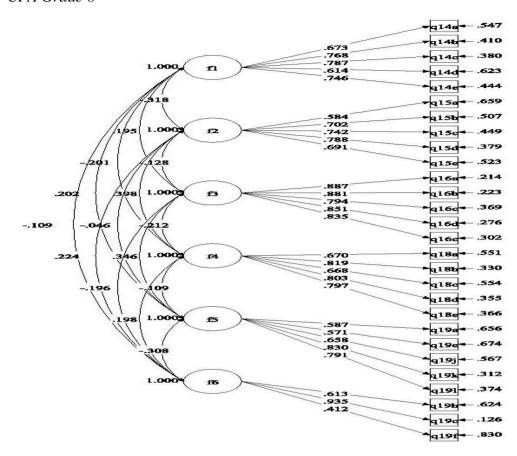


Figure 9

CFA Grade 8



The six-factor model fitted well to the data in both grades TLI and CFI are the same for both grades. Convergent validity can be achieved as well using score of factor loadings in each item in latent factors if the value is above 0.5 (Kock, 2014). All items have factor loading more than 0.5 showing that instrument in this study has achieved convergent validity criteria (see Tables 15 and 16).

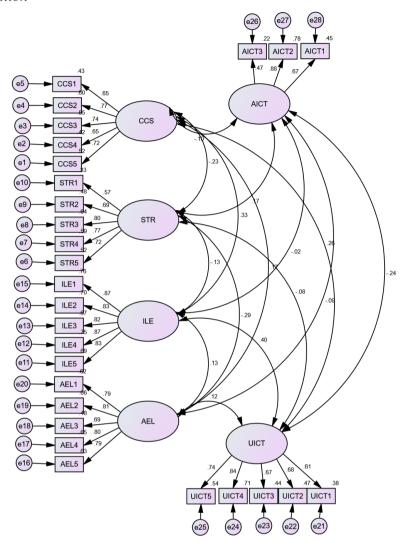
**Table 15**Factor loading for grade 6 (2018)

	ing for grade o (2010)	Loading	M	SD
Factor 1:	Classroom climate reported by student	α=.858	3.09	.71
	(CCS)			
	Students don't listen to what the teacher says	.713	2.96	.90
	There is noise and disorder	.795	2.98	.87
	The teacher has to wait a long time for students to settle down	.759	2.99	.94
	Students cannot work well	.663	3.22	.82
	Students don't start working for a long time after the lesson begins	.698	3.34	.87
Factor 2:	Student-teacher relationship(STR)	$\alpha = .827$	2.00	.76
- <b></b>	My teacher is interested in the progress of each student	.641	2.15	1.00
	My teacher provides extra-help to student if necessary	.783	1.98	.97
	My teacher helps students in school	.759	1.82	.90
	My teacher continues to explain the lesson until all	.689	1.95	1.03
	students fully understand My teacher gives students the opportunity to	.624	2.13	1.04
E 4 2	express their opinions	021	2.55	0.5
Factor 3:	Interest and like of English (ILE) I like learning English	$\alpha = .931$	2.77	.85
		.877	2.79	.99
	I like reading in English	.832	2.77	.97
	I like doing English language tasks	.841	2.72	.89
	I like to get new knowledge in English language	.873	2.82	.96
	I am interested in English	.811	2.79	.97
Factor 4:	Attitudes of English learning (AEL)	$\alpha$ =.875	1.80	.64
	English is important for society	.751	1.62	.73
	English is very important for me	.839	1.88	.78
	I think English is a language of international	.731	1.85	.79
	communication When I finish school I will have many opportunities to use English	.781	1.84	.81
	I will use English language in many ways when I become an adult	.657	1.83	.81
Factor 5:	Usage of new technologies (UICT)	$\alpha = .801$	2.83	.65
	I am interested in new technologies	.575	2.86	.96
	I am always interested in using the latest technical devices	.687	2.75	.89
	It depends on me whether I succeed in using new technologies or not	.603	2.69	.81
	I feel happy to use new technologies.	.776	2.99	.84
	The result of my use of new technologies depends only on me	.662	2.86	.82
Factor 6:	Anxiety of new technologies (AICT)	$\alpha = .711$	2.02	.65
- *	Using new technologies creates problems for me	.592	2.06	.78
	I find it difficult to use new technologies – I do not know how to work with them	.841	1.99	.83
	When I use new technologies I feel the fear of failure	.550	2.03	.85

**Table 16**Factor loading for grade 8 (2018)

		Loading	M	SD
Factor 1:	Classroom climate reported by student	α=.840	3.25	.63
	(CCS)			
	Students don't listen to what the teacher says	.666	3.14	.83
	There is noise and disorder	.767	3.20	.77
	The teacher has to wait a long time for students to settle down	.806	3.26	.81
	Students cannot work well	.613	3.31	.79
	Students don't start working for a long time after the lesson begins	.737	3.36	.80
Factor 2:	Student-teacher relationship(STR)	$\alpha = .827$	1.95	.72
	My teacher is interested in the progress of each student	.584	2.19	.97
	My teacher provides extra-help to student if necessary	.706	1.89	.88
	My teacher helps students in school	.737	1.80	.91
	My teacher continues to explain the lesson until all students fully understand	.793	1.90	.95
	My teacher gives students the opportunity to express their opinions	.690	1.99	1.00
Factor 3:	Interest and like of English (ILE)	$\alpha = .928$	2.87	.80
	I like learning English	.889	2.92	.95
	I like reading in English	.881	2.86	.89
	I like doing English language tasks	.795	2.71	.85
	I like to get new knowledge in English language	.850	2.95	.89
	I am interested in English	.836	2.91	.95
Factor 4:	Attitudes of English learning (AEL)	$\alpha = .866$	1.74	.61
	English is important for society	.675	1.57	.67
	English is very important for me	.823	1.80	.77
	I think English is a language of international communication	.670	1.64	.71
	When I finish school I will have many opportunities to use English	.799	1.81	.79
	I will use English language in many ways when I become an adult	.794	1.90	.85
Factor 5:	Usage of new technologies (UICT)	$\alpha = .815$	2.89	.66
	I am interested in new technologies	.565	2.97	.94
	I am always interested in using the latest technical devices	.561	2.72	.89
	It depends on me whether I succeed in using new technologies or not	.658	2.83	.81
	I feel happy to use new technologies.	.837	3.04	.82
	The result of my use of new technologies depends only on me	.803	2.94	.85
Factor 6:	Anxiety of new technologies (AICT)	$\alpha = .671$	1.95	.62
	Using new technologies creates problems for me	.621	2.00	.77
	I find it difficult to use new technologies – I do not know how to work with them	.923	1.87	.84
	When I use new technologies I feel the fear of failure	.413	1.98	.77

**Figure 10** *CFA both grades after modification indexes, standardized factor loading and correlation* 



In order to see problem of the poor reading achievements of the young learners the correlation of the revealed factors could be observed further in grades six and eight (see Tables 17 and 18). In the correlation of the factors, we noticed that the relationship is statistically significant as the students become older this means that that the revealed factors are necessarily important for the development of students' learning and teaching process in general.

**Table 17**Correlation Coefficients between Background Factors 6 grade

Factors	CCS	STR	ILE	AEL	UICT	AICT
Classroom climate by	-	134**	.317**	125***	.219**	033
student (CCS)						
Student-teacher			047	.277**	046	.128**
relationship (STR)					de de	
Interest and Like of				034	.349**	.051
English(ILE)						~~
Attitudes of English					026	.256**
learning (AEL)						
Usage of new						055
technologies (UICT)						
Anxiety of new						-
technologies (AICT)						

<sup>\*\*</sup> p<.01

**Table 18**Correlation Coefficients between Background Factors 8 grade

Factors	CCS	STR	ILE	AEL	UICT	AICT
Classroom climate by student (CCS)	-	259**	.171**	169**	.181**	099*
Student-teacher relationship (STR)			104**	.348**	017	.189**
Interest and Like of English (ILE)				178**	.316**	170**
Attitudes of English learning (AEL)					099*	.160**
Usage of new technologies (UICT)						250**
Anxiety of new technologies (AICT)						-

<sup>\*\*</sup> p<.01

The correlation of the factors was good and valid, where the square root of average variance extracted (AVE) higher than correlation between latent factors below in Table 19, which indicated that discriminant validity achieved in this study. However, for convergent validity (CV), the AVE in AICT is 0.482 and usually it is necessary to have AVE more than 0.5 for each factor variable and composite reliability (CR) should be 0.70 or above (Hair et al., 2010). In case the AVE is below 0.5 and the CR is more than 0.6 convergent validity of the construct could still be met the minimum thresholds (Farrell, 2010; Field, 2009) (Table 19).

<sup>\*</sup>p<.05

 Table 19

 Reliability and validity based on based on Fornell-Larcker Criterion

	α	CR	AVE	MSV	MaxR (H)	CCS	STR	ILE	AEL	UICT	AICT
CCS	0.849	0.834	0.503	0.111	0.840	0.709					
STR	0.830	0.839	0.513	0.084	0.852	-0.232***	0.716				
ILE	0.928	0.926	0.713	0.159	0.927	0.334***	-0.135*	0.845			
AEL	0.881	0.885	0.607	0.084	0.889	0.167**	-0.290***	0.127*	0.779		
UICT	0.818	0.836	0.508	0.159	0.855	0.264***	-0.085	0.398***	0.124*	0.713	
AICT	0.693/ 0.712*	0.724	0.482	0.057	0.822	-0.096†	0.166**	-0.024	-0.092†	-0.240***	0.695

Note: significance of correlations; ILE = Interest and like of English; CCS = Classroom climate reported by student; STR = Student-teacher relationship; UICT = Usage of new technologies; AICT = Anxiety of new technologies; AEL = Attitudes of English learning

<sup>†</sup> p < 0.100

p < 0.050

<sup>\*\*</sup> p < 0.010

<sup>\*</sup> p < 0.050

<sup>\*\*</sup> p < 0.010

# Regression

The relationships between revealed factors and reading achievements in English were examined using score factor of each latent factor saved from measurement model in CFA. In order to determine the affect of the factors detected from the background variables on students' reading results in EFL the regression analysis was conducted. The integration of background factors showed the following findings. Regression analysis (RA) with independent variables — six factors from the background questionnaire, and English reading tests as the dependent variables together in sixth and eighth graders showed that reading correlation in both grades was non-significant (p>.05). This is supposed to be that the influence of affective factors of young adolescents in the middle school towards tests' achievements is extremely low.

**Table 20** *Regression analysis grades* 6<sup>th</sup> and 8<sup>th</sup>

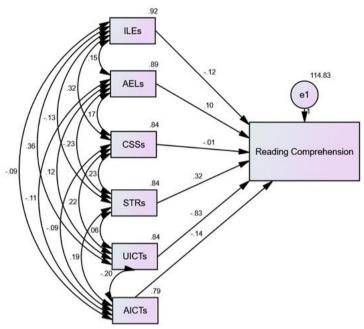
	Grade 6			Grade 8			
Prediction	path	t	p	path	t	p	
	coefficient			coefficient			
	(estimate)			(estimate)			
ILE -> Reading comprehension	.346	.731	.636	446	.521	.392	
CCS ->Reading comprehension	116	.693	.867	.047	.565	.934	
STR -> Reading comprehension	.373	.678	.582	.286	.554	.606	
UICT-> Reading comprehension	-1.448	.745	.052	374	.543	.491	
AICT -> Reading comprehension	170	.713	.812	055	.533	.917	
AEL -> Reading comprehension	.077	.625	.902	.145	.531	.785	

Note: ILE = Interest and like of English; CCS = Classroom climate reported by student; STR = Student-teacher relationship; UICT = Usage of new technologies; AICT = Anxiety of new technologies; AEL = Attitudes of English learning

Researchers (Jia et al., 2009; Pianta et al., 2008; Ryan & Patrick, 2001) confirm that students and teachers interaction and the classroom climate influence the learning outcomes of the children. However, if the interaction of the students with the teacher is low, or the classroom climate is negative then the outcomes of the students will be very low (Reyes et al., 2012).

The probability of low results could show the problem in the classroom climate between teachers and student's interaction in the process of teaching and learning, which further influenced reading skills in EFL. Figure 11 showed very small impact of affective factors on English reading tests of both grades. Thus, based on our results we could conclude that poor achievements in reading comprehension tests in EFL did not relate significantly to the latent factors. This indicates to the problem in the classroom climate, student's interaction in the school climate and engagement, which seemed to be interesting for further detailed investigation.

**Figure 11** *Regression analysis on the English Reading of the* 6<sup>th</sup> & 8<sup>th</sup> grades



#### 5.1.4 Discussion

The results indicate that both grades exhibited the same number of latent factors from the background questionnaire. Although learners from grades 6 and 8 produced poor results in English reading skills, the number of factors did not significantly influence the outcomes of the learners' reading skills in EFL. This might indicate that weak teacher-student interaction in the classroom, low support from peers or parents, little intervention from literacy leaders, and an insufficient environment may produce low EFL reading skills. These findings are in accordance with Alsowat (2016), confirming the challenge of teaching using the EFL flipped classroom teaching model in relation to classroom climate and engagement. In addition, several latent factors related to classroom climate and engagement indicated challenges in teaching and learning EFL reading skills, which may provide directions on how to manage as well as motivate young adolescents to read more in the middle school in Kazakhstan. Parents' level of education was not found to directly correlate to the outcomes of reading skills in English, as has also been established by Myrberg and Rosén (2009), who identified no direct effect of parents' education on reading skills and reading achievement. Thus, voung learners should be clearly instructed on the importance and necessity of reading. If children are informed that reading is the path to literacy and knowledge, they can properly evaluate the significance of pursuing it. Moreover, school libraries, librarians, teachers, and policymakers should investigate what books students are interested in and prefer to read. Books in school libraries should be updated frequently because this could underpin students to visit school libraries regularly.

Dotterer and Lowe (2011) indicated that school engagement may be mediated between classroom context and the academic achievements of students who did not have previous achievement difficulties. In particular, Dotterer and Lowe (2011) conducted their research among fifth-grade students and concluded that in students

with previous achievements problems, the school engagement might not be a mediator between classroom climate and academic achievement. In such a case, these authors suggested applying several additional strategies for low achievers. However, Baker (2006) showed that students with learning and behavioral problems performed poorly and that the classroom adjustment did not benefit them relative to those with high achievement or to peers who had a close relationship to the teacher. Although the impact of these factors is considerably low on English achievement, the issue of teaching and instruction in the classroom context may be the reason. Furthermore, Downer, Rimm-Kaufman, and Pianta (2007) reported that teachers' high quality of instruction in the classroom context facilitates children's engagement with high-risk problems and difficulties in school. Downer et al. (2007) also confirmed that classroom quality provides and supports engagement, which further stimulates motivation and being a mediator between students' outcomes.

Another indication that bilingual and monolingual young learners' reading and learning English as a foreign language may face problems with phonological awareness, sentence construction and reading comprehension, as they experience limited communication in English and relatively little time for instruction (Cline & Shamsi, 2000; Singleton & Vincent, 2004). Researchers assume (Singleton & Vincent, 2004, p. 114) that students who do not have a good "standard of English" and/or experience difficulties at the word level may be dyslexic and may encounter serious problems with literacy. In order to solve the problem and assess reading literacy among bilingual and monolingual children in English, tests should be "culture-free". Moreover, translating English-language tests into the students' native language (Cline & Shamsi, 2000; Stanovich, 2000) should be out of the question, as these tests will not be appropriate to the students' context. Consequently, the tests should be carefully prepared for a certain age group, and consider context and level of language preparation, which require time and effort from teachers, students and other stakeholders.

The development of English reading literacy in Kazakhstan has had poor results along with other English reading skills. The issue of teaching and learning English must be given serious attention and considered an urgent topic. Frequent assessments should take place in the classroom, which will guide teachers in assisting their students in terms of their reading comprehension. Moreover, school administration should support teachers in developing teaching reading skills in English. Doing so well should include managing student motivation and enabling young learners to read more for pleasure both in and out of school to actively encourage reading habits in them.

Young learners should be taught to read for pleasure in and out of school. Reading habits should be actively invested to young learners. Parents, teachers, and other stakeholders should look at the reading problem from the other side as the key of the students' further development and prosperity for the successful future of the younger generation. If the children will learn that reading is the "path" to the literacy and the knowledge increase then libraries in Kazakhstan will be full of students. Moreover, the libraries will know the requirements of the students' interests and the preferences in reading. The books of the school libraries should be refreshed and foreseen every time, as this could be a reason or a "hook" makes students visit the school or public libraries. This first pilot study performed in secondary schools of Kazakhstan firstly should be alarming aspect for the principals, teachers, and policy makers for further improvements of teaching reading skills and literacy.

# 5.2 Relationship between reading and writing skills of $6^{\rm th}$ graders in English language and socio-economic background

#### **5.2.1 Introduction**

No doubts that reading improves writing and the more people read the more sophisticated and rich their vocabulary becomes which influences the writing skills as well (Cavdar & Doe, 2012; Gao, 2013). Researchers confirm that reading-writing relationships are 'two sides of the same coin' (Ehri, 2000, 2005; Perfetti & Stafura, 2014). They claim that while reading and writing processes a map from speech to script is required and/or vice verse. Reading and writing are cognitive mechanisms (Hayes, 2000, 2012; Moore & MacArthur, 2012) and the weakness in reading can cause a serious problem further in writing (Elbow, 2004). Both receptive and productive skills need comprehension while decoding the text and producing the writing assignment. The strong correlation and interaction of reading and writing in L1 and L2 have been examined and confirmed in the number of the studies and research works (Cumming, 2013; Hirvela & Du, 2013; Koda, 2007; Nikolov & Csapó, 2010) where the process of language learning and the transparency of proficiency in L1 to L2 as the second language acquisition are among hallmarks. This fact was determined noticed in the bilingual educational context as well where the researchers (e.g., Bialystok, 2002; Verhoeven, 2007) claim that 'learn new skills by drawing on previously acquired resources' and such cross-lingual change of one language to another by bilingual person is working in both ways in L1 and L2.

#### 5.2.2 Methods

## 5.2.2.1 Participants

The participants were 12-year-old learners (year 6) from randomly chosen public seven middle schools of Pavlodar. The students came from Kazakh and Russian families. The number of samples, performing the reading tests in L2 (English), and the background variables such as gender, age, and mother tongue are presented in Table 21 below. Some students who performed the questionnaire session did not attend the language test session therefore, the numbers in English sub-scale tests were different (22 students were absent).

**Table 21** *Number of participants in the Grade 6 (2018)* 

Variables	English
N (sub-samples)	282
Gender (male; %)	48
Age (mean, years)	12.00
Age (SD)	.21
Mother tongue (%) Kazakh	43.6
Mother tongue (%) Russian	56.4

#### 5.2.2.2 Instruments

The original English reading tests booklet (c.f. Nikolov & Csapó, 2010, 2018) included 5 reading tasks, 2 writing tasks, and 2 listening tasks. This pilot project was applied only two reading tests (20 items) and two writing tests (9 items) (see Table 22). Listening part in L2 was excluded due to the lack opportunity of listening technical devices in the schools. The applied tests were modified and adapted. Students' socio-economic background was measured by the set of variables used in PISA-2015 background questionnaire for Kazakhstani 15-year-old students where parents' level of schooling, education level, and number of books at home were adapted and applied in the project. The questionnaire was in L1 (Kazakh and Russian) and had several items regarding students' mother tongue, age, grade and gender as well.

**Table 22**Tests booklet in L2 in Grade 6 (2018)

Skill	Task	Input content	No. of items
Reading 1	Find the title of each book	Descriptions of books	10
Reading 2	Find the missing parts in the list	Text 'First Day of School'	10
Writing 1	Write an e-mail to invite your English friend	Answer the following questions	4
Writing 2	Write a blog post about your favorite season	Answer the following questions	5

Parents' level of education in Table 23 demonstrated that most 6<sup>th</sup> graders' parents' had a graduate degree of education mother's level of education is 25.3% (19.2+4.2+1.9), and father's is 13.9% (10.8+1.9+1.2). However, the vast majority of the students did not know what degree their parents have. The students had to choose the highest level of education of their parents. The scale of the variable was the same for father and mother, where 1) did not go to school; 2) finished grades 1-9, middle school; 3) completed grades 1-11 main secondary school; 4) finished vocational and technical school; 5) has Bachelor degree; 6) has Master degree; 7) has PhD degree; 8) I do not know. The results in the following table present the percentage in the group, not the number of the samples.

**Table 23**Parents' level of education (%) in the 6<sup>th</sup> grade (2018)

	All Students				
Parents' level of schooling	Mother's schooling	Father's schooling			
Did not go to school	.4	1.2			
Grades 1-9, middle school	9.6	10.8			
Grades 1-11, secondary school	18.1	18.8			
Vocational and technical schools	9.2	14.6			
Bachelor de gree	19.2	10.8			
Master degree	4.2	1.9			
PhD degree	1.9	1.2			
I do not know	37.3	40.8			

The percentage in the group of Kazakh and Russian native speakers were almost the same thus, as we would like to determine the whole picture of the students' socio-economic background. This finding indicated that parents' education is significantly important for further academic development of the child a s if the parents' less educated this could negatively influence on further career goals of the person which could reflected on motivation, individual habits, priorities, and on personal characteristics while learning e.g. reading or foreign languages.

Another socio-economic variable was the number of books at home. The outcomes demonstrated all students who participated in the survey. Students' number of books was measured by 6-scale: 1) 0-10 books; 2) 20-50 books; 3) 100 books; 4) 200 books; 5) 500 books; 6) more than 500 books. Interesting to know that only 30 per cent in the  $6^{th}$  grade reported that they had more than 100 books and the rest of others mentioned they had around 20-50 books (see Table 24).

**Table 24** *No. of books (%) in the 6*<sup>th</sup> grade

No. of books at home	All Students	
0-10 books	22.7	
20-50 books	28.8	
100 books	32.7	
200 books	9.6	
500 books	4.2	
More than 500 books	1.9	

#### 5.2.2.3 Procedure

Before performance, all students were instructed and were provided with the personal password to enter the online platform. Students took 30-50 minutes to do the tests in L2 in winter, 2018. Test materials in English, reading and writing skills were administered to the 6<sup>th</sup> graders via the eDia system (Csapó & Molnár, 2019). Reading comprehension tests have several tasks including reading and writing skills (*Reading test 1, 2*, and *Writing test 1, 2*) and were distributed into several cognitive operational types as Information Retrieval (IR), Inference (Inf.), and Reflection (Ref.). All items were coded into 0-1 scale, where "0" – wrong answer, and "1" – right answer.

Information Retrieval (IR) tasks reveal to the process of selecting the required information from the number of paragraphs and texts. These categories were established in PISA-2018 (PISA, 2018, p. 31). The tasks "Match the title of the book" were referred to IR.

Inference (Inf.) tasks involve putting the missing information to a given text, as in puzzle to infer a missing part to make meaning and require an acquisition of a new meaning "from context is the distance between the target word and its cue" (Cain et al., 2004, pp. 672-673). The tasks "Match the missing part of the text" were regarded to Inf. tasks, as the performer needs to make a conclusion from the various recourses or key words around the context in order to understand the meaning of the word.

Writing tasks were deemed appropriate to the Reflection (Ref.) part of the tests, as the students had to answer the guided questions. The scoring system for the writing tasks had 0-1 scale. The scoring criteria were determined on relevant information regarding the writing tasks. For example, if the student did not write anything and/or if the answer was not related to the meaning of the question – a "0"

score was earned, a "1" score was earned if the answer was appropriate and right. Thus, students could earn 4 scores for writing task 1, and 5 scores for writing task 2. The maximum score for the writing was 9 points. Finally, after qualitative assessment of the writing part the points were set up to IBM SPSS Statistics 23 computer software for further analysis and revealing the results quantitatively.

#### 5.2.3 Study Results

# 5.2.3.1 Grade performances

The reliability of the whole instruments in English was very good (Cronbach's alpha = .897). The reliability values for the writing component seemed better than in reading sub-scales (.878\sectional lpha \section .926). On one of the English writing tests, Kazakh native speakers outperformed Russian native speakers, while maternal education did not influence students' performance in either group. The reliability of the tests, number of items, Mean (%), SD are represented in Table 25.

**Table 25**Reliability of the tests

Sub-scales	Test in English	N of items	M (SD)
Information Retrieval	α=.893	10	50.0 (28.7)
Inference	$\alpha = .878$	10	50.0 (28.7)
Reflection	α=.926	9	50.0 (27.5)

Researchers in the last decades have determined that proficiency of students' skills in L1 could have success in L2. The aim was to examine the effect of mother tongue in English language learning. Our hypothesis was that students, with strong L1 language self-confidence were more successful in L2 outcomes. Reading tests were divided and analysed separately in Information Retrieval (IR), Inference (Inf.) and Reflection (Ref.) in EFL or L2 (see Table 26). The Mean of Kazakh native speakers in English Reading tests were M=50.46% (SD=28.33), and Russian performers M=49.63% (SD=29.41).

**Table 26**Results in English Test sub-scales

Scale	Mother Tongue	N	M (%)	SD (%)	Cronbach's alpha
Information Retrieval	Kazakh	115	48.42	28.94	.897
	Russian	145	51.25	28.55	.889
Inference	Kazakh	115	49.35	29.31	.885
Interence	Russian	145	50.52	28.31	.873
Reflection	Kazakh	115	53.02	27.98	.937
	Russian	145	47.60	26.87	.916

The effect of mother tongue was not significantly influencing the results of Kazakh and Russian native speakers in English test. Cohen's d (1988) was very small in all variables IR (d=-0.11); Inf. (d=-0.03); Ref. (d=0.17) which seemed that mother tongue of learners' had little effect while learning English. We supposed that this could relate to the age of the students and/or the duration of learning the languages, which should increase in the upper grades. This seemed interesting as the information retained that mother tongue in learning English by Kazakhstani young learners did not reliably affect English as L2. We assumed that this might be due to the age of the students, and/or the short duration of language learning, which is supposed to increase in the upper grades.

## 5.2.3.2 Reading and writing skills relationships

To determine the relationships between the reading and writing skills in L2 the correlation of the sub-scales in L2 were analyzed. The correlation between reading and writing components in English was non-significant: .053 (n.s.). In English subscale tasks Information Retrieval (IR) and Inference (Inf.) had strong significant correlation and relatively low with Reflection. It should be taken into account that the students were studying English language (L2) for their second year. The reason for this was that new standard was announced only in April, 2013 (MES, 2013), and for most secondary schools in Pavlodar to find qualified teachers of English for elementary school children was a big issue thus, in these schools, where the assessment was conducted most students started to learn English from the age 11 (grade 5). Although for those who went to school in 2014, English was taught in primary school (age 7). The assessment samples were six graders when we conducted the survey in 2018 (the students went to school in 2013). This survey was the first pilot assessment study in those schools and the eDia online platform was implemented for the first time in Paylodar.

**Table 27**Correlations of Sub-scales in English: Kazakh native speakers

	Informat	Inference	Reflection	No. of	Mother's	Father's
	ion			books at	education	education
	Retrieval			home		
EFL	.838**	.856**	.026	.223*	075	082
Information		.613**	067	.131	049	101
Retrieval						
Inference			053	. <b>198</b> *	.044	020
Reflection				002	055	054
No. of books at					122	047
home						
Mother's						.477**
education						

<sup>\*\*</sup>p<0.01

Low correlation of Reflection and Inference and Information Retrieval in English could depend on several external factors the ways and conditions of performing the tests on computer, as well as students' level of English (grammar, vocabulary knowledge, sentence structure). Tables 27 and 28 showed the strongest

<sup>\*</sup>p<0.05

significant correlations (.856 and .867 respectively) between IR and Inf. in Kazakh and Russian native speakers. In order to see the whole impact of the tests on SES (mother and father's levels of education and number of books at home) we compose all operational skills (information retrieval, inference, and reflection) in one as English reading comprehension tests as the foreign (EFL). It seemed interesting that number of books and inference tasks were correlated (.198) positively in Kazakh performers but significantly negatively (-.265) among Russian ones. However, the correlations between mother's and father's level of education and EFL (.243; .172) were found significant in Russian native speakers but not among Kazakh students. In the case of inference tasks, the relationship was significant between mother's education level in the group of Russian performers but not in Kazakh group.

**Table 28**Correlations of Sub-scales in English: Russian native speakers

	Informat	Inferenc	Reflectio	No. of	Mother's	Father's
	ion	e	n	books at	educatio	educatio
	Retrieval			home	n	n
EFL	.881**	.867**	.069	149	.243**	.172*
Information		.689**	037	121	.158	.112
Retrieval						
Inference			136	265**	.240**	.144
Reflection				016	.052	.000
No. of books at					.103	.042
home						
Mother's						.667**
education						

<sup>\*\*</sup>p<0.01

Table 29 represented all students in the pilot study assessment. The reason of why there were not any correlations between reading and writing in L2 (English) could be the age of the students, their individual differences, teaching and learning style or the classroom climate. Another reason could be that writing scripts in Kazakh and Russian languages are highly transparent so the phonological awareness of the words plays an essential role while learning Kazakh or Russian languages, albeit for English, the non-transparent orthography language, spelling process is highly required. Insofar, the correlations of IR and Inf. were strong in L2 language tests, but not with Reflection part. Students' low achievements in L2 and no correlation between reading and writing could be because at 12<sup>th</sup> age students who is studying EFL or as L2 could only achieve a certain level. The frequency of teaching and learning English, way and quality of teaching and instruction emerge in level of proficiency.

**Table 29**Correlations of Sub-scales in English: all students

	Inference	Reflection
Information Retrieval	.662**	052
Inference		.053

<sup>\*\*</sup>p<0.01

<sup>\*</sup>p<0.05

The level of "can do statements" and types of the tasks (Nikolov, 2016) in L2 or FL are framed and limited as their potential in L2 could not be appropriate for the strong correlation as the level of proficiency is not enough in L2 in reading and writing skills thus, the relationship was not found. It should be taken into an account that learners' attitude, and motivation school be positive and could affect students' assessment process and achievements in L2.

### 5.2.3.3 Relationships of SES variables, reading, and writing

Multiple regression analyses stepwise method was used in each language group separated regarding to students' SES variables (Kazakh and Russian). The model in regression analysis pointed that mother's education has the strongest influence on the achievements of reading comprehension tests in English in Russian students and not in Kazakh. In Kazakh and Russian groups, the level of father's education did not predict achievements in L2.

Students whose L1 was Kazakh, achieved better results in writing than those, whose L1 was Russian which seemed interesting. Number of books at home seemed to contribute the outcomes in English tests for Kazakh learners better than Russian performers the differences in path coefficients (beta: .223; -.176) (Table 30) was higher in Kazakh students, albeit negative among Russian ones. It seemed that Kazakh native speakers are more satisfied to use books, textbooks materials at home for learning English as a foreign language than Russian native speakers. The probability value is statistically significant. However, it should be taken into account that these findings examined only sixth graders of urban seven secondary schools in Pavlodar city and the results may not be referred to the whole region. Although the fact that abilities level in EFL is low should be considered as alarming for the schools, teachers, parents and other stakeholders to modify the process of teaching and learning of English language programme. In order to indicate the efficiency of educational programme, the level of literacy in L1 and L2, the relationship of L1 with L2 or EFL where individual differences of the learners are followed and accepted, the assessments from other regions and cities of Kazakhstan are necessary to explore in several other age groups.

**Table 30**Regression analyses in English test outcomes as the dependent with parents' level of education, number of books and reading and writing in L2 by Kazakh and Russian native speakers

	Dependent variable: Reading comprehension tests in English						
Independent	Ka	Kazakh native speakers			Russian native speakers		
variables	R square =.050				R square = .090		
	Beta	t	Sig	Beta	t	Sig	
Mother's	-048	519	0.605	.261	3.239	0.001	
education							
Father's education	072	778	0.438	.011	.100	0.921	
No. of books at home	.223	2.432	0.017	176	-2.187	0.030	

#### 5.2.4 Discussion

Literacy and proficiency in English as a foreign language the reading process of the learners should be in mother tongue and in English as this could predict language development, and promote literacy from L1 to L2. Although a certain kind of "scaffolding" in reading and writing, instruction and intervention are necessary in early language stages. Further perspectives of reading and writing interrelationship will be the ways of how to improve literacy level among learners in Kazakhstan in the middle school. These assessment results lead us to the track of the problems in and out of school classroom management, literacy issues in reading, writing, foreign language teaching, individual differences of the students learning L2 in the middle school. Although students' literacy level can be improved in Pavlodar, (Kazakhstan) if the assessment being frequently applied and students' achievements are discussed regularly with teachers, students, parents, and other stakeholders (Akhmetova et al., 2020). School administration should provide a space for parents to participate in the learning process and help teachers to define the children's problems in reading comprehension in L1 and L2 while reading. There are number of limitations of the current study as we did not assess students' L1 reading and writing skills, teachers' viewpoints and the ways of their regular assessment, we did not have any information of how teachers define whether students have any difficulties and understand the reading content while reading. We did not analyse factors that may influence reading and writing literacy among students, the questionnaire for teachers and parents of how they could reform the content of teaching and learning in order to attract kids' motivation and make them read more books were not provided. These questions require a lot of work in the way of improving teaching and learning process, and reading literacy among learners, teachers, and parents. All participants should work and inspire each other in the teaching and learning process as reading literacy is significantly essential for students' critical thinking, and problem solving.

Future research agendas will be under the scope of reforming program in the middle secondary education in terms of implementing diversify methods in L1 and L2, flexibility, and feasibility for all members of schooling process. Digitalizing the list of the literature books that student should have to read in the middle stage in L1 (Kazakh and Russian), and in L2 (English) languages would be our next step to increase motivation and literacy (Zickuhr et al., 2012). Concerning the list for reading books in L2 (English) they should be carefully chosen, adaptive, available in paper and electronic version, as well as appropriate to the students' level in the foreign language. Accountability of the books and reading materials in the library, computer software, and ICT devices will grow students and teachers' motivation. In conclusion, 12-year-old learners should read and write more while learning EFL and school should assist students and teachers in the teaching and learning process. SES is essential for the future of the students' career goals and job findings. Students should be motivated to read more books they would like to read in L1 and L2 and the school administration should provide this opportunity for all students in the school library. Negligible results in English and low correlation with SES seemed that students, parents and teachers discuss less or not enough on students' outcomes during studying period. Teachers in L1 and L2 should apply diagnostic tests more frequently.

# 5.3 Links between reading attitude and reading achievement in three languages: Assessments in two age groups of young Kazakhstani learners

#### **5.3.1 Introduction**

There is considerable agreement that a positive reading attitude positively influences reading outcomes, although the literature claims that when students grow older and move on to middle or high school, reading attitude decreases (McKenna et al., 2012) and could affect reading achievement (Petscher, 2010; Woolley, 2011), thus furthering a negative trend. Reading habits and love of reading promote reading literacy. Moreover, regular reading activity has a great impact on people's general language ability, such as vocabulary, speaking and communicative skills (Cain & Oakhill, 2011; Schatz & Krashen, 2006).

Several studies (e.g., Bialystok, 2002; Koda, 2007; Verhoeven, 2007) have shown that reading skills in one's native language and in English as a foreign language in young learners can operate in both directions as learners' previously acquired resources are accelerated to master new skills. These interaction processes in language learning positively influence reading attitude and affect reading achievement. However, additional options for recreation and knowledge acquisition are among the factors behind children no longer reading regularly for pleasure and in their attitude towards reading dropping significantly. In a bilingual and monolingual context, this issue could pose a challenge in teaching children languages other than their heritage language and/or language of instruction, which could be an impediment for further literacy development.

## 5.3.2 Methods

#### 5.3.2.1 Participants

The sample (n=1,505) included students from Grade 6  $(n_{6th}=810)$  and Grade 8  $(n_{8th}=695)$ . The sixth graders comprised 531Kazakhs, 257 Russians and 22 students from other ethnic groups. The eighth-grade sample included 407 Kazakhs, 258 Russians and 30 students from other nations.

Information on ethnicity was obtained from the background questionnaire (with the question: What is your native language? 1–Kazakh, 2– Russian, 3– Other); 22 in sixth grade and 30 in eighth grade who completed the questionnaire chose "Other". However, all the students whose native language is Russian and/or "Other" speak Russian. The sample size of the students whose native language is Kazakh includes both students who are fluent in Kazakh and Russian and those who are fluent in Russian, but cannot speak Kazakh fluently, although they can read and write in Kazakh and understand the spoken form. However, 44% of the students in Grade 6 completed the questionnaire in Kazakh and 56% did so in Russian. While in the eighth grade, 37% did the questionnaire in Kazakh and 63% in Russian. This suggests that number of Russian speaking students is still higher in northern Kazakhstan comparing to Kazakhs. Table 31 summarizes detailed information on the demographic variables of the sample size.

**Table 31**Samples of the study (2019)

		Age		Gender	Gender %		Native language (%)	
Grade	N	Mean	SD	Boys	Girls	Kazakh	Russian	Other
6	810	11.99	0.22	49.9	50.1	64.6	31.8	2.7
8	695	14.00	0.21	51.2	48.8	58.6	37.1	4.3

The assessed schools have both Kazakh and Russian as media of instruction. The sole medium of instruction in Schools A, B and C is Kazakh, whereas the four other schools (Schools D, E, F and G) have both Kazakh- and Russian-medium classes. The teaching and learning in the mixed schools are designed for both bilingual and monolingual students, although the majority of the students there use Russian on a regular basis, as Russian-medium schools are dominant in northern Kazakhstan.

#### 5.3.2.2 Instruments

#### Reading attitude questionnaire

The survey used the questionnaire for reading attitude based on the National Literacy Trust (NLT) of Children's and Young People's Reading Habits and Preferences (cf. Clark & Foster, 2005). The reading attitude questionnaire was adapted from the NLT with some modifications, including a five-point Likert scale. The sixth-and eighth-grade students were asked to choose how much they agree or disagree with certain statements on a scale: 1 (strongly disagree), 2 (disagree), 3(neither agree nor disagree), 4 (agree) and 5 (strongly agree). The questionnaire consisted of twelve items and was in the students' native language (Kazakh or Russian); before completing the main part of the questionnaire, the students also responded to background questions on gender, native language and age (see Table 31).

The questionnaire was the first part of the assessment. It took 15–20 minutes and was composed of the following items: (1) I read because it is fun; (2) I read because it relaxes me; (3) Reading broadens my knowledge; (4) I only read when I have to; (5) Reading is more for girls than boys; (6) Reading is boring; (7) I like going to the library; (8) I prefer reading in my native language to reading in English; (9) I prefer reading e-books; (10) Reading is necessary to work on the Internet and the computer; (11) I mostly read at home; and (12) My groupmates motivate me to read more. After some breaks, students did the tests in the three languages, so there were two sessions in all.

# Reading tests

The reading tests were prepared in three languages, Kazakh, Russian, and English, in a similar way. Both the bilingual and monolingual students did the tests in the three languages, as these languages are compulsory in Kazakhstan. All children know them but still Russian speaking students have the immune to learning Kazakh. The reading tests were based on the present program of the core curriculum for secondary education (MES, 2013) for Kazakh, Russian, and English; as well, the PISA framework requirements were taken into consideration. Both the sixth and eighth grades had different reading tests in the targeted languages; thus, in the sixth grade the number of items in English, Kazakh, and Russian alike consisted of twelve items. In the eighth grade, the tests differed somewhat: they involved 17 items in English, 17

items in Kazakh and 14 items in Russian. The content of each language test was different although with a similar format (i.e., multiple-choice tasks and closed questions). The reading tests consisted of continuous and non-continuous texts with graphics and images similar to those on the PISA tests. The graphic tasks included posters and invitation cards in which to find the answer. Tables 32 and 33 present a detailed description of the tests. The online test items are illustrated in more details in Appendices.

**Table 32** *The reading tests in English, Kazakh and Russian in Grade 6 (2019)* 

Skill	Task	Input content	No. of items
Reading 1 in English	Match the right answer to the questions	Invitation card	4
Reading 2 in English	Match words with the definition	Describing professions	8
Reading 1 in Kazakh	Match the right answer to the questions	Invitation card	4
Reading 2 in Kazakh	Match words with the definition	Defining words	8
Reading 1 in Russian	Match the right answer to the questions	Poster information	4
Reading 2 in Russian	Match notices to the meaning	Describing notices	8

**Table 33**The reading tests in English. Kazakh and Russian in Grade 8 (2019)

Skill	Task	Input content	No. of
			ite ms
Reading 1 in English	Match statements true or false	Advertisement information	7
Reading 2 in English	Match words to the definition	Defining words	10
Reading 1 in Kazakh	Match statements true or false	Advertisement information	7
Reading 2 in Kazakh	Match the right answer to the questions	Quiz texts	10
Reading 1 in Russian	Match the right answer to the questions	Dialogue interview	7
Reading 2 in Russian	Match the statement true or false	Advertisement information	7

The reliability of the questionnaire for Grade 6 ( $\alpha$ =.745) and Grade 8 ( $\alpha$ =.749) pointed to a good level of acceptance. Both grades completed the same questionnaire for reading attitude. The results showed that the questionnaire and the tests were appropriate for young learners in Kazakhstan (see Table 34).

**Table 34** *Reliability (Cronbach's alpha) of the reading tests* 

	Grade 6	Grade 8
English	.88	.90
Kazakh	.89	.89
Russian	.84	.84

#### 5.3.2.3 Procedure

The tests and questionnaires were delivered online by the Electronic Diagnostic Assessment System, the eDia platform (Csapó & Molnár, 2019). The instruments were administered in the computer rooms at the participating schools with the Internet connection available there and using the operating system and browsers, the participants normally use and are familiar with. Before the assessment, each school was visited and a number of technical issues were discussed regarding the availability of the computer labs and schedule preparation for the sixth and eighth grades in the selected schools. As this measurement project commenced in 2018, an agreement with the Departments of Education in the region and the city as well as with principals, administrators, and teachers in the randomized schools was reached the year before.

Before each assessment session, schools were informed about the period and the time almost three to four months ahead. Participating students were also informed in advance that they were taking part in the survey to measure adolescents' reading literacy skills in Kazakh, Russian and English and their attitudes towards the reading process for further research to facilitate improvement in reading skills. As the participants were from different grades, the assessment timetable was organized separately for the sixth-and eighth-grade students. On the assessment day, each participant was given an eDia link and a personal password to enter, so he or she could first complete the questionnaire and then do the tests in Kazakh, Russian, and English. As the young adolescents were not proficient in English, the questionnaire was in Kazakh or Russian. The duration for the tests and the questionnaire in both grades was approximately 30 to 50 minutes. The Internet connection was good, so the students did not have any difficulties during their assessment process. The data were analyzed with SPSS, Mplus and ConQuest.

## **5.3.3 Study Results**

5.3.3.1 Differences in reading achievement in the three languages, age group and gender

The sub-scales for the questionnaire and test performance were compared separately for each grade. The level of test difficulty and its appropriateness to the level of the sixth- and eighth-grade students' ability on each reading achievement test (English, Kazakh and Russian) was confirmed with Rasch (IRT) analyses. The item-person maps for the reading achievement tests indicated a convincing overlap between test item difficulty and students' ability distribution in both age groups. As regards the test achievement of the students, both grades did better on the Russian test than on the Kazakh and English ones. However, it was observed that performance was slightly

higher in English as a foreign language in the eighth grade than in the sixth, but the results were lower in Kazakh and Russian.

**Table 35** *The performances in the reading tests (2019)* 

Languaga	Grade 6		Grade 8	Grade 8		
Language	Mean	SD	Mean	SD		
English	49.26	30.92	52.85	30.18		
Kazakh	65.16	30.61	58.74	28.79		
Russian	73.20	24.62	66.56	26.13		

Item-person map in the Rasch analysis showed better outcomes for the sixth graders on the text tasks than on the graphic ones. The graphic tasks seemed difficult for the twelve-year-olds in all three languages. However, the graphic tasks were better in English than in Kazakh and Russian for the eighth graders, whereas the text tasks did not cause any problems for the Grade 8 students.

Although Table 36 illustrates that the girls performed somewhat better in the three languages than the boys in both grades, the differences were statistically non-significant (p>.05). Interestingly, the PISA 2018 report for Kazakhstan (OECD, 2019), published on 3 December 2019, underlined that the gender aspect in the performance of 15-year-old boys and girls was not significant. Our finding is in line with the PISA results, indicating that unlike most participating countries, there is no large gender difference in reading achievement.

**Table 36**Gender differences in the English, Kazakh and Russian reading test performances

Grade 6 (n=81	0)		Grade 8 (n=695)			
English	Mean (%)	SD (%)	English	Mean (%)	SD (%)	
Boys	47.33	31.52	Boys	51.72	30.43	
Girls	51.25	30.20	Girls	54.04	29.91	
tEng (810) = -1.78, p > .05			tEng (695) =	-1.00, p>.05		
Kazakh	Mean (%)	SD (%)	Kazakh	Mean (%)	SD (%)	
Boys	64.75	30.88	Boys	57.74	29.17	
Girls	65.59	30.35	Girls	59.80	28.37	
tKaz (810) = -	.39, p > .05		tKaz(695) =94, p > .05			
Russian	Mean (%)	SD (%)	Russian	Mean (%)	SD (%)	
Boys	73.02	24.90	Boys	65.71	26.38	
Girls	73.39	24.34	Girls	67.46	25.87	
tRus (810) = -	.21, p >.05		tRus (695) =	88, p >.05		

The Rasch analysis showed that students' ability level and test difficulty were appropriate. The Rasch analyses showed that test difficulty and student ability in English, Kazakh, and Russian did not show big differences, although test achievement in both grades was lower in English than in Kazakh and Russian. However, two items on the English test and one item on the Kazakh in sixth grade were difficult to do, whereas in the eighth grade the items in the three languages were in the middle distribution.

Item response modelling was conducted for defining the fit of the item difficulty and the level of latent traits in reading literacy of young learners in each

language test. Item response theory (IRT) model examined item statistic properties conducting Rasch analysis using ConQuest-2.0 package program. Regarding item analysis, the following values should be investigated such as description index (DI), Weighted MNSQ mean square, point-biserial correlation (Pt Bis), average measure (Avg). The fit of items' difficulties, and the students' abilities were ranged under the next distribution, where the DI should be higher 0.2 and close to 0.4 or above, which means, that item score meets the whole score of the test where 0.4 is the good item; (Hopkins, 1998). The measures of "category disordering" as Weighted MNSQ should be from 0.7 to 1.3 (Griffin, 2010) but not higher than one. PtBis point-biserial correlation and average measure should "not be in increasing order with increasing category scores", which means "for a lower score category, the average autonomy level is higher than that for a higher score category" (Wu & Adams, 2007, pp. 64-65).

Rasch analysis in item-person map showed that the sixth graders did better in the tasks with texts rather than the graphs, where the answers must be searched from the posters and the invitation cards. These graphs tasks seemed very difficult for the 12-year-olds in all three languages. However, for eighth graders these types of the tasks with graphs caused more problems in Kazakh and Russian languages than in English. We suppose that this is because the students from the eighth grades do not often apply tasks with graphs or interactive pictures and advertisements in Kazakh and Russian than in learning English. Therefore, we would probably suggest using more tasks with the diagrams, tables, graphics or advertisements further rather than difficult texts in Kazakh and Russian languages (see Appendix A, B) the item-person map (IPM) of sixth and eighth graders in English, Kazakh and Russian languages.

The tests' difficulties and the students' abilities of Rasch analyses in English, Kazakh, and Russian languages did not show big differences, although tests' achievements of both grades in English were lower than in Kazakh and Russian. Interestingly to denote that as our survey, conducted during January-February 2019 in seven schools of Pavlodar, Kazakhstan in grades 6<sup>th</sup> and 8<sup>th</sup> showed no differences between boys and girls (p>.05). Although this could be noticed that girls performed better in three languages than the boys in the both grades. In PISA-2018, published in December 3, 2019 report for Kazakhstan (OECD, 2019) the gender aspect in the performances of 15-year-olds boys and girls were not significantly different. This feature has also been proved and confirmed in the results of our analysis that the gender differences in our research among six and eighth grades was not statistically significant (p>.05) (see Table 36).

The reliability of all tests in the both grades was very good is .8 and above. Although it was very interesting to denote that, we noticed that for the sixth graders, the graph tasks where the answers have to find out from the poster and the invitation cards were very difficult in all three languages than from the texts. However, for the eighth graders the graph tasks were much more difficult to perform in Kazakh and Russian languages than in English.

We suppose that this is because the students from the 8<sup>th</sup> grades used very few graphic tasks in Kazakh and Russian languages than in English. As for the 6<sup>th</sup> grades text information used more frequently than the graph tasks in all Kazakh, Russian and English languages. However, while our data collection the usage of interactive board, pictures, and advertisements are implementing and actively apply in the learning English language as a foreign. We conducted Rasch model analysis in order to observe the whole picture of the tests in three languages. The analysis in general showed that there were no items of lower or higher ability level in 6<sup>th</sup> and 8<sup>th</sup> grades. Students' ability level and the tests' difficulties were appropriate and reliable to them.

However, two items in English and one item in Kazakh tests for the grade sixth were difficult to perform, whereas in the eighth grade the items in three languages were in the middle distribution. Although more items should be included in the tests in the future for both grades in order to investigate the level of students' ability in three languages in detail.

# 5.3.3.2 The relations between the tests in Kazakh, Russian and English

Concerning the reliability of the test is of the important concepts in testing as it shows whether the tests is well-constructed and shows the same outcomes in the various moments and time (Johnson, 2008, p. 313). Discrimination in the tests means that the tests should be able to differentiate students' abilities and skills in a certain domain therefore each item is crucial in the test (Johnson, 2008, pp. 314-315). Feasibility means the way of administration of the tests and the tests procedures how it is organized to the students (Johnson, 2008, pp. 314-315). In order to know the relation between students' abilities of retrieval and inferring items, we conducted a correlation analysis of the four tasks. The relation between students' abilities of retrieval and inferring items was ascertained with four tasks. Table 37 highlights that Pearson correlations for the tests were significantly strong (r=.51, p<.01) between the languages in both grades.

**Table 37** *Correlations for reading tests in Grades* 6 *and* 8

Grade	Test	Test in Russian	Test in English
Grade 6	Test in Kazakh	.520**	.547**
	Test in Russian		.576**
Grade 8	Test in Kazakh	.509**	.582**
	Test in Russian		.551**

<sup>\*\*</sup> p<.01

The way of constructing the tests in three languages, the results of the test express whether the learner has mastered "the content specification" (p. 310). In constructing a test, one should take into account that a test needs to meet validity, reliability, discrimination, and feasibility. Johnson (2008) represents that validity has five types that a good test has to pass through in order to achieve "true reflection of individual's skills" (p. 311). He defines that *content validity* "must clearly be represented in the test itself" (p. 311) the content of the test. Content validity should include the question sampling as a good test have to be required "grasped the entire material", "...to draw up a detailed *content specification*". Face validity is the second type of the validity, which means, "what the world thinks of the test" (p. 311) as the author mentioned that expert and professionals should look and examine the tests. Construct validity means that the test and the structure of the language and the learning process have the relationships (Johnson, 2008, p. 312). Empirical validity is the way of verification of the test together with the other for example standardized or placement tests to see how the new-made tests are comparable and predicts the same results as standardized (Johnson, 2008, p. 312). Consequential validity deals with the effect of the test (social or pedagogical) it has on the students it could be intentional or non-intentional, positive or negative, etc (Johnson, 2008, p. 313).

5.3.3.2.1 The influence of the native language on the results of the young learners' reading performance

The results in the sixth grade for the ANOVA (Analysis of Variance between Groups) showed the main effect of the students' native language on their performance on the tests in Kazakh: F(2, 801)=20.29, p<.001,  $\eta^2_p$ =.049; in Russian: F(2, 794)=7.29, p<.001,  $\eta^2_p$ =.018; and in English: F(2, 779)=7.75, p<.001,  $\eta^2_p$ =.019.

In the eighth grade, statistical analysis showed a significant difference between Kazakhs, Russians and other ethnic groups taking the test in Kazakh: F(2, 692)=14.87, p<.001,  $\eta^2_p$ =.041; in Russian: F(2, 689)=3.35, p<.036,  $\eta^2_p$ =.009; and in English: F(2, 682)=6.61, p<.001,  $\eta^2_p$ =.019. However, the actual effect of the mean scores between groups was quite small; the students' native language did influence their outcomes in Kazakh, Russian or English.

In both grades, post hoc testing demonstrated significant differences between pairs of nations on the Kazakh test whose native language is Kazakh (M=63.59, SD=28.96), Russian (M=52.35 SD=27.02) and Other (M=47.84 SD=28.26). Although non-significant differences between the nations were found on the Russian tests, the Kazakhs performed significantly better than the Russians and others on the English test. Therefore, the effect size of the native language was small in both grades but close to intermediate on the Kazakh-language test ( $\eta^2$ =.018–.049). The probability of the Kazakh native speakers achieving well on the tests in Kazakh, Russian, and English is significantly higher statistically in all three languages than that of the Russian native speakers and others. This could suggest that the bilingual students performed better than the monolingual ones in the respective languages, despite a small effect size on reading achievement in the native language.

# 5.3.3.3 The influence of reading attitude on reading achievement in Kazakh, Russian, and English

The results showed low influence of reading attitude on the reading tests in the three languages. Interestingly, young learners have a positive attitude towards reading, but this did not have any impact on their performance. Factor analysis showed a three-factor model in the sixth grade and a four-factor model in the eighth. Factor loadings in both grades correlated well, and reliability coefficients for these factors ranged from .71 to .86; the models fitted well to the data in both grades: the sixth ( $\chi^2$ =154.33, CFI=.95, TLI=.93, df=51, RMSEA=.05, SRMR=.04) and eighth ( $\chi^2$ =148.33, CFI=.97, TLI=.95, df=48, RMSEA=.06, SRMR=.04). The factor loading for the items in Grade 6 produced three factors: positive reading attitude, non-positive reading attitude and reading preferences(see Table 38).

The regression analysis showed a good fit to the model in all three languages: Grade 6 ( $\chi^2$ =196.75, CFI=.96, TLI=.94, df=78, RMSEA=.05, SRMR=.04) and Grade 8 ( $\chi^2$ =192.51, CFI=.97, TLI=.95, df=72, RMSEA=.05, SRMR=.04), respectively. However, based on the results, reading attitude (RA) and reading achievement in both grades indicated that reading attitude did not influence students' reading achievement in all three languages in Grade 6 ( $r_{en}$ =.004,  $r_{kaz}$ =.004,  $r_{rus}$ =.040, p>.05) and Grade 8 ( $r_{en}$ =.013, $r_{kaz}$ =.006,  $r_{rus}$ =.005, p>.05).

Table 38 demonstrates factor loading of the affective items in grade six resulted in three factors labeled as "Positive Reading Attitude", "Non-positive Reading Attitude", and "Reading Preferences". In Table 39, eight graders performed the same affective questions, albeit the number of the factors increased to four factors

as "Positive Reading Attitude", "Non-positive Reading Attitude" "Reading Preferences", and "Reading Habit and Activity". Interestingly, that in grade eight the correlation of the items in factor loadings is much stronger than in grade six. This could also prove that as children pass to the upper graders positive attitude towards reading is fostering negative feeling (McKenna et al., 1995; Sainsbury & Schagen, 2004).

**Table 38**Factor loadings for reading attitude in Grade 6 (2019)

Item number	Positive reading attitude (PRA)	Non-positive reading attitude (NRA)	Reading preferences (RP)
1. I read because it is fun.	0.672	0.247	0.295
2. I read because it relaxes me.	0.729	0.077	0.296
3. Reading broadens my knowledge.	0.604	0.228	0.112
4. I only read when I have to.	0.126	0.680	0.112
5. Reading is more for girls than boys.	0.094	0.610	0.157
6. Reading is boring.	0.058	0.733	0.050
7. I like going to the library.	0.460	-0.021	0.312
8. I prefer reading in my native language to reading in English.	0.176	0.105	0.428
9. I prefer reading e-books.	0.289	0.148	0.651
10. Reading is necessary to work on the Internet and the computer.	0.270	0.201	0.634
11. I mostly read at home.	0.282	0.031	0.546
12. My groupmates motivate me to read more.	0.201	0.063	0.597

Table 39 illustrates four factors that emerged from the reading attitude questionnaire among the eighth-grade learners: positive reading attitude, non-positive reading attitude, reading preferences, and reading habits and activity. Interestingly, the correlation of the items in the factor loadings in Grade 8 was much stronger than in Grade 6. This could suggest that a positive attitude towards reading fosters a negative feeling as children move on to the upper grades (McKenna, 2001; McKenna et al., 1995; McKenna et al., 2012; Sainsbury & Schagen, 2004; Walpole & McKenna, 2012) and the external motivation to study for good grades starts to be a pivotal factor in the upper grades. Significant correlations were found between factors in Grades 6 (r=.21, p<.01) and 8 (r=.33, p<.01). Despite a positive attitude towards reading, the regression analysis, in both grades, found weak relations between reading attitude and reading achievement in the targeted languages.

**Table 39** *Factor loadings for reading attitude in Grade 8 (2019)* 

Item number	Positive reading attitude (PRA)	Non- positive reading attitude (NRA)	Reading preference s (RP)	Reading habits and activity (RHA)
1. I read because it is fun.	0.841	0.089	0.239	0.224
2. I read because it relaxes me.	0.880	0.048	0.206	0.255
3. Reading broadens my knowledge.	0.751	0.240	0.228	0.154
4. I only read when I have to.	0.145	0.856	0.133	-0.001
5. Reading is more for girls than boys.	0.051	0.766	0.168	0.142
6. Reading is boring.	0.100	0.841	0.168	-0.014
7. I like going to the library.	0.176	-0.062	0.124	0.651
8. I prefer reading in my native language to reading in English.	0.163	0.078	0.675	0.137
9. I prefer reading e-books.	0.203	0.176	0.642	0.217
10. Reading is necessary to work on the Internet and the computer.	0.177	0.122	0.682	0.232
11. I mostly read at home.	0.247	0.052	0.18	0.572
12. My groupmates motivate me to read more.	0.184	0.041	0.310	0.786

These outcomes proved the effect size was very slow and this fact was underpinned in the most literatures (McKenna, 1995; McKenna et al., 2012) that as children become older the attitude changed but this could not influence achievement. However, in the background questionnaire half of the students mentioned that the problem is in lack of the free time and the absence of the books at home and in the school library.

These results are supposed to have the following explanation. Children in Kazakhstan in general, have positive attitude towards reading but as they pass to the upper grades, the number of subjects and homework increase and thus, they have less free time for reading. The Ministry of Education and Science of the Republic of Kazakhstan finance almost all school libraries in the country. Even though, the list of the books, necessary for the students to read in Kazakh and Russian languages in the middle and upper grades are determined in the main standard of core curriculum for the secondary school. Most teachers demand students to read those books in during

the holidays and/or in summer vacation. Only few of the students could read the books from the list, just because those books for most students' opinions are not interesting and language is hard to read, most found those books boring and simple do not read them at all. Even if someone reads, he or she reads them just because this is the part of school programme and it will be useful for future marks, but not for pleasure. This also raises a negative attitude towards reading in the middle and upper grades. Most classes in the school in Kazakhstan are overloaded (i.e., 30-35 students in one class) especially in the urban areas. This could also be the reason for the students' low results in reading achievement in three languages where English is a foreign.

#### 5.3.4 Discussion

The low impact of reading attitude on reading outcomes is underpinned by the literature (McKenna, 1994, 2001; McKenna et al., 2012), confirming that reading attitude declines significantly as children grow older. However, on the background questionnaire, half of the students mentioned that the problem was a lack of free time and the absence of interesting books at home and in the school library. The low effect size of the reading-to-reading ratio has been shown to change attitudes towards reading as children grow older, which is also confirmed in the literature (McKenna, 1994, 2001; McKenna et al., 2012).

The study shows significant problems in the development of the students' reading literacy through the relation of reading attitude and reading achievement in three languages. However, such factors as the geographical location of the randomly chosen schools (only in Pavlodar –in northern Kazakhstan), teaching style, home life and cultural diversity of the students, as well as students' educational background could have affected the findings of this study.

Based on the results, we assume that young learners in Kazakhstan in general have a positive attitude towards reading, but they read less as they move onto the upper grades. We consider that this may be because the quantity of subjects and homework grows significantly and they have less free time for pleasure reading. Since 2009, Kazakhstan has participated in the PISA surveys. In 2018, Kazakhstan showed declining results in reading literacy (M=387) compared to 2009 (M=390) and 2012 (M=393) (OECD, 2019). The decrease in reading literacy could be worrisome for the education system, economic progress and the welfare of Kazakhstan in general.

Another issue is the core curriculum for secondary education (MES, 2013) for Kazakh literature and Russian literature, where one of the requirements in secondary education is a reading list for students in the middle and upper grades to facilitate reading literacy development. Only a few students manage to read the books from the list because most of them find them boring and difficult. We suppose that this could also cause a negative attitude among the students towards reading in the middle and upper grades in Kazakhstan. The study aims to investigate the impact of a cross-sectional survey of reading attitude and achievement in three languages in two cohorts. The relationship of young learners' reading attitude and test performance in their first and second languages (L1 and L2), Kazakh or Russian, and English as a foreign language (L3) in bilingual and monolingual contexts was examined. To investigate young learners' reading attitudes and habits as well as the languages preferences, which will further provide us the clues for more sophisticated and complex research is crucial for reading area in the future.

Overall, for Kazakhstani young learners this survey was based on the eDia online platform that has been implemented for the secondary schools of Pavlodar since 2018, and the students' ability level to use computers while performing the tasks was taken into account. However, the study should be continued and implemented further in order to research the field of reading development and the level of literacy in the mother tongue and English as a foreign more deeply. Obtaining results will give us an opportunity and evidences for further intervention and recommendations in instruction for the development of interactions of reading and writing in practice. Therefore, the intervention and instruction are required for the young learners' literacy development in the case of Kazakhstan.

5.4 Mediation effect of engagement between classroom climate and reading achievement in three languages among sixth- and eighth-grade students in Kazakhstan

#### **5.4.1 Introduction**

Classroom climate is defined as a certain environment in the learning process where students and teacher respect and support each other, and "are ready to exchange ideas and explore new learning content" (Djigic, & Stojiljkovic, 2011, p. 821). Literature notifies (Pianta, Hamre, & Allen, 2012; Ryan & Patrick, 2001) that classroom climate is mainly depended on teacher's appropriate management in the classroom, which further facilitates students' academic achievements. Researchers (Djigic, & Stojiljkovic, 2011; Perliger, Canetti-Nisim, & Pedahzur, 2006) also define that democratic style of management in the classroom contributes motivation, supports learning process, encourages positive attitude and behaviour of students and teacher. First National Report of Canada (2009) states that classroom climate plays a pivotal role on the students' learning process and achievements, where learning environment should be positive, provides support among teacher-student interaction, creates solid belief of student success, and "appropriate instructional challenge" (Willms, Friesen, & Milton, 2009, p. 24). Djigic and Stojiljkovic (2011) consider an "interactionist" approach in the "classroom management style is the best way to build stimulating learning environment" (p. 822) because this approach develops success of students' outcomes, and the control in the classroom is divided between teacher and the students. The "interactionist" management in the classroom focuses on learner's individuality and the influence of this learning process to the learner.

In Kazakhstan, the relationship between teacher and students in the classroom is highly disciplined where students follow and subordinate teacher's requirements and rules (OECD/The World, Bank, 2015). This authoritarian model of education in Kazakhstan has still left since Soviet Union time (OECD/The World, Bank, 2015, p. 70), where centralised system of education has hardly provided any autonomy policy for effective and appropriate management in the school and with school resources (OECD/The World, Bank, 2015, pp. 54-57). Hence, the importance of assessing classroom climate in engaging students' reading skills in Kazakh, Russian and English may define the gaps of learning environment in the schools of Kazakhstan, provides tools for appropriate literacy development in the respected languages, and further improvements in the current core curriculum.

#### 5.4.2 Methods

#### 5.4.2.1 Participants

The participants were (N=1,563) students in Grades 6 (N=888) and 8 (N=675) from randomly enrolled middle schools in Pavlodar city (northern east part of Kazakhstan). The students' age was ranged from 11 to 14 years of age (M=12.81; SD=1.13). Number of females was (52.6%) and males (47.4%), including Kazakh (N=986, 63%), Russian (N=547, 35%), and Other (N=30, 2%) ethnic groups. The ethnicity was obtained from the background questionnaire with the question: What is your native language? 1–Kazakh, 2–Russian, 3–Other. The participants, whose native

language is Russian and/or "Other" speak Russian, whereas the students, whose native language is Kazakh includes students, who are fluent in Kazakh and Russian and those, who are fluent in Russian. Those ethnic Kazakhs who are proficient in Russian cannot speak Kazakh fluently, but they can read, write and understand the spoken form in Kazakh. However, being culturally diversified the assessed schools have both Kazakh- and Russian-medium classes. The questionnaire was performed by bilingual and monolingual students in Kazakh (N=609, 39%) and Russian (N=954, 61%). Table 40 represented the properties of two cohort grades with detailed information on the demographic variables of the sample size.

**Table 40**Samples of the study (2020)

	Age		Gender	Gender %		Mother tongue (%)		
Grade	N	Mean	SD	Boys	Girls	Kazakh	Russian	Other
6	888	11.93	0.47	48.1	51.9	64.2	34.1	1.7
8	675	13.97	0.51	46.5	53.5	61.6	36.1	2.2

The level of tests difficulties and the level of students' abilities in each reading comprehension test (English, Kazakh, and Russian) were analyzed with the help of Rasch analysis. The reading tests indicated the appropriateness of the tests and the ability levels of the sixth and eighth graders were achievable.

#### 5.4.2.2 Instruments

#### Background Questionnaire

The background questionnaire was adapted from Programme for International Students Assessment (PISA) and included twelve items regarding socio-economic status (SES) of the students (i.e. e.g., age, gender, grade, home language, native language, mother's and father's highest level of education, internet access at home, having your own room, desk, number of books, computer or lap-top at home), and thirty-four items related to classroom climate and engagement variables.

Classroom emotional climate consisted of several sub-constructs as climate at school (3 items), sense of belonging to school (3 items), classroom climate reported by students (5 items), student-teacher relationship (5 items). Engagement variables consisted of interest and like of English (5 items), attitude in English learning (5 items), usage of ICT (5 items), anxiety of ICT (3 items). These items were measured by 5-point Likert scale from strongly disagree to strongly agree.

#### Reading comprehension tests

For the reading comprehension tests in English, Kazakh and Russian in Grades 6 and 8 we adapted the format of the tests battery developed by Hungarian language experts and researchers (for more details see cf. Csapó & Nikolov 2009; Nikolov & Csapó, 2010, 2018). The modified tests involved similar topics and tasks in all target languages all rubrics in the tests were familiar to the students. The format and level of the tests were corresponded to A1-A2 Levels of the Common European Framework of Reference for Languages (Council of Europe, 2001).

The reading tests were applied separately for grades sixth and eighth, the reliability in both grades ranged from .94 to .96 respectively. Both bilingual and

monolingual students performed the tests in three languages- Kazakh, Russian and English, as in Kazakhstan Kazakh and Russian languages are used as the native language and/or the language of every day communication, and English as a foreign language. The number of items in both grades of the tests is represented in Tables 41 and 42. Appendix Q illustrated the online tests in more details.

**Table 41** *The reading tests in English, Kazakh and Russian in Grade* 6 (2020)

Skill	Task	Input content	No. of
			ite ms
Reading 1 in English	Match the right answer	Invitation card	4
	to the questions		
Reading 2 in English	Match words to the	Describing	8
	definition	professions	
Reading 3 in English	Choose the right word to	School website	8
	the text		
Reading 1 in Kazakh	Match the right answer	Invitation card	4
	to the questions		
Reading 2 in Kazakh	Match words to the	Defining words	8
	definition		
Reading 3 in Kazakh	Match the right answer	Weather forecast	8
	to the question	table	
Reading 1 in Russian	Match the right answer	Poster information	4
	to the questions		
Reading 2 in Russian	Match notices to the	Describing notices	8
	meaning		
Reading 3 in Russian	Match the right answer	Weather forecast map	8
	to the question		

Reading attitude questionnaire was applied for the second time in 2020, the number of items (12 items), and the content were the same as used in 2019 (see study 3 in this chapter). In our second round, we would like to verify whether the same factors in reading attitudes be revealed in year 2020. The total number of background questionnaire involved 58 items. All items were more appropriate for the context of secondary schools in Kazakhstan as those questions were underlined in PISA-2009, 2012 in background questionnaire section (see OECD, 2009, 2014c). Students' achievements were measured by reading comprehension tests in English, Kazakh, and Russian languages separately for 6<sup>th</sup> and 8<sup>th</sup> graders.

**Table 42** *The reading tests in English, Kazakh and Russian in Grade 8 (2020)* 

Skill	Task	Input content	No. of items
Reading 1 in English	Match statements true or false	Advertisement information	7
Reading 2 in English	Match words to the definition		10
Reading 3 in English	Match advertisements to missing words	Advertisements	9
Reading 1 in Kazakh	Match statements true or false	Advertisement information	7
Reading 2 in Kazakh	Match the right answer to the question	Quiz texts	10
Reading 3 in Kazakh	Match the right answer to the question	Library information	9
Reading 1 in Russian	Match the right answer to the questions	Dialogue interview	7
Reading 2 in Russian	Match statements true or false	Advertisement information	7
Reading 3 in Russian	Match the right answer to the question		12

#### *5.4.2.3 Procedure*

Computer based assessment was administered online by the Electronic Diagnostic Assessment System, the eDia platform (Csapó & Molnár, 2019). The instruments were administered in the computer rooms at the participating schools with the Internet connection available there and using the operating system and browsers the participants normally use and are familiar with. Before the assessment survey, all seven schools were informed about the period and the time almost three to four months ahead. Participating students were also informed in advance that they were taking part in the survey to measure adolescents' reading literacy skills in Kazakh, Russian and English, and if necessary, for those, who had questions regarding entering and performing the tasks certain assistance was provided during the process.

The assessment procedure consisted of two sessions. In the first session, the students responded to the questionnaire regarding SES and variables of classroom climate, engagement, interest of learning English language, usage, and anxiety in ICT technologies. As the young adolescents were not proficient in English, the questionnaire was in Kazakh or Russian. In the second session, the students performed the reading tests in English, Kazakh, and Russian languages. On the assessment day, each participant was given a personal password to enter the eDia link platform to complete first the questionnaire, and then perform the tests in English, Kazakh, and Russian. The duration for the questionnaire and the tests in both grades took approximately 40 to 60 minutes. The Internet connection was good, so the students did not have any difficulties during their assessment process. The data were analyzed with the help of Statistical Package for the Social Sciences (SPSS), Mplus, ACER ConQuest, and RStudio.

## **5.4.3 Study Results**

#### 5.4.3.1 Validity and reliability of the instruments

Reliability of the background questionnaire in both grades ranged from ( $\alpha$ =.80) to ( $\alpha$ =.85). The questionnaire with background and attitude items had similar 58 items to both grades. Cronbach's alpha in the revised reading tests in three languages indicated an increased value in the upper grade (see Table 43). Interestingly, in both grades, the reliability in three reading tests was higher in 2020 than in 2019 (see study 5.3 in this chapter).

**Table 43** *Reliability (Cronbach's alpha) of the reading tests (2020)* 

	Grade 6	Grade 8
English	.84	.90
Kazakh	.93	.92
Russian	.92	.94

Exploratory factor analysis (EFA) in sixth and eighth grades showed eight-factor model from the questionnaire fitted well to the data. Furthermore, in both grades we conducted confirmatory factor analysis (CFA) to determine whether classroom climate and engagement scales validated the study. The results in both grades revealed good factor loadings, correlation coefficients for these factors ranged from .61 to .86 in sixth grade, and from .69 to .87 in eighth grade (see Tables 44, 45). Fit indices of the models fitted well to the data in Grade 6 ( $\chi$ 2=840.51, CFI=.95, TLI=.94, df=499, RMSEA=.02, & SRMR=.03) and Grade 8 ( $\chi$ 2=1038.51, CFI=.93, TLI=.92, df=499, RMSEA=.04, & SRMR=.04). Furthermore, we employed Rasch model measurement to scales the tests.

# Table 44

# Factor loading Grade 6

1 actor was	ting Grade 0	
Factor 1:	Climate of feeling at school (3 items)  1. I feel like an outsider (or out of things) at school  2. I make friends easily at school  6. I feel like an outsider (or out of things) at school	α=.670
Factor 2:	Sense of belonging to school (3 items) 3. I feel happy at school 4. Things are ideal in my school 5. I am satisfied with my school	α=.605
Factor 3:	Classroom c limate by student (5 items) 25. Students don't listen to what the teacher says 26. There is noise and disorder 27. The teacher has to wait a long time for students to settle down 28. Students cannot work well 29. Students don't start working for a long time after the lesson begins	α=.729
Factor 4:	Student-teacher relationship (5 items) 30. My teacher is interested in the progress of each student 31. My teacher provides extra-help to student if necessary 32. My teacher helps students in school 33. My teacher continues to explain the lesson until all students fully understand 34. My teacher gives students the opportunity to express their opinions	α=.619
Factor 5:	Interest and enjoyment of English learning (5 items) 7. I like learning English 8. I like reading in English 9. I like doing English language tasks 10. I like to get new knowledge in English language 11. I am interested in English	α=.856
Factor 6:	Attitudes of English learning (5 items)  12. English is important for society  13. I think English is a language of international communication  14. When I finish school I will have many opportunities to use English  15. I will use English language in many ways when I become an adult  16. English is important for society	α=.767
Factor 7:	Interest of using new technologies (5 items)  17. I am interested in new technologies  20. I am always interested in using the latest technical devices  22. It depends on me whether I succeed in using new technologies or not  23. I feel happy to use new technologies.  24. The result of my use of new technologies depends only on me	α=.636
Factor 8:	Anxiety of new technologies (3 items)  18. Using new technologies creates problems for me  19. I find it difficult to use new technologies – I do not know how to work withem  21. When I use new technologies I feel the fear of failure	α=.663

# Table 45

# Factor loading Grade 8

	1.0	
Factor 1:	Climate of feeling at school (3 items)  1. I feel like an outsider (or out of things) at school  2. I make friends easily at school  6. I feel like an outsider (or out of things) at school	α=.782
Factor 2:	Sense of belonging to school (3 items) 3. I feel happy at school 4. Things are ideal in my school 5. I am satisfied with my school	α=.709
Factor 3:	Classroom c limate by student (5 items) 25. Students don't listen to what the teacher says 26. There is noise and disorder 27. The teacher has to wait a long time for students to settle down 28. Students cannot work well 29. Students don't start working for a long time after the lesson begins	α=.837
Factor 4:	Student-teacher relations hip (5 items) 30. My teacher is interested in the progress of each student 31. My teacher provides extra-help to student if necessary 32. My teacher helps students in school 33. My teacher continues to explain the lesson until all students fully understand 34. My teacher gives students the opportunity to express their opinions	α=.731
Factor 5:	Interest and enjoyment of English learning (5 items) 7. I like learning English 8. I like reading in English 9. I like doing English language tasks 10. I like to get new knowledge in English language 11. I am interested in English	α=.872
Factor 6:	Attitudes of English learning (5 items)  12. English is important for society  13. I think English is a language of international communication  14. When I finish school I will have many opportunities to use English  15. I will use English language in many ways when I become an adult  16. English is important for society	α=.828
Factor 7:	Interest of using new technologies (5 items)  17. I am interested in new technologies  20. I am always interested in using the latest technical devices  22. It depends on me whether I succeed in using new technologies or not  23. I feel happy to use new technologies.  24. The result of my use of new technologies depends only on me	α=.697
Factor 8:	Anxiety of new technologies (3 items)  18. Using new technologies creates problems for me  19. I find it difficult to use new technologies – I do not know how to work with them  21. When I use new technologies I feel the fear of failure	α=.724

**Table 46** *Correlation of the Factors in Grade 6* 

Factors	1	2	3	4	5	6	7	8
1. Climate of feeling at	-	121**	.169**	.059	.008	.118**	.036	.236**
school								
2. Sense of belonging		-	070*	.158**	.235**	.226**	.288**	.131**
to school								
3. Classroom climate			-	.107**	147**	073*	058	.155**
by student								
4. Student-teacher				-	.109**	.118**	.115**	.049
relationship								
5. Interest & enjoyment					-	.543**	.300**	.115**
of English learning								
6. Attitudes of English						-	.420**	.200**
learning								
7. Interest of using ICT							-	.333**
8. Anxiety of ICT								_

<sup>\*\*</sup>p<.01

For the eighth-grade students the correlations between most factors were significant although relatively weak. However, factor (3) Classroom climate by student and (5) Interest & enjoyment of English learning showed no relationship. Even the number of negative relationships in Grade 8 found less than in Grade 6 where the problem between teacher-student interactions in the classroom for successful achievement seems to be existed.

**Table 47** *Correlation of the Factors in Grade 8* 

Factors	1	2	3	4	5	6	7	8
1. Climate of feeling at	-	114**	.298**	.086*	.085*	.179**	.110**	.350**
school								
2. Sense of belonging to		-	148*	.198**	.206**	.222**	.334**	.132**
school								
3. Classroom climate			-	.141**	.004	.113*	.129**	.157**
by student								
4. Student-teacher				-	.145**	.173**	.256**	.086*
relationship								
5. Interest & enjoyment					-	.565**	.325**	.090*
of English learning								
<ol><li>Attitudes of English</li></ol>						-	.419**	.224**
learning								
7. Interest of using ICT							-	.303**
8. Anxiety of ICT								-
stepte 0.1		•		•	•		•	

<sup>\*\*</sup>p<.01

## 5.4.3.2 Rasch analyses

The level of reading literacy among young learners and the fit of item difficulty was conducted by Item Response theory (IRT) model examined item statistic properties conducting Rasch analysis using ConQuest-2.0 package program. Item analysis showed the following values of the items, where description index (DI), Weighted MNSQ mean square, point-biserial correlation (Pt Bis), average measure (Avg) were checked. The fit of the items difficulties and the students' abilities were ranged under the next distribution, where the DI should be higher 0.2 and close to 0.4 or above,

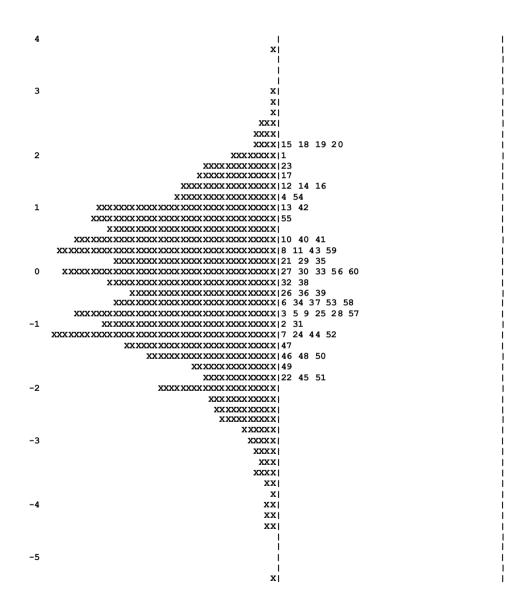
<sup>\*</sup> p<.05

<sup>\*</sup>p < .05

which means that the item score meets the whole score of the test where 0.4 is the good item; (Hopkins, 1998). In Grade 6, DI of the item score met the entire test score (in English - 0.16 (item 4); 0.15 (item 15); in Kazakh - 0.19 (item 23); in Russian - all above 0.2 and close to 0.4). Tests' reliabilities in Rasch analysis showed the range from .84 to .92 (Figure 12).

Figure 12
Grade 6: Wright map of persons and items in Reading comprehension test (English, Kazakh, Russian) for the unidimensional model (each 'X' represents 1.3 cases)

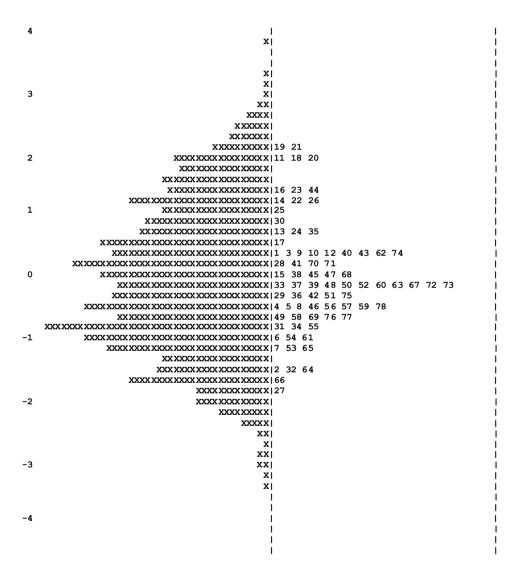
EAP/PV RELIABILITY: 0.915



In Grade 8, the results of DI in Kazakh and Russian showed (in Kazakh 0.11 (item 2); 0.03 (item 4); in Russian 0.16 (item 13)), whereas in English all items were above 0.23. The reliability of the tests was from .90 to .94 (Figure 13).

Figure 13
Grade 8: Wright map of persons and items in Reading comprehension test (English, Kazakh, Russian) for the unidimensional model (each 'X' represents 1.0 cases)

EAP/PV RELIABILITY: 0.901



The measures of "category disordering" as Weighted MNSQ should be not higher than one but from 0.7 to 1.3 (Griffin, 2010). In Grade sixth Weighted MNSQ of the items in all languages were appropriate, particularly, in English the ranging was from 0.75 (item 9) to 1.35 (item 4); in Kazakh, from 0.74 (item 28) to 1.61(item 23); in Russian - from 0.60 (item 51), 0.65 (item 49), 0.62 (item 45) to 1.48 (items 42, 43).

In Grade eighth, Weighted MNSQ in English is ranging from 0.71(item 10) to 1.49 (items 1); in Kazakh – 0.65 (item 42) to 1.79 (item 30); in Russian is from 0.66

(item 70) to 1.86 (item 66), which means that items fitted the model even though some items in Kazakh and Russian languages should be modified regarding the measures of "category disordering".

Pt Bis and Avg should "not be in increasing order with increasing category scores", which means that "for a lower score category, the average autonomy level is higher than that for a higher score category" (Wu & Adams, 2007, pp. 64-65). Pt Bis and Avg were appropriate and fitted the range. Both grades demonstrated that items' difficulties in Kazakh and Russian tests were easier comparing to English, but still some more items should be included. Item Person Map (IPM) defined that level of items' difficulties and abilities of the students' level were appropriate and aligned the model. In general, for both grades the items in English language tests were difficult to perform comparing to Kazakh and Russian. Both grades demonstrated that items' difficulties in Kazakh and Russian tests were easier comparing to English, but still some more items should be included, albeit good item distribution. Detailed maps of the items of the tests could be presented further in the appendices (see Appendix C, D) right after the references.

## 5.4.3.3 Performance difference in difference grade levels

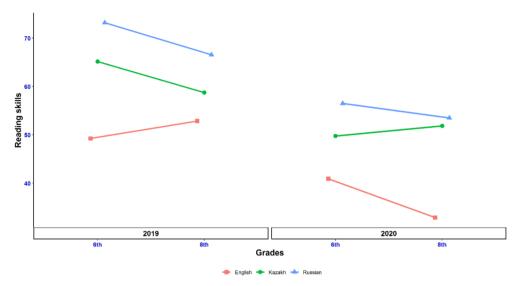
The performances of students in Grades sixth and eighth were poor in all three languages. Comparing to the results collected in 2019 reading literacy in 2020 has declined significantly (see Table 48, Figure 14), which could be a worrisome issue for the development of literacy among young learners. Despite the engagement and classroom climate in grade 8 (Figure 15) were increasing their impacts on reading achievement in the target languages in 2020 were declining in the eighth grade.

**Table 48** *Comparing performances in the reading tests in 2019 and 2020* 

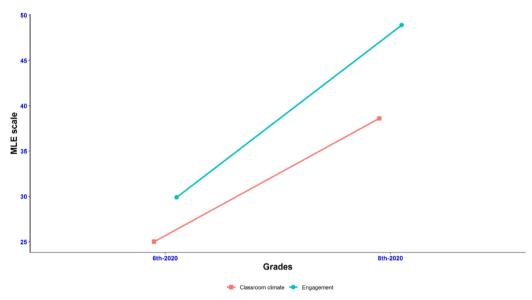
Languaga	Grade	6 (2019)	Grade 6 (2020)		Grade 8 (2019)		Grade 8 (2020)	
Language	Mean	SD	Mean	SD	Mean	SD	Mean	SD
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
English	49.26	30.92	32.90	21.70	52.85	30.18	40.92	24.53
Kazakh	65.16	30.61	51.85	31.14	58.74	28.79	49.76	27.93
Russian	73.20	24.62	53.50	29.52	66.56	26.13	56.50	30.57

The problem for this issue may relate to the Reviews of School Resources (OECD/The World Bank, 2015) in Kazakhstan indicating the gaps in the system of secondary education. These reviews suggesting teachers, parents, principles, and other stakeholders to be more careful and put a significant attention on the process of choosing textbooks for reading, which should meet students' interests in middle school. In addition to this, among sixth-grade students the correlation of factor (1) Climate of feeling at school with the factors (4) Student-teacher relationship, (5) Interest & enjoyment of English learning, and (7) Interest of using ICT found non-significant and showed no relationships. While factor (7) Interest of using ICT revealed negative poor correlation with factor (3) Classroom climate by student, as well as no relation between factor (8) Anxiety of ICT and (4) Student-teacher relationship.

**Figure 14**Development of young learners' reading skills in 2019 and 2020



**Figure 15** *Performance difference in difference grade levels* 



The role of teachers and school administration should be motivated and let young learners root ideas, contribute, and develop views in the process of teaching and learning. Students should able to decode and comprehends the information in the languages they are learning. Although comparing the findings of sixth and eighth grades in 2019 and 2020 years the decrease in three languages was obvious.

### 5.4.3.4 Language differences

Kazakh and Russian languages showed higher correlation (r=.65, p<.01) than between English, Pearson correlation was stronger in eighth grade than in sixth albeit significant in both grades.

In sixth grade ANOVA test indicated that mother tongue affected tests' performances in English, Kazakh, and Russian, significant differences were revealed between students' mother tongue and the tests (English - F (2, 885) =25.53, p<.001,  $\eta_p^2 = .053$ ; Kazakh - F (2, 885) =42.16, p<.001,  $\eta_p^2 = .086$ ; Russian - F (2, 885) =141.55, p<.001,  $\eta_p^2 = .230$ ). Although actual effect of mean score between groups in English and Kazakh tests was quite small (Cohen, Manion, & Morrison, 2007) comparing to Russian, where the effect of mother tongue was 23%. Furthermore, post hoc test defined significant difference between students' performances regarding their mother tongue the mean difference was statistically significant in English, where Russian students (M = 58.98, SD = 27.75) performed better than Kazakh (M =45.06, SD = 28.13). However, in Kazak test the mean score of Russian native speakers was higher (M = 61.48, SD=25.58) than Kazakh (M = 43.71, SD = 28.66) and Other (M = 57.17, SD = 26.12). In Russian test, Russian (M = 68.29, SD = 18.59) and Other (M = 72.04, SD = 24.12) did statistically better than Kazakh native speakers (M = 39.70, SD = 28.29).

**Table 49** *Correlations of Tests in Grade 6 and 8 (2020)* 

Grade	Test	Test in Russian	Test in English
Grade 6	Test in Kazakh	.578**	.461**
	Test in Russian		.450**
Grade 8	Test in Kazakh	.645**	.484**
	Test in Russian		.503**

<sup>\*\*</sup> p<.01

**Table 50**Gender differences in the English, Kazakh and Russian reading test performances (2020)

Grade 6 (n=	888)		Grade 8 (n=675)			
English	Mean (%)	SD (%)	English	Mean (%)	SD (%)	
Boys	49.70	28.53	Boys	50.04	29.49	
Girls	50.28	29.08	Girls	49.97	28.30	
tEng (888) =	=30, p >.05		tEng (675) =	= .03, p>.05		
Kazakh	Mean (%)	SD (%)	Kazakh	Mean (%)	SD (%)	
Boys	50.83	28.88	Boys	51.65	29.21	
Girls	49.23	28.81	Girls	48.57	28.50	
tKaz (888) =	= .82, p > .05		tKaz(675) =	= 1.38, p>.05		
Russian	Mean (%)	SD (%)	Russian	Mean (%)	SD (%)	
Boys	51.54	28.79	Boys	54.00	28.17	
Girls	48.58	28.82	Girls	46.52	29.03	
tRus (888) =	1.53, p > .05		tRus (675) = 3.39, p < .05			

In eighth grade, significant differences were found among Kazakh, Russian and other ethnic groups performing the test in English - F(2, 672) = 26.71, p < .001,  $\eta_p^2 = .071$ ; Kazakh - F(2, 672) = 35,34, p < .001,  $\eta_p^2 = .095$ ; and Russian - F(2, 672) =

156,79, p < .001,  $\eta^2_p$  = .318 languages. Post hoc analysis in eighth grade revealed significant differences between pairs of the nations in English test where students, whose mother tongue was Russian (M = 60.33, SD = 28.25) performed significantly higher than Kazakh (M = 43.95, SD = 27.18) and Other (M = 49.81, SD = 36.59) ones. The mean score in Kazakh test showed better results of Russian (M = 61.19, SD = 25.72) and Other (M = 62.63, SD = 23.27) native speakers than Kazakh (M = 42.98, SD = 28.59). In Russian test, the scores of Russian (M=70.75, SD = 17.11) and Other (M = 68.23, SD = 22.31) students were statistically different than Kazakh students (M=37.17, SD = 27.09).

Non-significant difference in Russian test and the students' ethnic groups was found, albeit in English test, significant difference was revealed among Kazakh and Russian students. Students, whose mother tongue was Russian, did significantly better than those, whose native language was Kazakh and Other. Hence, the effect size of mother tongue had small, even close to intermediate effect in both grades in three language tests ( $\eta^2=$  is from .053 to .318). Although the probability of performing the tests in Kazakh, Russian, and English by Kazakh native speakers was significantly lower than Russian and other nations in all respected languages. Interestingly, comparing to the results, collected in 2019 - Kazakh students performed better in all language tests than Russian and Other.

However, the findings of 2020 showed the opposite tendency, although the mother tongue and/or the language students speak at home emerge intermediate effect size in reading achievement, albeit strong significant correlations between the languages. Gender differences regarding tests in English, Kazakh, and Russian represented in Table 47 determined that boys fulfilled better in the tests than the girls, albeit it was revealed that in sixth grade no significant differences were defined because the probability value was greater than .05 (p >.05). The difference was only significant (p<.05) in Russian test among students in eighth grade almost .001 the results of the boys were higher than the girls. However, comparing to data collected in 2019 the girls did better in all tests in both grades although not significantly different.

# 5.4.3.5 Interaction of Classroom climate and engagement in explaining children's reading achievement

Path analyses in structural equation modeling (SEM) approach to explore the relationships between classroom climate and engagement in both grades as the predictors of reading comprehension tests. The analysis tested whether engagement mediated the link between classroom climate and academic achievements among adolescents in two cohort grades. SEM tests showed that factor loadings of classroom climate's latent variables in sixth grade ranged from .01 to .59; and from .05 to .33 in eighth. Factor loadings of engagement's latent variables ranged between .00 to .84 in sixth grade, and from .01 to .82 in eighth grade.

SEM analysis model in both grades indicated acceptable fit model to the data with 8-factor model in Grade 6 ( $\chi$ 2=1235.03, CFI=.92, TLI=.91, df=607, RMSEA=.03,SRMR=.05); and in Grade 8 ( $\chi$ 2=1456.03, CFI=.90, TLI=.89, df=607, RMSEA=.05,SRMR=.06). The low TLI or non-normed fit index may determine low correlation between some variables in Grade 8 in the model if the TLI is below .90 (Barrett, 2007; Kenny & McCoach, 2003).

Reading achievements had non-significant low effect in both grades - sixth grade in English ( $R^2$ =.01), Kazakh ( $R^2$ =.02) and Russian ( $R^2$ =.04); eighth grade in English ( $R^2$ =.01), Kazakh ( $R^2$ =.07), in Russian ( $R^2$ =.06). R-square in regression

analysis examined how obtained factors influenced significantly on tests in sixth grade although not strong in English and Kazakh languages (almost 1% in each), but slightly better in Russian test (15%). Comparing to grade eighth, the impact was better in Kazakh and Russian (10% and 15%) tests, but weak in English (1%) (Table 51).

**Table 51** *Regression analysis* 

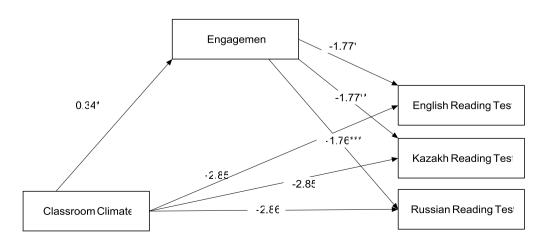
	R <sup>2</sup> (%) In English, p-value	R <sup>2</sup> (%) In Kazakh, p-value	R <sup>2</sup> (%) In Russian, p-value
Grade 6	1%, p=.02	1%, p=.01	15%, p<.001
Grade 8	1%, p=.05	10%, p<.001	15%, p<.001

### 5.4.3.6 Mediation effect

Mediation is the relationship between X independent variable (IV) and Y dependant variable (DV) through a mediator (M) variable. There are *complete mediation* – IV causes its full influence on DV via M, and *partial mediation* – IV causes some part of its full influence on DV via M and without M. "The possibility that mediation can exist even if there is not a significant relationship between the independent and dependent variables" (Judd and Kenny, 1981, p. 207). Mediation suggests a causal effect between independent and dependent variables, although in order to test our conceptual model we conducted regression analysis. The findings revealed the following effects showing that direct effects of X (IV) on Y (DV) in grade sixth was insignificantly negative in all target languages (Figure 16), whereas in grade eighth positively significant in Kazakh and Russian reading tests and non-significant in English (Figure 17).

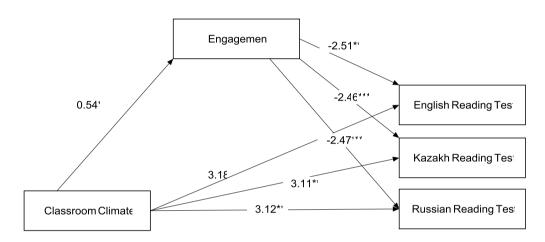
The indirect effect of classroom climate on tests' outcomes via the mediation effect of engagement the achievements of the sixth graders in English language was non-significant, albeit significant in Kazakh (p<.01) and Russian (p<.001) languages. Hence, we may assume that full mediation could take place among sixth graders only in Kazakh and Russian languages and not in English (Figure 16).

Figure 16
Mediation in Grade 6



The direct effects of classroom climate X (IV) on engagement M (DV) was significantly positive in both grades [Grade 6 ( $\beta$ =.34, p<.001); Grade 8 ( $\beta$ =.54, p<.001)], however, the mediation was non-significant only in the reading test of English in grade sixth (p=.048), albeit significant in the eighth grade in all reading language tests. However, the direct effects of engagement on reading achievement tests were significantly negative in both grades in all respected languages. The mediation effect of classroom climate on achievement through engagement among eighth graders found significantly partial in Kazakh (p<.000) and Russian (p<.000), and significantly full in English. The indirect effect of classroom climate in engaging eighth graders' reading skills in three target languages revealed negative (Figure 17).

**Figure 17** *Mediation in Grade 8* 



The results of the analysis could be worrisome as the negative classroom climate in the schools in Kazakhstan will be reason to suggest that learning process is not safe and does not encourage for further engagement. Classroom climate and engagement played a significant role as children move to the upper grades e.g. from grade six to grade eight. The differences in ages and grades were obvious from negative to positive in classroom climate as predictor of reading comprehension. Furthermore, the literature underpins that negative area in the classroom climate could be vulnerable for low results in achievement.

However, low influence on achievements in reading comprehension language tests would be because of the inefficient quality of instruction, limited time provided for teaching, and technical resources necessary for student teaching and learning process. Randomly chosen schools were all public and there could be several students from low socio-economic background, which also could be one of the reasons endorsed with the issue. Although in our current study, we did not provide any information about family income of the students as this issue was not under our focus of our research. However, the descriptive properties showed that more than half of the students were satisfied with their school, the results of students' achievements predicted to require sensitive attention to the quality of instruction in the classroom climate.

#### 5.4.3.7 Reading attitudes and reading achievements

For reading attitude tests, EFA was performed to reveal the factors for grades  $6^{th}$  and  $8^{th}$  and in the grade 6 and  $8^{th}$  3-factor loadings had a good model fit to the data and then in order to assess the influence of the reading attitude factors on reading achievement confirmatory factor analysis (CFA) was conducted. However, the model fit did not fit well to the data and even both grades were combined the analysis of total (N=1,563) sample was not fitted well. The analysis of regression analysis revealed that even the students had positive attitude towards reading it did not impact reading comprehension tests in English, Kazakh, and Russian (i.e.  $\chi$ 2=561.00, CFI=.85, TLI=.80, df=78, RMSEA=.06, & SRMR=.05 both  $6^{th}$  and  $8^{th}$  grades).

The influence of factors in reading attitudes was only significant in Kazakh and Russian tests but not in English, albeit the strength of the relationships between factors between reading attitudes and the reading tests were not high  $(R^2_{en}=.021,p>.05;\ R^2_{kaz}=.030,p=.04;\ R^2_{rus}=.064,\ p<.05)$ . This could relate to the aspect that some of the variables did not correlate significantly to reading achievement tests in the respected languages, and as a result, caused the problem to the model. However, Pearson correlation between revealed reading attitudes factors were moderate but statistically significant and ranged from (r=.154 to .380, p< .001) for the following factors as Factor 1- "Positive Reading Attitude", Factor 2- "Nonpositive Reading Attitude" and Factor 3 - "Reading Preferences". Based on the results, girls preferred to read more books at home and like to go to the library than boys, independent sample t-test showed that in factor 3 there were significant differences between the girls and the boys (t=4.636, p< .001). These results could demonstrate that reading attitudes of the children did not interact well on students' reading achievements in various languages.

Researchers prove (Cunningham & Stanovich, 2001; Partin & Gillespie, 2002) that reading achievements are mostly depended on systematic reading literacy process, which then positively influence reading attitudes. Although, if the systematic reading experiences were not provided in or out of the school then this could affect reading achievements and form negative belief towards reading attitudes later in the upper grades. Poor results in reading tests and low relationships with reading attitude could be determined that children in Kazakhstan in the middle grades read less and this could be a serious problem for further in the upper grades. These results would probably be the basis that children have difficulties with reading and do not have regular reading habits in the classroom and at home.

#### 5.4.4 Discussion

Even the impacts of classroom climate in engaging children's reading competency in English, Kazakh, and Russian languages in both grades were low the validity of the adapted instruments showed good fit to the model. To overall, the validity of adapted instruments showed that mediation was taken place in the middle school among Kazakhstani young learners (Akhmetova et al., 2021c). The interaction between students and teachers, classroom emotional climate in school and level of engagement impact the learning process (Ryan & Patrick, 2001; Pianta et al., 2008; Jia et al., 2009). For example, Jennings & Greenberg (2009) state that teacher's social and emotional competence may improve classroom climate and promote students' outcomes in the school, as students "learn better when they are happy" (p. 515).

Literature underpins that negative climate area in the classroom could be vulnerable for low results in achievement. Students with high level of engagement in reading have high achievements in learning than those who are disengaged (Fredricks, Blumenfeld, & Paris, 2004). Gao, Chen, Zhou & Jiang (2020) claim that engagement and students' achievements pivot on school environment and classroom climate, defining that the more safety classroom climate, the more reliable behavioral perception of the students' outcomes.

Poor results in reading language tests may relate to the limited of time required for classes in the school, low engagement of students to learn the languages in overloaded classes (20-25 students). Weak performances of young adolescents must be because of the inefficient quality in teaching and learning, limited technical resources necessary for student teaching and learning process. In addition, a diagnostic report determined that socio-economic status (SES) had a weak point in education system of Kazakhstan. This report has also highlighted that teachers, principals, and other stakeholders have not correctly understood what the statement like developing the workforce with high level of "innovative, technical skills and leadership" (Sagintayeva et al., 2014, p. 22) interprets and how it is underpinned in international survey assessment like PISA, TIMMS, or PIRLS, where the ability to think critically is necessary. Another reasonable problem may be school textbooks for teaching reading skills, recommended by the ministry of education and listed in the standards of Core curriculum. For example, the content of most textbooks for middle school students has been found difficult and/or boring, which may not follow the interests of the young learners. Thus, in order to encourage and motivate young learners to read more for fun, parents, policy makers, principles, and other stakeholders in Kazakhstan should be familiar with the books that interest children and/or they would like to read and select textbooks and additional reading materials regarding their interests. Teachers should put serious attention on assessment process and appropriate management of climate in the classroom, when teaching reading skills in native language (e.g., Kazakh or Russian) and/or English as a foreign that facilitates engagement for effective comprehension in reading.

Conceptual model was based on literature research tested by several educators and researchers (Pianta et al., 2008; Reyes et al., 2012) in the field of assessment in education, classroom climate, and engagement. The model examined mediation effect of engagement between school classroom climate and the students' reading outcomes in English, Kazakh, and Russian languages. In Grade 6 full mediation effect were in Kazakh and Russian, and no mediation in English, albeit in eighth grade, partial mediation revealed in Kazakh and Russian, and full mediation in English. These results may prove the existence of mediation effect in the middle school of Kazakhstan, where classroom climate and engagement could play a significant role as children move to the upper grades i.e. from grade six to grade eight. Difference in the classroom climate in sixth and eighth grades was obvious – from negative to positive. These findings could be worrisome as the negative classroom climate in the schools may suggest that learning process in Kazakhstan could not be sufficiently safe and/or encourage further engagement. Randomly chosen schools were all public and there were students with low socio-economic background, which may be endorsed with that issue. Although in our current study, we did not provide any information about family income of the students as this issue was not under the focus of our research. However, descriptive properties showed that more than half of the students were satisfied with their school, the results of students' achievements predicted sensitive attention to the climate in the classroom and the quality of instruction. The effect of mother tongue

influenced significantly higher among Russian native speakers. Although the percentage of achievement was very low, Russians performed significantly better in all three languages than Kazakhs and Others. Interestingly, boys did relatively better than the girls, albeit not significantly different.

Researchers (Djigic, & Stojiljkovic, 2011) determine "interventionist" relationship between teacher-student, where the teacher "tends to achieve complete control" (p. 822) over students' success in outcomes. This also may be related to several drawbacks that have been highlighted in the system of secondary education in Kazakhstan. For example, National Strategic Plan of 2020 on development and improvement national standards in education has not been sufficiently implemented an appropriate core curriculum for secondary education. Likewise, many textbooks, national and standardized tests such as, the Unified National Test (UNT) is full of factual quantity information that students have to memorize and produce back to the teacher. Hence "while students performed very well on an international mathematics and science test, (TIMMS), their practical skills are not well developed as the curriculum center on raw memorisation" (ICG, 2011, p. 32, as sited in Sagintaveva et al., 2014, p. 25). The reports determines that National standard of education in Kazakhstan has fewer tasks measuring such abilities and skills as "to compare and contrast two poems or problems; explain and interpret why a certain issue has happened; evaluate, discuss, develop an argument regarding the problem" (Sagintaye va et al., 2014, pp. 24-25).

Background variables indicated further relationship between reading achievements and classroom climate that had strong prediction of engagement although relatively small for reading comprehension. Negative relationship between variables in Grade 6 determined difficulties in assisting an appropriate planning classroom climate and engagement among students and teachers. In Grade 8, the results, showed positive influence of classroom climate on reading tests, but still negative engagement of the students remained towards reading comprehension tests in English, Kazakh, and Russian languages. Advanced analysis demonstrated good model fit indices, the intervention for appropriate guided skills in teaching and learning reading abilities occurred essential.

Moreover, the findings pointed that students' reading achievement performed in 2020 in reading comprehension has decreased significantly comparing to 2019, which can be worrisome. The effect of mother tongue influenced significantly higher for Russian native speakers. Russian students performed significantly better than Kazakh and Others, although in general the percentage of achievement was very low comparing to 2019 respectively in all three languages. It was interestingly to denote that boys did relatively better than the girls, albeit significant differences were not observable.

Poor results in reading language tests would relate to the limited of time required for classes in the school, low engagement of students to learn English, overloaded classes (20-25 students). To increase reading comprehension teachers, parents, and other stakeholders should clearly identify, implement and develop certain methods, techniques, instruments, and measurement tools to increase and stimulate the range of reading comprehension as low and poor reading comprehension define negative attitudes towards reading. It is advisable to apply frequently early and regular reading experience in teaching process. Students should be motivated and supported in and out of school, especially if reading difficulties among young adolescents is evident. Likewise, tools for high-quality assessment may provide

teachers, researchers, and policy makers with reliable data collection, constant assessment, and further improvements for curriculum requirements.

On contrary, beyond motivation there is another types of assessment are test anxiety and exam performance, where a test taker perceives several kinds of emotional cognitive, behavioral, and physical feelings. Miller identifies that test anxiety can block students' performance in the exam and therefore one cannot demonstrate his or her best in the test even if he learnt and knew the material well. Miller offers several tasks-solutions how to overcome with the stressful situations in the test and during performing in order to pass successfully. Performing and fulfilling the test is not an easy task as it takes from an examinee to overcome several influencing factors such as anxiety, memory, attention, etc. Danili & Reid (2006) refer such functions like attention, memory, and reasoning to cognitive factors as they affect person's characteristics in performance and learning. Affective factors can be positive and negative as these factors relate to emotion, feeling, and attitude that a person is approaching in learning practice and mastering his competence. Further these factors play a basis fundamental for motivation (Dörnyei, 2001). This also proves that motivation as a broad issue touches various aspects in human's life and education, as well as plays one of the important reasons in learning outcomes and achievement process. Lazowski & Hulleman (2016) differentiate several aspects including in motivation like "...achievement emotions, achievement goals, attribution, expectancy-value, goal setting, implicit theories of intelligence (mindsets), interest, need for achievement, possible selves, self-affirmation, self-confrontation, self-determination, self-efficacy, social belongingness, and transformative experience. These theoretical frameworks have produced a variety of different interventions that target student motivation as an instigator of enhanced learning outcomes" (p. 606).

# 5.5 Reading strategies and reading performances of $6^{th}$ and $8^{th}$ graders in Kazakh, Russian, and English: cross-sectional study

#### 5.5.1 Introduction

During the last several decades, researchers have been actively assessing the essential benefits of reading strategies the students use in their mother tongue, L1, L2 or English as a foreign while reading. Many research works towards reading domain refer reading to the cognitive interaction of the "reader, the text, and the context" (Sheorey & Mokhtari, 2001). Sheorey and Mokhtari claim that later on, a useful reader has to "utilize metavognitive knowledge and must invoke conscious and deliberate strategies" (Mokhtari & Sheorey, 2002, p. 3) in order to understand the meaning of the text. They also determine that "metacognitive knowledge" of the reader has a number of reading strategies that affect the cognitive process of reading (Sheorey & Mokhtari, 2001).

Reading strategies has one of the significant roles while performing tasks and define one the main parts in students' better comprehension. Researchers define that reading strategies are among the substantial components in text comprehension and adequate knowledge recognition necessary for successful "interpretation of the meanings communicated in the text" (Van Gelderen et al., 2004, p. 19). "Reading strategies are associated with different aspects of language learning and cognitive processes, and the effects can only be observed if reading becomes a habit" (Ríos & Valcárcel, 2005).

The improvement of Kazakhstani young language learners' reading level requires efforts, and time as well as well-developed framework, scheme, and instruction. In addition, it is necessary to know and define what strategies the skilled readers use and how they apply them during the reading process (Sheorey & Mokhtari, 2001). Thus, the way of exploring of reading strategy of young learners while reading in the targeted languages will be useful for better assisting and guiding the comprehension and instruction in reading activity.

### 5.5.2 Methods

## 5.5.2.1 Participants

The participants were (N=1,563) students in grades 6 and 8 from randomly enrolled middle schools in Pavlodar city in the north of Kazakhstan. Students age was ranged from 11 to 14 the mean age of the students was 12.81 years (SD=1.13). Number of females was (52.6%) and males (47.4%), including Kazakh (N=986, 63%), Russian (N=547, 35%), and Other (N=30, 2%) group of students. However, being culturally diversified Kazakhstan has officially two languages of instruction in the schools. Although, Kazakh children are bilingual the proficiency level depends on the way of studying in the school and the frequency of using the language at home. Thus, for example, the percentage of performing the questionnaire in Kazakh (N=609, 39%) and Russian (N=954, 61%) had varied.

#### 5.5.2.2 Instruments

Metacognitive Awareness of Reading Strategies Inventory (MARSI) - a 30-item questionnaire Version 1.0 by Kouider Mokhtari and Carla Reichard (c.f. Mokhtari & Reichard, 2002) was applied for the first time to adolescent students in the middle schools. Traditionally the MARSI explores to define the level of metacognitive awareness of the students from the middle schools who are able to use reading strategies for the academic goals. The instrument reflects the development of reading abilities of the students from 11 to 18 ages while reading the texts. The MARSI has categorized with three factors, which have already passed several aspects of validity mode as content validity, substantive, structural, general, external and consequential (see Mokhtari, Dimitrov, & Reichard, 2018, p. 223) of the items. Global, problem solving and support reading strategies were the factors involving in the MARSI questionnaire (c.f. Mokhtari & Reichard, 2002).

Researchers (Mokhtari, Dimitrov, & Reichard, 2018, p. 221) defined that the MARSI questionnaire has been translated into several languages, albeit in Russian and Kazakh languages the questionnaire has not been available. Thus, to adapt the MARSI questionnaire, four experts in Kazakhstan translated the original English version of the MARSI into Kazakh and Russian languages twice back and forth to assess the level of metacognitive awareness of Kazakhstani students in their mother tongue. The students from the middle schools verified the validation of the MARSI instrument and the Cronbach's coefficient alpha demonstrated  $\alpha$ = .89- of the total groups of people.

The range of the each category of the sample in each factory sub-scale were: Factor 1- Global Reading Strategies ( $\alpha$ = .78); Factor 2- Problem-Solving Strategies ( $\alpha$ = .68); Factor 3- Support Reading Strategies ( $\alpha$ = .74). In addition to MARSI questionnaire, administered in Kazakh or Russian, the students performed self-developed reading tests in Kazakh, Russian, and English. The reliability of each language was very good from .95 to .96 (see study 4 in this chapter). The tests were applied separately for the 6<sup>th</sup> and 8<sup>th</sup> grades for the second time to the same seven secondary schools in Pavlodar. The reliability of all tests in sixth and eighth grades ranged from .94 to .96 respectively. The correlations of the factors of the MARSI questionnaire of the whole sample was significantly strong from r=.65 to r=.75, p<.001 (Table 52).

**Table 52**Correlations of MARSI factors of the whole sample (6 & 8, grades)

Factor	Factor 2	Factor 3	
Factor 1	.684**	.747**	
Factor 2		.650**	

<sup>\*\*</sup> p<.01

Note. Factor 1 = Global Reading Strategies; Factor 2 = Problem-Solving Strategies; Factor 3 = Support Reading Strategies.

### 5.5.2.3 Procedures

The collection of the data was conducted in January-February, 2020 among young adolescents in the middle school. This was the second part of the assessment session as the first part was of the session students performed background questions. The instruments were administered online via eDia platform; the students were familiar

with the purpose of the research because they were instructed before the session, although who had questions necessary guide was undertaken. Students were informed to read each statement carefully and attentively and choose the response that they usually use and apply while reading books related to their studying and school programme. The session process had morning and the afternoon session as children of 6<sup>th</sup> and 8<sup>th</sup> grades in various schools had different shifts, thus the instruction was administered in the morning and in the afternoon. The students completed the instruments in about 25-30 minutes.

### 5.5.3 Study Results

### 5.5.3.1 Reading strategies and reading comprehension tests of the learners

Cronbach's alpha showed good reliability in all reading tests in three languages ranged from ( $\alpha$ =.95) in sixth to ( $\alpha$ =.96) in eighth grade. In questionnaire alpha pointed from ( $\alpha$ =.88) to ( $\alpha$ =.90) in sixth and eighth grades respectively, although the reliability of the questionnaire for the total sample (N=1,563) was .89. The adapted questionnaire of metacognitive awareness of reading strategies inventory (MARSI) was applied for the first time in Kazakhstan to the new culture to young adolescents aged 12 to 14 (Grades  $6^{th}$  and  $8^{th}$ ).

Mainly, MARSI questionnaire was designed "to assess 6th-through 12th-grade students' awareness and perceived use of reading strategies while reading academic or school-related materials" (Mokhtari & Reichard, 2002, p. 251). Due to the young age of the students, the assessment of MARSI questionnaire was in the students' mother tongues (Kazakh or Russian) not in English. It should be taken noted that students at the age of 12 and 14 in Kazakhstan, have not yet developed fluent proficiency skills in English, as they learn English as the foreign language and cannot fully and proper understand the meaning of the statements in English MARSI questionnaire.

All in all the analysis of the MARSI questionnaire in Kazakh and Russian and the reading tests in all languages analyzed the whole sample of 6<sup>th</sup> and 8<sup>th</sup> grades (N=1,563). The students demonstrated moderate results in all three language reading tests (M=50%, SD=28.8%), three factors were revealed from the reading strategy questionnaire the average of the factors pointed a medium score (M=2.61, SD=.462) of the strategies when reading academic or school related materials.

**Table 53**Correlations of reading strategies and reading tests in English, Kazakh, and Russian (6 & 8, grades)

	Test in English	Test in Kazakh	Test in Russian
Factor 1	097**	135**	215**
Factor 2	052*	069**	114**
Factor 3	071**	151**	235**

<sup>\*\*</sup>p<.01

Note. Factor 1= Global Reading Strategies; Factor 2= Problem-Solving Strategies; Factor 3= Support Reading Strategies

Although regarding the score of the whole sample in each language reading test in English (M=36%, SD=23.3%); in Kazakh (M=51%, SD=29.8%); in Russian

<sup>\*</sup>p<.05

(M=55%, SD=29.9%), the students showed low results. It is interesting that researchers claim that mostly the relationships between reading strategies and the reading comprehension have found positive and the more skillful the reader is the more strategies he or she uses (Lau & Chan, 2003; Alsheikh & Mokhtari, 2011). In addition the strategies he or she uses are significantly necessary "for reading comprehension" in L1, L2 or EFL (Alsheikh & Mokhtari, 2011, p. 151).

The correlation of reading strategies and reading comprehension tests in Kazakh, Russian, and English was negative but significantly moderate. The weak interaction of reading strategies and the reading comprehension test was defined in English. This could be proved that the questionnaire was administered in Kazakh and Russian not in English. In addition, the investigation of several researchers have claimed that while reading or performing the tasks in English as FL, the students usually apply the knowledge from their native language or use translation strategy from English to their own language to understand and gain comprehension of the reading text (Kong, 2006; Alsheikh & Mokhtari, 2011, p. 152). Therefore, we assume that Kazakhstani young students supposed to apply reading strategies from Kazakh and Russian languages while performing the reading tasks in English.

### 5.5.3.2 Gender and language performances in reading strategies

Descriptive statistics of grade, gender and the ethnic groups performing the MARSI 30-item reading strategy questionnaire are the following. Regarding gender differences, in general, there are no any differences between boys and girls in the reading strategies, although in some strategies referred to problem solving and support girls performed significantly better. The overall score of reading strategies revealed that students in the middle school in Kazakhstan had medium level of using (M=2.65, SD=.474) reading strategies while reading in their mother tongue and probably in English, as we assessed the questionnaire only in the students' mother tongues. Global reading strategies: "I decide what to read closely and what to ignore. I use tables, figures, and pictures in text to increase my understanding.", and the only support reading strategy: "I use reference materials such as dictionaries to help me understand what I read." had the low average score comparing to the other strategies. By the means of these sub-scale strategies, we assumed that the ways of decision-making and/or the proper use of figures and tables in comprehension process among young adolescents in Kazakhstan have not been constantly formed yet.

**Table 54**Differences by Gender of the whole group (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)

		Male	(n=741)	Female	(n=822)		
	Strategy	M	SD	M	SD	t	p-value
1.(GLOB)	I have a purpose in mind when I read.	2.78	.932	2.77	.879	.220	.826
2.(SUP)	I take notes while reading to help me understand what I read.	2.56	1.027	2.56	1.017	.084	.933
3.(GLOB)	I think about what I know to help me understand what I read.	2.81	.956	2.86	.932	-1.048	.295
4.(GLOB)	I preview the text to see what it's about before reading it.	2.65	.996	2.63	.955	.255	.798
5.(SUP)	When text becomes difficult, I read aloud to help me understand what I read.	2.55	1.028	2.54	.980	.249	.804
6.(SUP)	I summarize what I read to reflect on important information in the text.	2.68	.930	2.73	.957	-1.145	.252

7.(GLOB)	I think about whether the content of the text fits my reading	2.64	.961	2.72	.941	-1.706	.088
8.(PROB)	purpose. I read slowly but carefully to be sure I understand what I'm reading.	2.73	.988	2.77	.949	796	.426
9.(SUP)	I discuss what I read with others to check my	2.53	1.022	2.66	.995	-2.551	.011
10.(GLOB)	characteristics like length and	2.55	.987	2.64	.959	-1.730	.084
11.(PROB)	organization. I try to get back on track when I lose concentration.	2.80	.966	2.84	.940	915	.360
12.(SUP)	I underline or circle information in the text to help	2.53	1.041	2.67	.993	-2.625	.009
13.(PROB)	me remember it. I adjust my reading speed according to what I'm reading.	2.72	.979	2.75	.915	521	.602
14.(GLOB)	I decide what to read closely and what to ignore.	2.22	1.023	2.24	.985	310	.756
15.(SUP)	I use reference materials such as dictionaries to help me understand what I read.	2.37	1.016	2.42	1.001	-1.052	.293
16.(PROB)	When text becomes difficult, I pay closer attention to what I'm reading.	2.77	.982	2.80	.925	673	.501
17.(GLOB)	I use tables, figures, and pictures in text to increase my	2.28	1.048	2.30	1.005	362	.717
18.(PROB)	understanding.  I stop from time to time and think about what I'm reading.	2.71	.954	2.81	.904	-2.025	.043
19.(GLOB)	I use context clues to help me better understand what I'm reading.	2.51	1.014	2.52	.975	239	.811
20.(SUP)	I paraphrase (restate ideas in my own words) to better understand what I read.	2.60	1.020	2.59	.978	.128	.898
21.(PROB)		2.70	.955	2.71	.918	261	.794
22.(GLOB)	I use typographical aids like bold face and italics to identify key information.	2.47	1.006	2.45	.978	.389	.698
23.(GLOB)	I critically analyze and evaluate the information presented in the	2.72	.913	2.64	.891	1.772	.077
24.(SUP)	text.  I go back and forth in the text to find relationships among ideas in	2.73	.963	2.75	.934	318	.751
25.(GLOB)	come across conflicting	2.77	.956	2.80	.884	625	.532
26.(GLOB)	information.  I try to guess what the material is about when I read.	2.51	1.065	2.56	.996	978	.328
27.(PROB)	When text becomes difficult, I re-read to increase my	2.69	.977	2.79	.923	-2.074	.038
28.(SUP)	understanding. I ask myself questions I liketo	2.58	.985	2.66	.942	-1.564	.118
29.(GLOB)	have answered in the text.	2.80	.989	2.73	.936	1.422	.155
30.(PROB)	the text are right or wrong.	2.63	.992	2.68	.984	893	.372
	unknown words or phrases.  R - Global Reading Strategies Ph						

Note. GLOB - Global Reading Strategies, PROB - Problem-Solving Strategies, SUP - Support Reading Strategies.

Teachers, parents, and other stakeholders should pay attention to the results of reading strategies for effective way of instructing students reading skills and developing modifying literacy. However, the overall mean score of gender showed no significant different effects of boys and girls, t (1561) = -.1.525, p>.05. Although the overall score regarding the language performances the students, who fulfilled the questionnaire in Kazakh demonstrated statistically significant differences of using reading strategies than Russian did, t(1561) = 8.240, p<.001.

**Table 55**Differences by Language performances (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)

	I = I			,		
	Kazakh (n=609)		Russian	(n=954)		
	M	SD	M	SD	t	P, value
Overall (MARSI)	2.77	.436	2.57	.481	8.240	.000
Factor 1	2.74	.457	2.51	.512	9.276	.000
Factor 2	2.81	.491	2.71	.545	3.808	.000
Factor 3	2.75	.497	2.50	.580	8.958	.000

Note. Factor 1 = Global Reading Strategies; Factor 2 = Problem-Solving Strategies; Factor 3 = Support Reading Strategies

**Table 56** *Grade differences in reading strategies* (6<sup>th</sup> and 8<sup>th</sup> grades, 2020)

Greate etgjerentees ut	61161	<i>deces</i> , 2020)				
	Grade 6 (n=888)		Grade 8 (n=675)			
	M	SD	M	SD	t	P, value
Overall (MARSI)	2.61	.462	2.69	.487	-3.128	.002
Factor 1	2.56	.489	2.66	.519	-3.892	.000
Factor 2	2.71	.511	2.80	.544	-3.313	.001
Factor 3	2.58	.558	2.62	.569	-1.320	.187

Note. Factor 1 = Global Reading Strategies; Factor 2 = Problem-Solving Strategies; Factor 3 = Support Reading Strategies

Analysis revealed that there were significant differences of the students whose language was Kazakh used more reading strategies while reading the text than those, whose native language was Russian. It seemed to be that bilingual (Kazakh) students frequently apply reading strategies than monolingual (Russian) (Akhmetova et al., 2021b). This may suggest proving by several researchers who investigated that bilingual use more reading strategies than monolingual (Sheorey & Mokhtari, 2001; Alsheikh & Mokhtari, 2011). This could also define that the usage of reading strategies between bilingual and monolingual students depends on the level of reading abilities as skillful and unskillful.

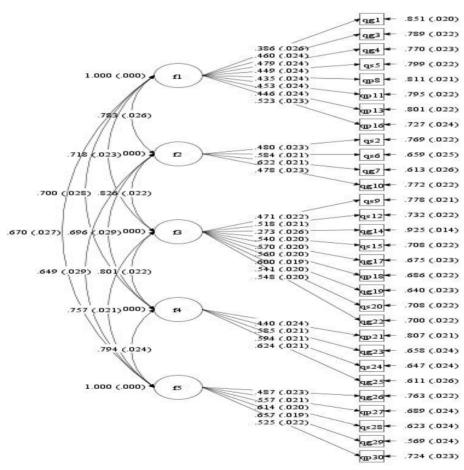
# 5.5.3.3 Confirmatory analysis of reading strategies of learners in Kazakhstan

To test the original factors defined in the MARSI questionnaire of 30-items with three factors as - *Global Reading Strategies (GLOB), Problem*-Solving *Strategies (PROB), Support Reading Strategies (SUP)* from the total sample (N=1,563), a confirmatory factor analysis (CFA) was conducted using Mplus computer software. Although exploratory factor analysis showed, a good model fit to the model for the separate 6<sup>th</sup> (n=888) and 8<sup>th</sup> (n=675) samples of the students, although while analyzing the grades separately CFA results showed poor statistical fit for the data the goodness did not fit well to the model thus, we combined the samples of 6<sup>th</sup> and 8<sup>th</sup> grades. The

performance of EFA analysis conducted to the whole sample (N=1,563) on the 30-items to validate the measurement of the instruments on the new culture. The results of EFA analysis of the whole sample revealed three-, four-, and five-factor loadings, although the goodness of fit indices were better in five-factor loadings. However, we would like to confirm the model of the factors performing CFA and test whether three, four, and five-factors fit to the model better.

Confirmatory factor analysis with three-factor and four-factor loadings showed poor statistical fit for the data, with the following results of indices: (three-factor loadings –  $\chi$ 2=1529.807, CFI=.88, TLI=.87, df=402, RMSEA=.04, & SRMR=.04); (four-factor loadings –  $\chi$ 2=1453.601, CFI=.89, TLI=.88, df=399, RMSEA=.04, & SRMR=.04). However, four-factor loadings showed better statistical results although still below suggested. Thus, five-factor model was tested which were revealed in EFA with good model fit. The results of CFA with five-factor model defined that five-factor fitted well to the model of the whole samples ( $\chi$ 2=1244.243, CFI=.91, TLI=.90, df=395, RMSEA=.04, & SRMR=.03). The standardized factor loadings is shown in Figure 18.

**Figure 18**Confirmatory factor analysis of reading strategies in Grades 6 and 8 with five-factors (2020)

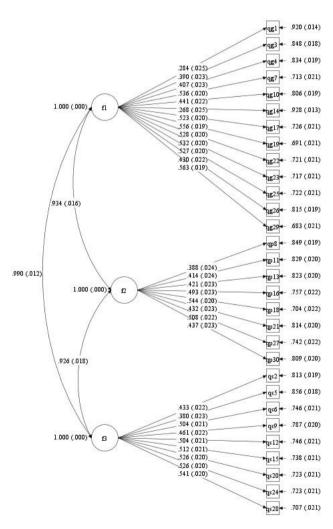


The correlation of the factors seemed the strongest between factors 2 and 3 (r=.826), and factors 3 and 4 (r=.801). The items in factors 2, 3 and 4 are mostly

belonged to the global and support reading strategies than problem solving. The literature has proved that this could be obvious as researchers indentified that "taking notes, consulting a dictionary, and underlying texts" (p. 61) are supportive strategies and global strategies are mostly used by "more proficient readers" whereas struggling readers prefer "local strategies" (Park, 2015, p. 61). Most researchers (Wen, 2003; Wang et al., 2009; Zhang, Chin, & Li, 2017) highlighted that proficient readers use more sophisticated reading strategies regarding the difficulty of the tasks and several findings indicated the those proficient readers apply more metacognitive reading strategies than less proficient readers.

The results in three-factor loadings of the whole sample in sixth and eighth grades were fragile, the model indices did not fit to the data ( $\chi$ 2=1886.750, CFI=.85, TLI=.83, df=402, RMSEA=.05, & SRMR=.04). The standardized factor loadings and correlation of the factors in both grades is represented in Figure 19.

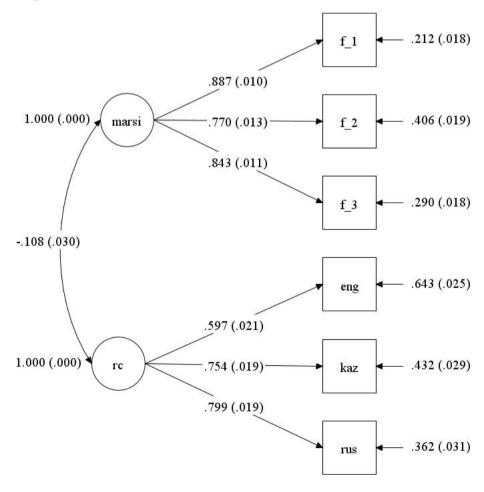
**Figure 19**Confirmatory factor analysis of reading strategies in Grades 6 and 8 with three-factors (2020)



Note: fl = Global Reading Strategies (factor 1); f2=Problem-Solving Strategies (factor 2); f3= Support Reading Strategies (factor 3)

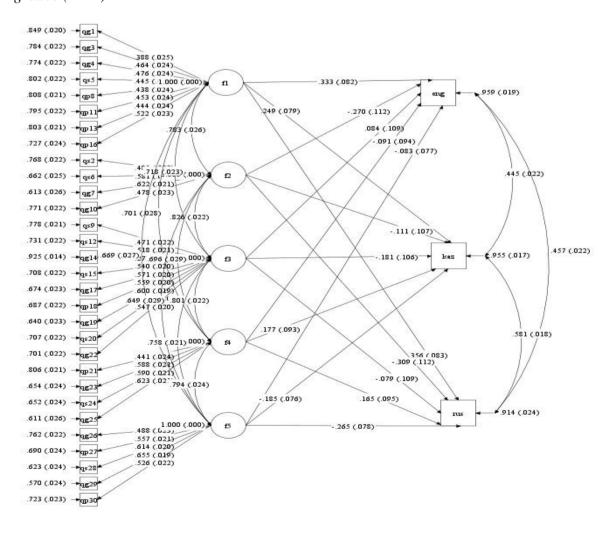
For defining the relations between independent and dependent variables structural equation modeling was conducted (Schumacker & Lomax, 2010). The following statistical procedure found correlations of the three factors on reading comprehension test in the target languages were first analyzed separately - sixth and eighth grades and then the whole sample. The results demonstrated the following in Grade 6 ( $\chi$ 2=6.172, CFI=1.00, TLI=1.00, df=8, RMSEA=.00, & SRMR=.01) the prediction was of reading strategies on the tests was non-significant; in Grade 8 ( $\chi$ 2=45.152, CFI=.98, TLI=.96, df=8, RMSEA=.08, & SRMR=.04) the prediction was significantly negative ( $\beta$ =-.340, p<.000). For the whole sample ( $\chi$ 2=37.250, CFI=.99, TLI=.99, df=8, RMSEA=.04, & SRMR=.02). The R-squared in the whole sample showed the prediction of the factors in the Russian reading (64%), in Kazakh reading (57%), and in English (36%). However, the prediction of the MARSI factors on the reading comprehension tests was significantly negative ( $\beta$ =-.108, p<.000). SEM analysis of both grades is illustrated in more detail in Figure 20.

**Figure 20**Structural equation modeling of reading strategies and reading achievements (the whole sample, 2020)



Regression analysis with the five factors in reading strategies confirmed in CFA, predicted reading achievements tests in three languages of the whole sample size (6<sup>th</sup> and 8<sup>th</sup> grades). The goodness of fit indices showed a good fit to the model in both grades (γ2=1358.158, CFI=.92, TLI=.91, df=470, RMSEA=.04, & SRMR=.03). However, the regression analysis showed that R-squared did not equal zero, albeit the correlation between the model and the dependent variables were statistically significant in English (R<sup>2</sup>=.041, p=.033), in Kazakh (R<sup>2</sup>=.045, p=.010), in Russian (R<sup>2</sup>=.086, p<.001). The findings indicated that reading strategies of the of the whole sample (6<sup>th</sup> and 8<sup>th</sup> graders) affected reading outcomes but probability of using several other strategies by the students while performing reading tests was obvious. The standardized beta coefficient of reading strategies showed that in English, only factor 1 ( $\beta$ = .333, p<.001) and 2 ( $\beta$ = -.270, p<.05) predicted reading achievements but from factors  $3(\beta = .084, p=.439)$ , factor 4 ( $\beta = .091, p=.331$ ), and factor 5 ( $\beta = .083,$ p=.278) the prediction was not statistically significant. Although the prediction for the factor 2 was negative will be that probability of using reading strategies in factor 2 was not efficiently provided in the studying process.

**Figure 21**Regression analysis of reading strategies and reading achievements of  $6^{th}$  and  $8^{th}$  grades (2020)



In Kazakh language reading tests the prediction was significant in two dimensions factor 1 ( $\beta$  =.249, p<.001) and factor 5 ( $\beta$  = -.185, p=.02) and still factor 5 had a negative prediction probability of which is significant. However, the prediction was not significant for the factor 2 ( $\beta$  = -.111, p=.298), factor 3 ( $\beta$  = -.181, p=.087), and factor 4 ( $\beta$  =.083, p=.058) of using reading strategies in performing the tests in Kazakh.

In Russian language test, the factor  $1(\beta = .356, p<.001)$ , factor  $2(\beta = -.309, p=.01)$ , factor  $5(\beta = -.265, p<.001)$  were significantly predicting the frequency of utilizing reading strategies than in English and Kazakh. However, still factor 2 and 5 had negative prediction. The prediction of factor  $3(\beta = -.079, p=.470)$  and factor  $4(\beta = .165, p=.081)$  were not statistically significant.

Researchers suggest that positive relationship between metacognitive reading strategies and reading achievement affects and facilitates comprehension although in our case the relationship of reading strategies and reading comprehension tests in English, Kazakh and Russian were negative but statistically significant (p<.001). This could probably suggest that young adolescents in Kazakhstan did not often used reading strategies or used them ineffectively. Moreover, there seemed to be the feature that young learners were familiar with only less effective reading strategies or the lack of knowledge in monitoring the tasks revealed the weaknesses in achievements of reading comprehension. This could probably relate to the existence of limited practice, lack of instruction in teaching and learning reading skills in the respected languages.

#### 5.5.4 Discussion

Reading strategies are essential to define the use of cognitive and motivational processes and will be significantly important to enhance and improve the reading awareness for "struggling readers" (Mokhtari & Reichard, 2002, p. 250). A multilingual community and society playing a key role in English proficiency factor in Kazakhstan. However, there are several factors playing a great important role in learning English language under the basis of young language learners' background. Parents' role in education; gender equality, number of schools, qualitative human resources, material, technical base, financial support, resources and condition of the schools are significantly for the achievements' results.

The importance of PISA for Kazakhstan is obvious as a world measurement of the country's educational and socio-economic development. Online assessment of reading literacy of 15-year-old students is very important, as the knowledge taken from the young age could be valuable and crucial for further development of future generation and human beings as well. In addition, "fully equipped" content of the course give an opportunity to teachers to fill the gaps of the course regarding interests and preferences through reading as this produce motivation and the students reading the information in order to know new, challenging and necessary for their further generation.

The issue of reading strategies among young adolescents needs further investigation for the improvement of reading comprehension and the effectiveness of the strategies in the cognitive process. Based on the results we could suppose that students have several weaknesses in reading unknown texts in English as the foreign and their native language as well as they ha and facing difficulties. Although the medium level of the students in reading strategies seemed to have limitation in using

cognitive parts of reading strategies such as attention, evaluating reading materials, managing reading procedures effectively and strategically in Kazakh, Russian (mother tongues), and English (Mokhtari & Reichard, 2002, p. 259). There could also be the fact that in the background knowledge, that only one strategy can be appropriately used by the learners. Thus, the teachers should examine the issue in the classroom context and apply more effective and beneficial strategies to facilitate comprehension in the reading process. In addition, the teachers should learn material the students read and carefully consider the usage of reading strategies while reading. This could improve learners' reading abilities and facilitate comprehension.

Metacognitive reading awareness is defined as the strategy, which is beneficial and useful for understanding of the reading text, determines and monitors thinking and learning processes, facilitates planning, self-evaluation of the reader, and is crucial approach for motivation, beliefs, suggestions, desires, etc. (Cook, 2001; Sheorey & Mokhtari, 2001). Therefore, the reader should be able to obtain a certain "metacognitive knowledge" that has a number of reading strategies that affect the cognitive process of reading (Sheorey & Mokhtari, 2001). Sheorey & Mokhtari (2001) claim "metacognitive knowledge" as the thinking about thinking that comes when the reader has a number of reading strategies that affect the cognitive process of reading, the researchers (Afflerbach, Pearson, & Paris, 2008; Pressley, 2008) determine that the reader should be able to come to a "constructively responsive" reading of the text. Therefore, skillful and struggling readers should be differentiated with the help of the assessment and instruction while learning. The way of exploring reading strategy among young learners in Kazakhstan while reading in Kazakh, Russian, and English languages should be useful for better assisting, guiding, and instruction reading comprehension process in the future.

#### **CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS**

#### 6.1 Introduction

The improvement of reading literacy skills in the respected languages in the middle school is the main intension of this research. The issues of our detailed assessment provides evidences for defining the problem in teaching and learning reading skills in the classroom context, the level of literacy development among young learners, and guides information of the instruction process in the class. The results of this current study could be useful for further implementation as the tutorial guidebook for curriculum modification to enhance reading skills and boosts comprehension in the middle school in Kazakhstan. Traditional methods of teaching and learning reading skills are not appropriate for present technologically well-informed young generation, especially for straggling readers who lose the interests in reading "boring books". The teachers should be well prepared to implement applicable tools to maintain and extent reading process, which could be possible after deep investigation and assessment to design and outline instruction for the programme (Zwiers, 2010).

Assessing reading literacy skills among young adolescents in Kazakhstan highlights several factors and features concerning the teacher's and student's viewpoints. These factors can influence the results and the development of reading literacy in general. Reading literacy is a wide concept where clear instruction and management in school administration, classroom climate, school context, and teacher-student and peers relationship should be useful and supportive in the process of teaching and learning. Both students and teachers could see the efficacy of their work during practice and frequent assessment for future improvements.

Reading assignments and tasks should be are in need to be evaluated frequently by the teachers and students. The educators and the learners should be able to know whether they have any progress in their activities and what needs to be improved. Therefore, the frequency of the feedback should be provided if possible, after every test as this could make students get used to this process and be beneficial to perform better in the reading tasks. To understand the significance and value of the feedback students have to be instructed what and why is obtained and required from them and would have a chance to improve the mistakes and be able to define the errors by themselves. Although the ratings scale of evaluating the learner's abilities in mother tongue or in a foreign language level is a serious and difficult job because in order to mark the student the teacher has to know and perform his or her own system of grading criteria. For example, Jurišić & Vodogaz (2014), confirm "the scoring method or the way in which responses are evaluated and points assigned to responses. It includes the criteria used to judge the correctness of responses" (p. 457). This means that measurement should be subjective and objective depending on the format of the test (e.g., international or standardized).

The results of the assessment provides an information of the students' abilities as this could be a guide for the educator to consider and make further decisions, and diagnosis of the progress. Roca-Valera & Palacios (2013) determine that "....examiners should consider a number of predefined assessment criteria to help them with this difficult task and allowing them to measure the learners' performances objectively" (p. 61). Linn & Gronlund (2000) identify that criterion-referenced assessments have "to obtain a description of the specific knowledge and skills each student can demonstrate" (p. 43). We conclude that assessment in scoring is among

tough and demanding parts as it takes from the examiners careful evaluation, objective marking, and reliable measurement. However, Baker (2006) showed that students with learning and behavioral problems performed poor and the classroom adjustment did not benefit them compared to those who achieved well or the peers who have a close relationship to the teacher. In addition, Downer et al. (2007) consumed that teachers' high quality of instruction in the classroom context facilitate children's engagement with high-risk problems and difficulties in school. They confirmed that quality classroom provides and supports engagement, which further stimulate motivation and be a mediator between students' outcomes and achievements in the assessment process.

# 6.2 Study 1 Assessment of reading skills in English and socio-economic background among learners in middle schools in Pavlodar, Kazakhstan

The first pilot study revealed that reading comprehension tests in English (cf. Nikolov & Csapó, 2010; 2018) could be implemented in the context of Kazakhstan although the validation tests had good reliability in both grades the modification of the tests is required. The difficulty of the tests showed that the probability of several background variables as classroom climate, the relationships between teacher and the students, positive attitude towards English languages, interest of English language learning, usage, and anxiety of ICT had weak impact on the achievement tests in both grades. Furthermore, researchers (Dotterer & Lowe, 2011) claim that school engagement and classroom climate promote achievements especially for the students with low outcomes who are at the risk of dropping out of school and assuming that school engagement could be a mediator between classroom and academic achievements of the students. In their research study among 5<sup>th</sup> graders they concluded that school engagement could be mediated between classroom context and results of the outcomes for the students who did not have any previous difficulties in achievements, although for the students with several problems in achievements in the past, school engagement cannot be a mediator between classroom climate and academic achievement. They suggested of using additional strategies for low achievers.

Although the effect of the factors is very low on English achievement, we consumed that the issue of teaching and instruction in the classroom context could be the reason. Even though the prediction of the tests' results in English revealed that most of the factors were not significant and did not predict the results of the tests. Although CFA showed strong relationships between the background factors and the good model fit indices to the data in both grades, R-squared in both grades, showed weak prediction of the tests results, and regression analysis proved this as well. Based on the results we may conclude that students have difficulties in learning English language as the foreign and the reading skills in particular. This might probably be the issue relating to the problems with reading skills or literacy level of the students' mother tongue and native language. Therefore, the influence was very weak and non-significant.

In study 1, we examined the level of students' engagement in learning, their achievements, and the influence of classroom climate toward their engagement and learning outcomes. For this reason, several latent factors from background variables that related to their engagement and the climate in the classroom (i.e., the classroom climate, student—teacher relationship, positive attitudes of EFL, attitudes of English learning, interest in using new technologies, and anxiety of new technologies) were

considered. Although the results herein showed poor relationships between classroom climate and engagement toward reading achievement tests, factor loadings indicated a good model fit to the data. It is hoped that these results may be considered an initial step on the path to improve the process of teaching reading to young EFL learners and that the attempts herein may be useful for future policy instruction and beneficial for classroom management in middle school, although further research is required.

# 6.3 Study 2 Relationship between reading and writing skills of $6^{\rm th}$ graders in English language and socio-economic background

Strong correlation was found in the indexes, created by the reading test items: IR (information retrieval) and Inf. (inference) within English, and weak correlation to Ref. (reflection). These indicated that learners in Kazakhstan prefer to learn by heart theoretical material and less opportunity in practical tasks. Teacher, researchers, parents and other stakeholders in Kazakhstan should shorten the number of "factual information" in teaching and learning materials but increase more critical tasks. Although, the purpose of this study was to examine the relationships between reading and writing skills in English by young learners in the middle school, we wanted to understand why students in Kazakhstan failed in English, and why the relationships between reading and writing skills was low.

The analysis indicated that regular assessment in reading and writing skills is supposed to assist teachers to improve reading and writing components in English. Although parents' level of education had limited contribution due to the age of young learners, personal traits could affect further on EFL outcomes. However, parents' role in education in literacy development is a significant factor among young learners, the issues in reading and writing comprehension and literacy are obvious. Thus, further deep investigation and evaluation of more data and variables are necessary.

# 6.4 Study 3 Links between reading attitude and reading achievement in three languages: Assessments in two age groups of young Kazakhstani learners

PISA results in reading literacy claimed that reading attitude of the students decreased significantly only 24% of boys and 44% of girls defined that reading was their hobby (OECD, 2019a, p. 32). Kazakhstan was under the list of the countries that the differences between boys and girls were because of the declining process of reading for pleasure (OECD, 2019a, p. 31-32). Another factor deals with the language of bilingual students in Kazakhstan. Kazakh and Russian languages are "shallow" languages where the writing system is build and depended on morphological rules and structure. Researchers assume (Hanley et al., 2004; Seidenberg, 2013, pp. 337-338) that children in shallow languages start to read and pronounce the words correctly earlier than those who studying English language at the very young of age, although comprehension comes later. In English language first comes the meaning, and then correct pronunciation. The findings (Everatt et al., 2004) showed that the deficit of phonological awareness could be emerged difficulties in literacy skills in non-transparent orthography languages.

It is obvious that regular reading activity provides proficiency level of the learner in the reading process, increase literacy, gain knowledge, and achievement in language and a certain field as not all poor performers have negative attitude in

reading. Most of these poor performers are suffering from several factors such as essential classroom instruction, book accessibility, free choice of the books in order to increase intrinsic motivation from the children, etc (e.g., Day & Bamford, 2002; McKenna, 2001; Yamashita, 2004, 2013). The teacher should determine and put careful attention on individual differences of the learners as one of the essential factors, which could positively influence reading achievements and relate to further perspectives and success in reading achievements. Another issue could be the poverty of some students living mostly in the rural areas. Most rural areas have poor internet connection and most school libraries in those areas have very few books in English.

# 6.5 Study 4 Mediation effect of engagement between classroom climate and reading achievement in three languages among sixth- and eighth-grade students in Kazakhstan

The results showed that students' engagement on could be the mediator between classroom climate and the achievements although negative and slightly weak in the  $6^{th}$  grade, albeit negatively higher in the eighth grade. The impact of classroom climate and the engagement as the variables of socio economical factors could affect reading achievements of the students and reduce the poor results in case the relationships and the probability of engagements and classroom climate are positive. The findings indicated mostly negative impact of the variables on the outcomes, which could tell to define the problem.

Strong correlation of the items in reading attitudes to each other in the middle level of the students revealed poor and weak influence of reading attitudes seemed to provide less motivation students to read in native languages and in English as the foreign. Moreover, CFA analysis showed poor model and the fit indices did not fit the data. Even though in general students showed, positive attitudes towards reading process but their attitudes did not influence reading comprehension in the respected languages. This might prove that there could be a challenging problem in teaching and learning reading skills in Kazakh, Russian, and English.

OECD Reviews of School Resources (OECD/The World Bank, 2015) have indicated several problems and gaps in the system of secondary education. Teachers, parents, principles, and other stakeholders should be more careful and put a significant attention on the process of choosing textbooks and the content of the subjects. For example, the textbooks and the content for teaching and reading development should not be the only source of education forced by the government and the ministry of education.

# 6.6 Study 5 Reading strategies and reading performances of $6^{th}$ and $8^{th}$ graders in Kazakh, Russian, and English: cross-sectional study

The revealed issues in metacognitive reading strategies could be applied as a framework for modification the core curriculum and teaching instruction. Since reading process is the complex cognitive domain of learning reading strategies are the main tools for correct and proper understanding of school and academic reading materials. Skillful readers are strategic as they apply more sophisticated tactics in reading. Bilingual readers seemed to use more reading strategies than monolingual although the tendency of bilingual students were statistically higher as the impact was

low which could be defined that young learners were less proficient and experienced in applying strategies effectively. Teachers, parents and other stakeholders should have to pay a careful attention to the way of teaching and assessing students' reading skills in order to reveal reading strategies.

In conclusion, we could suggest constant assistance, frequent application, and appropriate instruction of reading strategies to young learners. Even though the regression analysis showed that prediction of the factors on the results in R-squared did not equal zero, albeit the correlation between the model and the dependent variables were statistically significant (in English – Factor 1, in Kazakh & Russian – Factor 3) the probability of using unfamiliar strategies is evident. Although strong significant correlation of the factors the lack of instruction and limited practice underpinned the reason of low prediction the results in reading. Therefore, further deep investigation of reading strategies in the upper grades should be examined and assessed in the future both qualitatively and quantitatively.

## 6.7 Conclusions and further prospects for analysis

Defining particular issues that prevent young learners in Kazakhstan to increase reading literacy in Kazakh as L1/L2, Russian as L1/L2 at the age of fifteen and develop reading skills in English as a foreign need constant assessment, further investigation, and deep analysis. The issue of poor reading skills among young adolescents could consider to the problems in social-economic background of the students themselves, and/or not clear instructions and management in the classroom context and the school administration in general. This will define obstacles to encourage effective teaching and learning process, assessment of teachers and students, appropriate collaboration to research and development of creative skills.

For instance, Bowey & Underwood (1996), while conducting several experiments in Australia among the students of second to fourth grades, and from fourth to six grades noticed that "Reading instruction probably placed less emphasis on decoding skills in the later grades, resulting in a diminishing rate of improvement in nonword reading" (p. 544). This also proves that the same problem is still observable in the secondary schools of Kazakhstan and it would probably necessary to set up and prepare "Literacy Couch" standard as Walpole & McKenna (2012) suggest determining certain activities while teaching and learning literacy in the school like learner, grant writer, curriculum expert, school-level planner, researcher, and teacher. Each role of these people has a list of the requirements and demands that are necessary for being a literacy couch in the school systems. Walpole & McKenna (2012) define school systems as "complex organizations, relying on people with different roles to enact these standards in coordinated ways" (p. 11).

The frequency of conducting different tests in reading in three languages for the context of 6<sup>th</sup> and 8<sup>th</sup> grade students in Pavlodar could be beneficial and facilitate development of literacy in reading and languages appropriate and familiar to. Although the tests we used previously did not fully demonstrate the reading performance of the children in three languages. Moreover, the modified questionnaire included tests' results in reading and background variables, which should be compared and taken into account. Kazakhstani young language learners have a great opportunity to develop reading literacy and the proficiency of reading skills by the age of fifteen. Students' literacy level can be improved in Pavlodar, (Kazakhstan) if the assessment being frequently applied and students' achievements are discussed

regularly with teachers, students, parents, and other stakeholders. School administration should provide a space for parents to participate in the learning process and help teachers to define children's problems in reading comprehension in L1, L2, and EFL.

Further perspectives of reading literacy skills and its interrelationship with writing skills will be the ways of how to improve literacy level among learners in Kazakhstan in the middle school. These assessment results lead us to the track issues of classroom management in and out of school, literacy in reading and writing, skills in the native language, teaching a foreign language, and individual differences of the students while learning L2 in the middle school.

#### 6.8 Recommendations

It is defined that for these who have regular reading activity may facilitate proficiency in the reading process, increase literacy, build knowledge, and/or provide fluency in the language. While those, who read less can be assumed to have limited knowledge in a certain field and may have negative attitude towards reading or perform weak in reading. Although researchers (e.g., McKenna, 2001; Yamashita, 2004, 2013) have determined that not all poor performers have a negative attitude to reading as most of these poor performers are suffering from several factors, such as basic classroom instruction, book accessibility, free choice of books to increase intrinsic motivation, etc. Another issue can be the poverty of students in the rural areas with a weak Internet connection, school resources, or the scarcity of interesting books in the school libraries.

Even though the number of Kazakh classes in the mixed schools has increased recently, still the percentage of Russian classes in the mixed schools are more in the north and north east of Kazakhstan, while in the south and southwest parts — Kazakh classes are prevailed. Likewise, "Over half (53.1%) of general day schools offer instruction in Kazakh, while 17.5% offer instruction in Russian and 28.9% are schools with Kazakh- and Russian-medium instruction" (OECD, 2018, p. 8). At present, and the language situation towards the status of Kazakh language in Kazakhstan has rapidly changed, still more work should be modified in literacy issues, in the area of teaching reading skills in the language.

Based on the results of our studies it is necessary to pay serious and careful attention to the development of reading skills in students' native tongue, second and foreign languages. Frequent assessment of monitoring students' reading attitudes, reading strategies, and reading abilities are required to increase literacy level. For example, collaborative work should be orchestrated between teachers—student—parents. School administration, principals, and other stakeholders should support teaching staff in frequent monitoring process of the learners for sufficient instruction. Teaching and learning process should have a clear planning of what, how and why questions while teaching and applying academic and school related materials to the students. Students should be able to use the obtained knowledge in the real life practice. The learning material should led learners to clear comprehension track before, while and after reading process.

One of the ways to determine and assess modification process of teaching and learning is regular assessment and the way of analyzing the results for further feedback. Students should learn how to think critically while performing the tests. For this reason, teachers should be able to implement standardized and self —developed

tests, albeit these tests should have to meet and follow a certain kind of scheme in constructing the content of the test proposed by Bloom's taxonomy (Osterlind, 1998; Osterlind & Everson, 2009) such as knowledge, comprehension, application, analysis, synthesis, and evaluation.

For example, Johnson (2008) divides test types of English into two big categories such as achievement and proficiency tests. Achievement tests are usually performed after the completion of the course and involved tasks, which were under the studying materials in the classroom context and school programme. Johnson (2008) also refers a diagnostic test to the achievement type of the test that provides a teacher and the learner a clear image of the gaps in the teaching and learning process. Diagnostic test helps both to differentiate the problems that has to be changed and progress that has developed. In addition, Keith Johnson (2008) denotes that international tests are discriminated by two various types like "norm-referenced, and criterion-referenced". *Norm-referenced* tests are belonged to the internationally ones as the scores are understood and interpreted to the extent that they are accepted throughout the world. *Criterion-referenced* tests are the ones that have a certain kind of direct statement for each point. Johnson (2008) "... based on some form of needs analysis and a resulting syllabus specification" (pp. 310–311).

Proficiency tests are mostly used for academic purposes and be held when the test taker wants to investigate the degree of the language and if he or she is able to study academic subjects in a foreign language. Mostly proficiency test is passed at the end of learning or studying process whereas the placement test is often at the beginning of the learning process as this kind of test helps in making a decision what level of the class to choose and go (e.g. pre-intermediate or upper-intermediate).

Another approach described by Johnson is an "integrative" testing or "holistic" this kind of test unites various items into one thus, gives an educator an opportunity to examine the language skills of the examinee together. A type of integrative tests is "cloze test" where the examinee has to fill the gaps of the context with a certain word or used correct grammatical structure. A cloze test can also have two methods of approaching the first one is an "exact" where the answers are obtained on the right side and the second is "acceptable" where there are no any answers so that the test taker has to pay attention to some key words and guess what the "empty word" is. Johnson (2008) represents several approaches of the test items for example, he refers multiple-choice format of the test to "psychometric" testing. The test that has a "discrete point", as the multiple-choice questions are usually easy to do if the items are well constructed and have one "clear-cut" answer and several wrong but if the format is poorly made then to find the right answer is going to be very difficult. Johnson (2008) also denotes that the item types can be performed in the form of charts, table, gap filling, graphics, labeling and completing diagrams, and identifying appropriate headings and the format of the test types can vary. Thus, on one hand teachers should be taught how to assess reading skills, apply appropriate methods and instruments (i.e. tests, questionnaires, interview, observation) for identifying the problems and build up strategies regarding this issue. On the other, orchestrate improvement processes in collaboration with teachers, parents, school administration, principals, and students themselves. This collaboration should be a pivotal aspect in developing reading literacy and increasing the quality of education in Kazakhstan.

In addition, the responses of the parents would also be useful and helpful for examining the issue of the reading attitude, reading comprehension, reading strategies, and reading outcomes in detail. Any information of how teachers define whether students have any difficulties while reading or whether they are able to

comprehend the meaning of the content and the main idea of the text they are reading. Likewise, the questionnaire for teachers and parents of how they could reform the content of teaching and learning reading skills in order to attract kids' motivation and make them read more books for pleasure and enjoyments would be interesting. Although a lot of work should be done regarding improvements teaching and learning process of reading literacy among learners, teachers, and parents. Teachers, policy makers, parents, and other stakeholders should discuss the requirements of core curriculum for Kazakh, Russian and English languages in detail, define the appropriateness to reform the document theoretically and practically for better assisting and monitoring reading abilities and literacy to young learners in the middle school. Moreover, the list of the reading books should be chosen regarding students' preferences and interests, and be essential for students' analytical, critical thinking, and problem solving skills.

#### 6.9 Limitations

The study has several limitations although we believe that this could be fulfilled further in our future research work. For the current study, the assessment of teachers' viewpoints and the ways of their regular assessment were not undertaken. The assessing participants were only sixth and eighth graders and it would be very interesting if we examined the reading skills, achievements, attitudes, and strategies of the students in the third or the fourth grades in primary school, and tenth and twelfth grades in the upper secondary school. Students' responses performed on the computer and if the assessment of some classes in the grades sixth and eighth were paper-andpencil, we would be able to compare the answers to those, who performed the questionnaire on the computer. In addition, it would be valuable to assess and observe the classroom climate and engagement of the students in the primary and upper grades as these results would guide us what to be considered and how to manage appropriate programme for improving literacy among young adolescents. Based on the PISA surveys, the students from Kazakhstan in the rural areas scored low results and were one year behind (OECD/The World Bank, 2015, p. 42) the performers from the urban schools, which may concern to school resources and facilities.

The next limitation is socio-economic background of the students. The current study did not provide any information about students from disadvantaged family, and of those, who are at the risk of dropping out of school. The study population assessed bilingual and monolingual students in the sixth and eighth grades from seven randomly chosen public secondary schools in Pavlodar city (northern Kazakhstan). Furthermore, our study suffers from the absence of qualitative analysis (i.e., the interview with the teachers, parents and other stakeholders about language situation in the schools of Pavlodar). Assessing the quality of teaching and learning languages in Kazakh and Russian-medium classes we may relate to the linguistic diversity of Kazakh- medium classes comparing to Russians in Pavlodar to the entire country.

#### **6.10 Summary**

This chapter provides a brief overview of each study in the assessment process of the reading skills, conclusions, recommendations, and limitations. The main intension of this research study was to assess reading skills and define the level of reading literacy

among young adolescents in Kazakhstan. The expectations pursued providing the clues and appropriate recommendations to modify the instruction and framework structure in teaching and learning reading skills, frequent assessment of reading skills in terms of revealing significant strategies in teaching and learning process in heritage language (i.e., Kazakh or Russian), and English as a foreign.

The survey based on the eDia online platform that we have implemented in seven secondary schools of Pavlodar, Kazakhstan since 2018. Computer based assessment (CBA) provided the opportunity to test a large amount of students and collect the information of reading ability level among young adolescents. The importance of the study was to reveal difficulties of students' reading skills, and develop a recommendation framework based on the results and evidences we obtained. Due to our revealed evidences and outcomes, we have defined that frequent assessment practice in the classroom context can benefit teaching and learning process. Regular feedback is a significant intervention between student-teacher relationship. Positive engagements of the students could be a mediator for high results among young adolescents, enhance motivation, and facilitate positive attitudes towards reading in native language and English as FL. This can also support the benefits to use ICT technologies in learning a foreign language and decrease the level of anxiety in using ICT in the upper grades. Even though the attitude towards reading activity decreases significantly in the middle level, researchers, teachers, parents and other stakeholders should motivate young learners to read more for pleasure and enjoyment in and out of studying process. Students should learn how to implement several reading strategies and tactics in the various types of text materials, especially, in the upper grades. Reading strategies should be frequently instructed, and utilized in the reading process. Performing reading tasks academic and school materials, young learners are in need to obtain correct comprehension and clear instruction of the strategies. These features are the main components for the development of reading skills and are significantly necessary for the quality of education in the Republic of Kazakhstan.

Our research would suppose to be considered as one of the efforts towards improvements of core curriculum for middle secondary education and will benefit for appropriate standards in developing reading literacy among young learners, teaching and learning reading skills, textbook materials, availability of the books in the library.

In the future, this research study will continue further assessment in reading literacy development and the level of literacy in native language and English as a foreign in the upper grades.

Obtaining results will give us an opportunity to build up a solid recommendation for further appropriate intervention and provide evidences for better instruction, development, and improvements of reading and writing skills among young learners in practice.

#### **ACKNOWLEDGMENTS**

Performing this doctoral work was a challenging decision for me to leave my family, my daughter when she just turned seven and went to elementary school in Kazakhstan and come to Hungary. However, the chance to study abroad and support financially was possible by the Stipendium Hungaricum scholarship through Tempus Public Foundation for which I am extremely thankful.

Although this dissertation could not have been conducted and realized without people who helped and assisted me in my research. I would like to express my first big gratitude and appreciation to my supervisor, Prof. Dr. Benő Csapó for your great encouragement in launching me to conduct these studies in Kazakhstan. I respect your support, your professional assistance, and knowledgeable guidance during my PhD study, providing me your books from your library, which inspired me to think differently. I wish in the future I would do and continue the research work you are doing.

My deep thanks and appreciation goes to the staff of Doctoral School of Education to Dr. Edit Katalin Molnár for your valuable comments and ideas, your research collaboration in seminars, conferences, online courses, and personal meetings. I would like to say thank you to Prof. Dr. Tibor Vidákovich for your profound feedback and thoughts in educational seminars and assessment courses.

I would also like to thank Prof. Dr. Csaba Csíkos, Prof. Dr. Marianne Nikolov, Prof. Dr. Krisztián Józsa, Prof. Dr. Bettina Pikó, Prof. Dr. Gyöngyvér Molnár, Dr. Márta Lesznyák, Dr. Anikó Kálmán for your valuable courses, useful tips and guidance.

A special thanks goes to Katalin Molnár for your smart assistance in helping me to prepare official documentation for signing and sealing the letters. I would like to say thank you to Petra Varga-Virág for your technical assistance in copying and providing me the opportunity to send permission letters to my country. A big thanks goes to Ferenc Halof for your technical support and help with uploading computer programme for data analysis. A special appreciation is going to Pityu–Kállai István László for always helping me in designing data collection via eDia platform which provided data for all studies in this dissertation.

I am very grateful to my reviewers of my draft thesis for your helpful comments, and beneficial recommendations that helped me to improve this dissertation to the better needs.

To my colleagues, both hungarian and international, my group mates whom I had a chance to study and had classes together. A special gratitude goes to Dr. Yunjun Kong for always helping me to understand statistical analysis and showing several mehtods in the analysis when I had problems. I would like to say thank you to my country colleague Anuar Zhumakayev, and colleagues of Doctoral School of Education Konul Karimova, Soeharto Soeharto, Girum Tareke Zewude and De Van Vo for your valuable guide and advice.

A special deep appreciation and thanks are going to my lovely Mom and Dad, for your enormous support, endless care and taking care of my daughter when I was studying, thank you! I would also like to thank my brothers and a sister for always supporting and believing in me in any of my steps and decisions. To my lovely daughter Dariya for being the good girl as you are when I was not able to be with you, thank you!

Finally, but not the least, I would like express my gratitude to the Ministry of Education and Science of the Republic of Kazakhstan for understanding the significance of the research and providing the permission to conduct assessment in the schools. Special thanks go to the Departments of Education of Pavlodar region and the city, thank you for your collaboration work and support of the research study and of course all schools, principals, teachers, and especially students, who taking part in all assessment studies. Thank you!

#### References

- Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and reading strategies. *The Reading Teacher*, 61(5), 364-373. https://doi.org/10.1598/RT.61.5.1
- Akhmetova, A.B., Imambayeva, G. E., & Csapó, B. (2021a). Development of reading skills and motivation in learning English as a function of young learners' previous language background: Kazakhstani context. ҚазҰУ Хабаршысы. Филология сериясы (Eurasian Journal of Philology: Science and Education), 1(181), 152-161. https://doi.org/10.26577/EJPh.2021.v181.i1.ph17
- Akhmetova, A. B., Imambayeva, G. E., & Csapó, B. (2021b, August 23–27). Reading strategies and reading achievements in the middle school: Kazakhstani young learners [Paper presentation]. The 19th Biennial EARLI Online Conference for Research on Learning and Instruction: Education and Citizenship: Learning and Instruction and the Shaping of Futures, Gothenburg, Sweden (pp. 33-33). <a href="http://earli.org/sites/default/files/2021-10/EARLI2021-BOOK-OF-ABSTRACTS.pdf">http://earli.org/sites/default/files/2021-10/EARLI2021-BOOK-OF-ABSTRACTS.pdf</a>
- Akhmetova, A. B., Imambayeva, G. E., & Csapó, B. (2021c, August 18–20). Mediation of engagement between classroom climate and students' outcomes in Kazakhstan [Poster presentation]. 25th Online Conference of the Junior Researchers of EARLI (JURE), Gothenburg, Sweden (pp. 34-34). <a href="https://earli.org/sites/default/files/2021-08/JURE2021-Book-of-Abstracts\_0.pdf">https://earli.org/sites/default/files/2021-08/JURE2021-Book-of-Abstracts\_0.pdf</a>
- Akhmetova, A. B., Imambayeva, G. E., & Shakhmetova, N. A. (2020). English proficiency reading skills at the age of 12 in Pavlodar region, Kazakhstan. *Торайгыров университеті хабаршысы. Филологиялық сериясы (Bulletin of Toraighyrov University. Philology Series)*, 2020(4), 45-53. https://doi.org/10.48081/XTTX2598
- Alderson, J.C. (2005). *Diagnosing Foreign Language Proficiency: The Interface between Learning and Assessment*. London: Continuum; Bloomsbury Academic. Retrieved March 23, 2022, from <a href="http://dx.doi.org/10.5040/9781474212151">http://dx.doi.org/10.5040/9781474212151</a>
- Alsheikh, N.O., & Mokhtari, K. (2011). An examination of the metacognitive reading strategies used by native speakers of Arabic when reading in English and Arabic. *English Language Teaching*, 4(2), 151-160. https://doi:10.5539/elt.v4n2p151
- Alsowat, H. (2016). An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. *Journal of Education and Practice*, 7(9), 108-121.
- Alvermann, D. E., & Guthrie, J. T. (1993). The National Reading Research Center. In A. P. Sweet & J. I. Anderson (Eds.), Reading research into the year 2000 (pp. 129-150). New Jersey: Erlbaum.
- Anderson, N. J. (2003). Metacognitive reading strategies increase L2 performance. *The Language Teacher*, 27(7), 20-22.
- August, D., Artzi, L., Barr, C., & Francis, D. (2018). The moderating influence of instructional intensity and word type on the acquisition of academic vocabulary in young English language learners. *Reading and Writing*, *31*(4), 965-989.
- Bachman, L. F. (2004). *Statistical Analyses for Language Assessment*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511667350
- Baker, C. (2003). 6. Education as a site of language contact. *Annual Review of Applied Linguistics*, 23, 95-112. doi:10.1017/S0267190503000217.

- Baker, C. (2007). Becoming bilingual through bilingual education. *Handbook of multilingualism and multilingual communication*, 5, 131-152.
- Baker, J. A. (2006). Contributions of teacher—child relationships to positive school adjustment during elementary school. *Journal of School Psychology*, 44(3), 211-229. doi:10.1016/j.jsp.2006.02.002.
- Baker, L., Dreher, M. J., & Guthrie, J. T. (Eds.). (2000). Engaging young readers: *Promoting achievement and motivation*. New York: The Guilford Press.
- Ball, Jessica (2010). Enhancing learning of children from diverse language backgrounds: Mother tongue-based bilingual or multilingual education in early childhood and early primary school years. Paris: UNESCO. http://unesdoc.unesco.org/images/0021/002122/212270e.pdf
- Barrett, P. (2007). Structural equation modeling: adjudging model fit. *Personality and Individual Differences*, 42(5), 815–824. doi:10.1016/j.paid.2006.09.018
- Bellocchi, S., Tobia, V., & Bonifacci, P. (2017). Predictors of reading and comprehension abilities in bilingual and monolingual children: a longitudinal study on a transparent language. *Reading and Writing*, *30*(6), 1311-1334. <a href="https://doi.org/10.1007/s11145-017-9725-5">https://doi.org/10.1007/s11145-017-9725-5</a>
- Bialystok, E. (2002). Acquisition of literacy in bilingual children: A framework for research. *Language learning*, 52(1), 159-199. <a href="https://doi.org/10.1111/1467-9922.00180">https://doi.org/10.1111/1467-9922.00180</a>
- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*, 25(6), 551-575. https://doi.org/10.1080/0969594X.2018.1441807
- Bowen, T., & Marks, J. (1994). Inside Teaching: Options for English Language Teachers. Oxford: Heinemann.
- Bowey, J. A., & Underwood, N. (1996). Further evidence that orthographic rime usage in nonword reading increases with word-level reading proficiency. *Journal of Experimental Child Psychology*, 63(3), 526-562. https://doi.org/10.1006/jecp.1996.0061
- Brantmeier, C. (2005). Anxiety about L2 reading or L2 reading tasks? A study with advanced language learners. *Reading*, 5(2), 67-85.
- Bridges, D. (Ed.). (2014). Education reform and internationalisation: the case of school reform in Kazakhstan. Cambridge University Press.
- Brown, T. A. (2015). Confirmatory factor analysis for applied research (2<sup>nd</sup> ed.). New York: Guilford Press.
- Cain, K., & Oakhill, J. (2011). Matthew Effects in Young Readers: Reading Comprehension and Reading Experience Aid Vocabulary Development. *Journal of Learning Disabilities*, 44(5), 431–443. https://doi.org/10.1177/0022219411410042
- Cain, K., Compton, D.L., & Parrila, R.K. (Eds.). (2017). Theories of reading development. Amsterdam, Netherlands: John Benjamins
- Cain, K., Oakhill, J., & Lemmon, K. (2004). Individual Differences in the Inference of Word Meanings From Context: The Influence of Reading Comprehension, Vocabulary Knowledge, and Memory Capacity. *Journal of Educational Psychology*, 96(4), 671–681. <a href="https://doi.org/10.1037/0022-0663.96.4.671">https://doi.org/10.1037/0022-0663.96.4.671</a>
- Campbell, J. W. (2015). Identification and Performance Management: An Assessment of Change-Oriented Behavior in Public Organizations. *Public Personnel Management*, 44(1), 46–69. https://doi.org/10.1177/0091026014549473

- Carreira, J. M., Ozaki, K., & Maeda, T. (2013). Motivational model of English learning among elementary school students in Japan. *System*, *41*(3), 706–719. https://doi.org/10.1016/j.system.2013.07.017
- Carrell, P. L. (1991). Strategic reading. In J. E. Alatis (Ed.), Georgetown University Round Table on Languages and Linguistics 1991: Linguistics and language pedagogy: The state of the art (pp. 167-178). Washington, DC: Georgetown University Press.
- Carrell, P. L. (1998). Can reading strategies be successfully taught?. *Australian Review of Applied Linguistics*, 21(1), 1-20. https://doi.org/10.1075/aral.21.1.01car
- Carver, R.P. (2000). The Causes of High and Low Reading Achievement (1st ed.). New York: Routledge. https://doi.org/10.4324/9781410605375
- Castleberry, A. N., Schneider, E. F., Carle, M. H., & Stowe, C. D. (2016).

  Development of a summative examination with subject matter expert validation. *American Journal of Pharmaceutical Education*, 80(2), 1-9.

  <a href="https://doi:10.5688/ajpe80229">https://doi:10.5688/ajpe80229</a>
- Çavdar, G., & Doe, S. (2012). Learning through Writing: Teaching Critical Thinking Skills in Writing Assignments. *PS: Political Science & Politics*, 45(2), 298-306. https://doi:10.1017/S1049096511002137
- Chall, J. S. (2002). The academic achievement challenge: What really works in the classroom?. New York: Guilford Press.
- Clark, C., & Foster, A. (2005). Children's and young people's reading habits and preferences: The who, what, why, where and when. London: National Literacy Trust.
- Cline, T. & Shamsi, T. (2000). Language needs or special needs? The assessment of learning difficulties among children learning EAL: A literature review (Research Report RR184). London: Department for Education and Employment.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). New York: Lawrence Erlbaum Associates. <a href="https://doi:10.4324/9780203771587">https://doi:10.4324/9780203771587</a>
- Cohen, L., Manion., and Morrison, K. (2007). Research methods in education (Six edition). London and New York: Routledge.
- Cook, V. (2001). Using the First Language in the Classroom. *Canadian Modern Language Review*, 57(3), 402-423. https://doi.org/10.3138/cmlr.57.3.402
- Council of Europe. (2001). Common European Framework of Reference for Languages: Learning, teaching, assessment. Cambridge: Cambridge University Press
- Courtney, L., Graham, S., Tonkyn, A., & Marinis, T. (2017). Individual differences in early language learning: A study of English learners of French. *Applied Linguistics*, 38(6), 824-847. https://doi.org/10.1093/applin/amv071
- Coutinho, S. A. (2007). The relationship between goals, metacognition, and academic success. *Educate*~, 7(1), 39-47. <a href="http://www.educatejournal.org/">http://www.educatejournal.org/</a>
- Craig, S. A. (2006). The effects of an adapted interactive writing intervention on kindergarten children's phonological awareness, spelling, and early reading development: A contextualized approach to instruction. *Journal of Educational Psychology*, 98(4), 714–731. <a href="https://doi.org/10.1037/0022-0663.98.4.714">https://doi.org/10.1037/0022-0663.98.4.714</a>
- Csapó, B. (2007). Research into learning to learn through the assessment of quality and organization of learning outcomes. *The Curriculum Journal*, 18(2), 195-210. https://doi.org/10.1080/09585170701446044
- Csapó, B. (2010). Goals of learning and the organization of knowledge. Zeitschrift für Pädagogik, (Suppl. 56.), 12-27. <a href="https://doi.org/10.25656/01:3343">https://doi.org/10.25656/01:3343</a>

- Csapó, B., & Csépe, V. (2012). Framework for diagnostic assessment of reading. Budapest: Nemzeti Tankönyvkiadó.
- Csapó, B., & Molnár, G. (2019). Online diagnostic assessment in support of personalized teaching and learning: The eDia System. *Frontiers in Psychology*, 10(1522). doi: 10.3389/fpsyg.2019.01522
- Csapó, B., & Nikolov, M. (2009). The cognitive contribution to the development of proficiency in a foreign language. *Learning and Individual Differences*, 19(2), 209-218.
- Csapó, B., Józsa, K., Steklács, J., Hódi, Á., & Csíkos, C. (2012). Diagnostic assessment frameworks for reading: Theoretical foundations and practical issues. In B. Csapó and V. Csépe (Eds.), *Framework for diagnostic assessment of reading* (pp. 183-213). Budapest: Nemzeti Tankönyvkiadó.
- Cumming, A. (2013). Assessing Integrated Writing Tasks for Academic Purposes: Promises and Perils. *Language Assessment Quarterly*, 10(1), 1-8. https://doi.org/10.1080/15434303.2011.622016
- Cummins, J. (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853596773
- Cummins, J. (2003). 4. Bilingual Education: Basic Principles. In J. Dewaele, A. Housen & W. Li (Ed.), *Bilingualism: Beyond Basic Principles* (pp. 56-66). Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853596315-007
- Cummins, J. (2009). Pedagogies of choice: Challenging coercive relations of power in classrooms and communities. *International Journal of Bilingual Education and Bilingualism*, 12(3), 261-271. https://doi.org/10.1080/13670050903003751
- Cunningham, A. E. & Stanovich, K. E. (2001). What reading does for the mind. *Journal of Direct Instruction*, 1(2), 137–149.
- Cunningham, A. E., & Stanovich, K. E. (1998). What reading does for the mind. *American Educator*, 22(1 & 2), 8–15.
- Cunningham, D. D. (2008). Literacy Environment Quality in Preschool and Children's Attitudes Toward Reading and Writing. *Literacy Teaching and Learning*, 12(2), 19-36.
- Danili, E., & Reid, N. (2006). Cognitive factors that can potentially affect pupils' test performance. *Chemistry Education Research and Practice*, 7(2), 64-83. doi:10.1039/B5RP90016F
- Davison, C., & Leung, C. (2009). Current issues in English language teacher-based assessment. *TESOL Quarterly*, 43(3), 393-415. <a href="https://doi.org/10.1002/j.1545-7249.2009.tb00242.x">https://doi.org/10.1002/j.1545-7249.2009.tb00242.x</a>
- Day, R. R., & Bamford, J. (2002). Top Ten Principles for Teaching Extensive Reading. *Reading in a Foreign Language*, 14(2), 136–141.
- Díaz, G., Torres, M., Iglesias, J., Mosquera, R., Reigosa, V., Santos, E., . . . Galán, L. (2009). Changes in Reading Strategies in School-Age Children. *The Spanish Journal of Psychology*, *12*(2), 441-453. doi:10.1017/S1138741600001827
- Djigic, G., & Stojiljkovic, S. (2011). Classroom management styles, classroom climate and school achievement. *Procedia-Social and Behavioral Sciences*, 29, 819-828. <a href="https://doi.org/10.1016/j.sbspro.2011.11.310">https://doi.org/10.1016/j.sbspro.2011.11.310</a>
- Dörnyei, Z. (2001). New themes and approaches in second language motivation research. *Annual Review of Applied Linguistics*, 21, 43-59. doi:10.1017/S0267190501000034

- Dornyei, Z., & Ryan, S. (2015). The psychology of the language learner revisited. New York: Routledge. <a href="https://doi.org/10.4324/9781315779553">https://doi.org/10.4324/9781315779553</a>
- Dotterer, A. M., & Lowe, K. (2011). Classroom context, school engagement, and academic achie vement in early adolescence. *Journal of Youth and Adolescence*, 40(12), 1649-1660. <a href="https://doi.org/10.1007/s10964-011-9647-5">https://doi.org/10.1007/s10964-011-9647-5</a>
- Downer, J. T., Rimm-Kaufman, S. E., & Pianta, R. C. (2007). How do classroom conditions and children's risk for school problems contribute to children's behavioral engagement in learning?. *School Psychology Review*, *36*(3), 413-432. https://doi.org/10.1080/02796015.2007.12087938
- Ehri, L. C. (2000). Learning to read and learning to spell: Two sides of a coin. *Topics in Language Disorders*, 20(3), 19–36. <a href="https://doi.org/10.1097/00011363-200020030-00005">https://doi.org/10.1097/00011363-200020030-00005</a>
- Ehri, L. C. (2005). Development of Sight Word Reading: Phases and Findings. In M. J. Snowling & C. Hulme (Eds.), *The science of reading: A handbook* (pp. 135–154). Blackwell Publishing. https://doi.org/10.1002/9780470757642.ch8
- Elbow, P. (2004). Writing first!. Educational leadership, 62(2), 8-13.
- Ellis, R. (2005). Principles of instructed language learning. *System*, *33*(2), 209–224. https://doi.org/10.1016/j.system.2004.12.006
- Everatt, J., Smythe, I., Ocampo, D., & Gyarmathy, E. (2004). Issues in the assessment of literacy-related difficulties across language backgrounds: a cross-linguistic comparison. *Journal of Research in Reading*, 27(2), 141-151. https://doi.org/10.1111/j.1467-9817.2004.00222.x
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324-327. https://doi.org/10.1016/j.jbusres.2009.05.003
- Field, A. (2009). Discovering Statistics Using SPSS. Third Edition. London: SAGE Publications.
- Fierman, W. (2005). Kazakh Language and Prospects for its Role in Kazakh "Groupness". *Ab Imperio*, 2005(2), 393-423. doi:10.1353/imp.2005.0065
- Fisher B. (2001) Towards increased female participation in science and technology in Nigeria schools. A book of reading the word council for curriculum and instruction. (pp. 206-211). Lagos: Jos Publisher.
- Flavell, J. H. (2004). Theory-of-Mind Development: Retrospect and Prospect. *Merrill-Palmer Quarterly*, 50(3), 274–290. http://www.jstor.org/stable/23096166
- Flavell, J. H., & Hartman, B. M. (2004). What children know about mental experiences. *YC Young Children*, 59(2), 102-109.
- Flynn, S. (2009). UG and L3 acquisition: New insights and more questions. In Yan-kit. I. Leung (Ed.), Third Language Acquisition and Universal Grammar (pp. 71-89). Bristol: Multilingual Matters. <a href="https://doi.org/10.21832/9781847691323">https://doi.org/10.21832/9781847691323</a>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, 74(1), 59–109. <a href="https://doi.org/10.3102/00346543074001059">https://doi.org/10.3102/00346543074001059</a>
- Freeman, R. (2007). Reviewing the research on language education programs. In O. García & C. Baker (Eds.), Bilingual Education: An Introductory Reader (pp. 3–18). Clevedon: Multilingual Matters
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95(1), 148–162. https://doi.org/10.1037/0022-0663.95.1.148

- Gamboa-González, Á. M. (2017). Reading comprehension in an English as a foreign language setting: Teaching strategies for sixth graders based on the interactive model of reading. *Folios*, 45(1), 159-175. https://doi.org/10.17227/01234870.45folios159.175
- Gao, Q., Chen, P., Zhou, Z., & Jiang, J. (2020). The impact of school climate on trait creativity in primary school students: the mediating role of achievement motivation and proactive personality. *Asia Pacific Journal of Education*, 40(3), 330-343. https://doi.org/10.1080/02188791.2019.1707644
- Gao, Y. (2013). The effect of summary writing on reading comprehension: The role of mediation in EFL classroom. *Reading Improvement*, 50(2), 43-47.
- García, A., García, F., del Rey, Á. M., Rodríguez, G., & de la Villa, A. (2014). Changing assessment methods: New rules, new roles. *Journal of Symbolic Computation*, 61–62, 70–84. https://doi.org/10.1016/j.jsc.2013.10.012
- Gebhard, M., Chen, I. A., Graham, H., & Gunawan, W. (2013). Teaching to mean, writing to mean: SFL, L2 literacy, and teacher education. *Journal of Second Language Writing*, 22(2), 107-124. https://doi.org/10.1016/j.jslw.2013.03.005
- Ghaicha, A. (2016). Theoretical Framework for Educational Assessment: A Synoptic Review. *Journal of Education and Practice*, 7(24), 212-231.
- Goodman, K. S. (2014). Revaluing readers and reading. In K. S. Goodman & Y. M. Goodman. Making sense of learners making sense of written language: The selected works of Kenneth S. Goodman and Yetta M. Goodman (pp. 189-196). New York: Routledge.
- Grabe, W. (2009). Reading in a second language: Moving from theory to practice. Cambridge: Cambridge University Press
- Grabe, W., & Stoller, F. (2001). Reading for academic purposes: Guidelines for the ESL/EFL teacher. In M. Celce-Murcia (Ed.), Teaching English as a second or foreign language (pp. 187–204). Boston: Heinle & Heinle
- Graham, S., Berninger, V., & Abbott, R. (2012). Are attitudes toward writing and reading separable constructs? A study with primary grade children. *Reading & Writing Quarterly*, 28(1), 51-69. <a href="https://doi.org/10.1080/10573569.2012.632732">https://doi.org/10.1080/10573569.2012.632732</a>
- Grellet, F. (1981). Developing Reading Skills: A Practical Guide to Reading Comprehension Exercises. Cambridge: Cambridge University
- Griffin, P. (2010). Item response modelling: An introduction to the Rasch model. Melbourne: Assessment Research Centre Faculty of Education, The University of Melbourne.
- Grimm, R. P., Solari, E. J., & Gerber, M. M. (2018). A longitudinal investigation of reading development from kindergarten to grade eight in a Spanish-speaking bilingual population. *Reading and Writing*, *31*(3), 559-581. https://doi.org/10.1007/s11145-017-9798-1
- Guthrie, J. T., Hoa, A. L. W., Wigfield, A., Tonks, S. M., Humenick, N. M., & Littles, E. (2007). Reading motivation and reading comprehension growth in the later elementary years. *Contemporary Educational Psychology*, *32*(3), 282-313. https://doi.org/10.1016/j.cedpsych.2006.05.004
- Guthrie, J.T., & Davis, M.H. (2003). Motivating the struggling readers in middle school through an engagement model of classroom practice. *Reading and Writing Quarterly*, 19(1), 59–85. <a href="https://doi.org/10.1080/10573560308203">https://doi.org/10.1080/10573560308203</a>
- Hair, J.F., Tatham, R.L., Anderson, R.E., & Black, W. (2010). Multivariate Data Analysis. 7th ed. New Jersey, NJ, US: Pearson Prentice Hall, Upper Saddle River.

- Hanley, R., Masterson, J., Spencer, L., & Evans, D. (2004). How long do the advantages of learning to read a transparent orthography last? An investigation of the reading skills and reading impairment of Welsh children at 10 years of age. *The Quarterly Journal of Experimental Psychology Section A*, 57(8), 1393-1410. https://doi.org/10.1080/02724980343000819
- Hassan, F. (2003). Metacognitive strategy awareness and reading comprehension. *The English Teacher*, 32, 16-33.
- Hayes, J. R. (2000). A new framework for understanding cognition and affect in writing. In R. Indrisano & J. R. Squire (Eds.), Perspectives on writing: Research, theory and practice (pp. 6-44). Newark, DE: International Reading Association. Originally published in C. M. Levy & S. Ransdell (Eds.) (1996). The science of writing: Theories, methods, individual differences, and applications (pp. 1–27). Mahwah, NJ: Erlbaum
- Hayes, J. R. (2012). Modeling and Remodeling Writing. *Written Communication*, 29(3), 369–388. https://doi.org/10.1177/0741088312451260
- Hayes, J. R., Waterman, D. A., & Robinson, C. S. (1977). Identifying the relevant aspects of a problem text. *Cognitive Science*, 1(3), 297-313. https://doi.org/10.1016/S0364-0213(77)80021-9
- Hirvela, A., & Du, Q. (2013). "Why am I paraphrasing?": Undergraduate ESL writers' engagement with source-based academic writing and reading. *Journal of English for Academic Purposes*, 12(2), 87-98. <a href="https://doi.org/10.1016/j.jeap.2012.11.005">https://doi.org/10.1016/j.jeap.2012.11.005</a>
- Honchell, B., & Schulz, M. (2012). Engaging Young Readers with Text through Shared Reading Experiences. *Journal of Inquiry and Action in Education*, 4(3), 59-67.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55. https://doi.org/10.1080/10705519909540118
- Hulme, C., & Snowling, M. J. (2013). Learning to read: What we know and what we need to understand better. *Child Development Perspectives*, 7(1), 1–5. https://doi.org/10.1111/cdep.12005
- Issa, A. O., Aliyu, M. B., Akangbe, R. B., & Adedeji, A. F. (2012). Reading interests and habits of the federal polytechnic, OFFA, students. *International journal of learning and development*, 2(1), 470-486. doi:10.5296/ijld.v2i1.1470
- Jennings, P. A., & Greenberg, M. T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Review of Educational Research*, 79(1), 491–525. https://doi.org/10.3102/0034654308325693
- Jia, Y., Way, N., Ling, G., Yoshikawa, H., Chen, X., Hughes, D., ... Lu, Z. (2009). The Influence of Student Perceptions of School Climate on Socioemotional and Academic Adjustment: A Comparison of Chinese and American Adolescents. *Child Development*, 80(5), 1514–1530. doi:10.1111/j.1467-8624.2009.01348.x
- Johnson, K. (2008). An Introduction to Foreign Language Learning and Teaching. Second edition. New York: Routledge.
- Johnson, K. (2017). An Introduction to Foreign Language Learning and Teaching (3rd ed.). London: Routledge. https://doi.org/10.4324/9781351213868
- Johnstone, R. (2009). An early start: What are the key conditions for generalized success? In J. Enever, J. Moon, and U. Raman (Eds.), Young learner English

- language policy and implementation: International perspectives (pp. 31-41). Reading, UK: Garnet Publishing.
- Judd, C. M., & Kenny, D. A. (1981). Estimating the effects of social interventions. New York: Cambridge University Press
- Jurišić, M. & Vodogaz, I. (2014). (June 19–21, 2014) Different Attitudes Towards Grammar Teaching and Testing [Paper Proceeding]. International Scientific & Professional Conference (CIET), Split, Croatia (pp. 454-462). <a href="http://ciet2014.oss.unist.hr">http://ciet2014.oss.unist.hr</a>
- Kenny, D. A., & McCoach, D. B. (2003). Effect of the number of variables on measures of fit in structural equation modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 10(3), 333-351. https://doi.org/10.1207/S15328007SEM1003\_1
- Kenzhekhanuly, R. (2012). Ideologies and alphabet reforms in Central Asia. In B. Della Chiesa, B., J. Scott & C. Hinton (Eds.), *Languages in a global world: Learning for better cultural understanding* (pp. 133–150). Paris: OECD Publishing.
- Khasseneyeva, A. (2018). A case study of the conception of curriculum internationalization in a secondary school in Kazakhstan (Doctoral dissertation, Durham University).
- Kintsch, W. (2012). Psychological models of reading comprehension and their implications for assessment. In J. P. Sabatini, E. R. Albro, & T. O'Reilly (Eds.), Measuring up: Advances in how we assess reading ability (pp. 21–38). Lanham, Maryland: Rowman & Littlefield Education.
- Kiss, C., & Nikolov, M. (2005). Developing, piloting, and validating an instrument to measure young learners' aptitude. *Language Learning*, 55(1), 99-150. https://doi.org/10.1111/j.0023-8333.2005.00291.x
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*, 74(7), 262-273.
- Kock, N. (2014). Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM. *International Journal of e-Collaboration (IJeC)*, 10(1), 1-13. doi:10.4018/ijec.2014010101
- Koda, K. (2007). Reading and language learning: Cross linguistic constraints on second language reading development. *Language learning*, *57*, 1-44.
- Koda, K., 2012. How to do research on second language reading. In A. Mackey & S. Gass (Eds.), Research Methods in Second Language Acquisition: A practical guide. (pp. 158-179). Oxford: Blackwell Publishing.
- Kong, A. (2006). Connections between L1 and L2 readings: Reading strategies used by four Chinese adult readers. *The Reading Matrix*, 6(2), 19-45.
- Kramsch, C. (2020). Educating the global citizen or the global consumer? *Language Teaching*, *53*(4), 462-476. doi:10.1017/S0261444819000363
- Kush, J. C., Watkins, M. W., & Brookhart, S. M. (2005). The temporal-interactive influence of reading achievement and reading attitude. *Educational Research and Evaluation*, 11(1), 29–44.
- LaRusso, M., Kim, H. Y., Selman, R., Uccelli, P., Dawson, T., Jones, S., ... & Snow, C. (2016). Contributions of academic language, perspective taking, and complex reasoning to deep reading comprehension. *Journal of Research on Educational Effectiveness*, 9(2), 201-222.

- Lau, K. L., & Chan, D. W. (2003). Reading strategy use and motivation among Chinese good and poor readers in Hong Kong. *Journal of Research in Reading*, 26(2), 177-190.
- Lazowski, R. A., & Hulleman, C. S. (2016). Motivation Interventions in Education: A Meta-Analytic Review. *Review of Educational Research*, 86(2), 602–640. https://doi.org/10.3102/0034654315617832
- Lee, J., & Schallert, D. L. (2014). Literate actions, reading attitudes, and reading achievement: Interconnections across languages for adolescent learners of English in Korea. *The Modern Language Journal*, 98(2), 553-573.
- Lien, H.Y. (2016). Effect of EFL Individual Learner Variables on Foreign Language Reading Anxiety and Metacognitive Reading Strategy Use. *Psychological Reports*, 119(1), 124-135.
- Linn, R. & Gronlund, N. (2000). Measurement and Assessment in Teaching. (8th ed.). Upper Saddle River, NJ: Prentice Hall
- Linn, R. L. & Miller, M. D. (2005). Measurement and Assessment in Teaching (9th Ed). Upper Saddle River, NJ: Pearson
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American educational research journal*, 37(1), 153-184.
- Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural equation modeling: A Multidisciplinary Journal*, 11(3), 320-341. https://doi.org/10.1207/s15328007sem1103\_2
- McKenna, M. C. (1994). Toward a model of reading attitude acquisition. In E. H. Crammer & M. Castle (Eds.), *Fostering the love of reading: The affective domain in reading education* (pp. 18–40). Newark, DE: International Reading Association.
- McKenna, M. C. (2001). Development of reading attitudes. In L. Verhoeven & C. E. Snow(Eds.), *Literacy and motivation: Reading engagement in individuals and groups* (pp. 135–158). London: Routledge.
- McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, 43(9), 626–639.
- McKenna, M. C., Conradi, K., Lawrence, C., Jang, B. G., & Meyer, J. P. (2012). Reading attitudes of middle school students: Results of a US survey. *Reading Research Quarterly*, 47(3), 283–306.
- McKenna, M.C., Kear, D.J., & Ellsworth, R.A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly*, 30(4), 934–956. doi:10.2307/748205
- McLaughlin, M. (2012). Reading comprehension: What every teacher needs to know. *The Reading Teacher*, 65(7), 432-440.
- McTighe, J., & O'Connor, K. (2005). Seven Practices for, Effective Learning. *Educational Leadership. Assessment to Promote Learning*. 63 (3), 10-17. <a href="http://www.ascd.org/publications/educational-leadership/nov05/vol63/num03/Seven-Practices-for-Effective-Learning.aspx">http://www.ascd.org/publications/educational-leadership/nov05/vol63/num03/Seven-Practices-for-Effective-Learning.aspx</a>
- Meneghetti, C., Carretti, B., & De Beni, R. (2006). Components of reading comprehension and scholastic achievement. *Learning and individual differences*, 16(4), 291-301.
- MES (2013). Ministry of Science and Education of the Republic of Kazakhstan. Retrieved from <a href="http://adilet.zan.kz/kaz/docs/V17015605\_1">http://adilet.zan.kz/kaz/docs/V17015605\_1</a>

- MES (2016). Ministry of Science and Education of the Republic of Kazakhstan. Retrieved from
  - http://www.edu.gov.kz/kz/grazhdanam/detail.php?ELEMENT\_ID=368
- MESRK (2012). Factors Influencing the Quality of Knowledge of 9th Class Students, National Centre for Educational Statistics and Evaluation, Ministry of Justice of the Republic of Kazakhstan (2012, August 23). National Core Curriculum Standard of Education. Retrieved August 15, 2017 No. 485, from <a href="http://adilet.zan.kz/kaz/docs/P1200001080">http://adilet.zan.kz/kaz/docs/P1200001080</a>
- MESRK (2017). "the Law of Education" of the Republic of Kazakhstan, 2017 published November 16, 2017, Article 56 from <a href="https://adilet.zan.kz/eng/docs/Z070000319">https://adilet.zan.kz/eng/docs/Z070000319</a>
- Mitchell, R., & Myles, F. (2004). Second language learning theories (2nd ed.). New York: Oxford University Press
- Mokhtari, K., & Reichard, C. A. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, 94(2), 249-259.
- Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students' awareness of reading strategies. *Journal of Developmental Education*, 25(3), 2–10.
- Mokhtari, K., Dimitrov, D. M., & Reichard, C. A. (2018). Revising the Metacognitive Awareness of Reading Strategies Inventory (MARSI) and testing for factorial invariance. *Studies in Second Language Learning and Teaching*, 8(2), 219-246. http://hdl.handle.net/10950/1177
- Moore, N. S., & MacArthur, C. A. (2012). The effects of being a reader and of observing readers on fifth-grade students' argumentative writing and revising. *Reading and Writing*, 25(6), 1449-1478.
- Muhamedowa, R. (2015). Kazakh: A comprehensive grammar. London and New York: Routledge.
- Mullis, I. V. S. (2019). Introduction. PIRLS 2021–20 years of monitoring trends in international reading achievement. In I. V. S. Mullis & M. O. Martin (Eds.), *PIRLS 2021 Assessment Frameworks* (pp.1–3). Chestnut Hill, MA: TIMSS & PIRLS International Study Center.
- Mullis, I. V. S., & Martin, M. O. (2021). PIRLS 2021 Assessment Frameworks. International report. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- Mullis, I. V. S., & Martin, M. O. (Eds.). (2019). *PIRLS 2021 Assessment Frameworks*. Retrieved from Boston College, TIMSS & PIRLS International Study Center website: <a href="https://timssandpirls.bc.edu/pirls2021/frameworks/">https://timssandpirls.bc.edu/pirls2021/frameworks/</a>
- Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007). PIRLS 2006 International report. Boston, MA: International Study Center, Lynch School of Education, Boston College.
- Mundrake, G. A. (2000). The evolution of assessment, testing, and evaluation. In: J. Rucker (Org.), Assessment in business education, 38, NBEA Yearbook. Reston: NBEA.
- Muthén, L. K., & Muthén, B. (2017). Mplus user's guide: Statistical analysis with latent variables, user's guide. Los Angeles, CA: Muthén & Muthén.
- Myrberg, E., & Rosén, M. (2009). Direct and indirect effects of parents' education on reading achievement among third graders in Sweden. *British Journal of Educational Psychology*, 79(4), 695-711.
- Netten, A., Droop, M., & Verhoeven, L. (2010). Predictors of reading literacy for first and second language learners. *Reading and Writing*, 24(4), 413–425. doi:10.1007/s11145-010-9234-2

- Nikolov, M. (2016). A Framework for Young EFL Learners' Diagnostic Assessment: 'Can Do Statements' and Task Types. In M. Nikolov (Eds.), Assessing young learners of English: Global and local perspectives (pp. 65-92). Cham: Springer. https://doi.org/10.1007/978-3-319-22422-0\_4
- Nikolov, M., & Csapó, B. (2010). The relationship between reading skills in early English as a foreign language and Hungarian as a first language. *International Journal of Bilingualism*, 14(3), 315-329.
- Nikolov, M., & Csapó, B. (2018). The relationships between 8th graders' L1 and L2 reading skills, inductive reasoning and socio-economic status in early English and German as a foreign language programs. *System*, 73, 48-57.
- OECD (2009). Evaluation and Assessment Frameworks for improving School Outcomes. Common Policy Challenges. Education and Training Policy. Paris: OECD Publishing. www.oecd.org/edu/evaluationpolicy
- OECD (2014a). Reviews of National Policies for Education: Secondary Education in Kazakhstan. Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264205208-en.
- OECD (2014b), Education at a Glance 2014: OECD Indicators. Paris: OECD Publishing. <a href="http://dx.doi.org/10.1787/eag-2014-en">http://dx.doi.org/10.1787/eag-2014-en</a>
- OECD (2014c), PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science, PISA, Paris: OECD Publishing. <a href="http://dx.doi.org/10.1787/9789264208780-en">http://dx.doi.org/10.1787/9789264208780-en</a>.
- OECD (2017). PISA 2015 Assessment and Analytical Framework: Science, Reading, Mathematics and Financial Literacy. Paris: OECD publishing.
- OECD (2018), PISA for Development Assessment and Analytical Framework: Reading, Mathematics and Science, Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264305274-en.
- OECD (2019a). PISA 2018 Results (Volume I): What students know and can do. Paris: OECD Publishing. https://doi.org/10.1787/5f07c754-en
- OECD (2019b), PISA 2018 Results (Volume II): Where All Students Can Succeed. Paris: OECD Publishing. https://doi.org/10.1787/b5fd1b8f-en
- OECD (n.d.). OECD Skills Surveys, PISA IDE, from https://pisadataexplorer.oecd.org/ide/idepisa/dataset.aspx
- OECD/The World Bank (2015). OECD Reviews of School Resources: Kazakhstan 2015. Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264245891-en
- Osterlind, S. J., & Everson, H. T. (2009). Differential item functioning (2nd ed.). Thousand Oaks, CA: Sage Publications
- Osterlind, S.J. (1998). Constructing Test Items: Multiple-Choice, Constructed-Response, Performance, and Other Formats. Second Edition. Boston: Kluwer Academic Publishers.
- Park, J. (2015). Insights into Korean EFL Students' Reading Motivation, Proficiency, and Strategy Use. *English Teaching*, 70(1), 57-74.
- Parry, K.J. (1996). Culture, literacy and L2 reading. *TESOL Quarterly*, 30(4), 665–692.
- Partin, K., & Hendricks, C. G. (2002). The Relationship Between Positive Adolescent Attitudes Toward Reading and Home Literary Environment. *Reading Horizons:* A Journal of Literacy and Language Arts, 43 (1).), 60–84. Retrieved from https://scholarworks.wmich.edu/reading\_horizons/vol43/iss1/8

- Pearson, P. D. (2014). The roots of reading comprehension instruction. In S.E. Israel, and G.G. Duffy (Eds.), Handbook of research on reading comprehension (pp. 3-31). New York: Routledge.
- Perfetti, C. (2007). Reading ability: Lexical quality to comprehension. *Scientific studies of reading*, 11(4), 357–383. https://doi.org/10.1080/10888430701530730
- Perfetti, C. A. (2003). The universal grammar of reading. *Scientific studies of reading*, 7(1), 3–24. https://doi.org/10.1207/S1532799XSSR0701\_02
- Perfetti, C. A., & Liu, Y. (2005). Orthography to phonology and meaning: Comparisons across and within writing systems. *Reading and Writing*, 18(3), 193–210. https://doi.org/10.1007/s11145-004-2344-y
- Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific studies of Reading*, 18(1), 22–37. https://doi.org/10.1080/10888438.2013.827687
- Perliger, A., Canetti-Nisim, D., & Pedahzur, A. (2006). Democratic attitudes among high-school pupils: The role played by perceptions of class climate. *School Effectiveness and School Improvement*, 17(1), 119–140. <a href="https://doi.org/10.1080/09243450500405217">https://doi.org/10.1080/09243450500405217</a>
- Petscher, Y. (2010). A meta-analysis of the relationship between student attitudes towards reading and achievement in reading. *Journal of Research in Reading*, 33(4), 335–355. doi:10.1111/j.1467-9817.2009.01418.x
- Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, 45(2), 365–397. https://doi.org/10.3102/0002831207308230
- Pianta, R.C., Hamre, B.K., & Allen, J.P. (2012). Teacher-Student Relationships and Engagement: Conceptualizing, Measuring, and Improving the Capacity of Classroom Interactions. In: S. Christenson, A. Reschly, & C. Wylie (Eds.), Handbook of Research on Student Engagement (pp. 365–386). Boston, MA: Springer. https://doi.org/10.1007/978-1-4614-2018-7 17
- Pishghadam, R., & Khajavy, G. H. (2013). Intelligence and metacognition as predictors of foreign language achievement: A structural equation modeling approach. *Learning and Individual Differences*, 24, 176-181. doi:10.1016/j.lindif.2012.12.004
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. doi:10.1037/0021-9010.88.5.879.
- Pons, A., Amoroso, J., Herczynski, J., Kheyfets, I., Lockheed, M., & Santiago, P. (2015). *OECD Reviews of School Resources*. Paris: OECD Publishing.
- Pourcin, L., Sprenger-Charolles, L., El Ahmadi, A., & Colé, P. (2016). Reading and related skills in Grades 6, 7, 8 and 9: French normative data from EVALEC. *European Review of Applied Psychology*, 66(1), 23-37. https://doi.org/10.1016/j.erap.2015.11.002
- Pressley, M. (2008). Epilogue: What the future of reading research could be. In C. C. Block & S. R. Parris (Eds.), Comprehension instruction: Research-based best practices (pp. 391–413). New York: Guilford Press.
- Protacio, M. S. (2012). Reading motivation: A focus on English learners. *The Reading Teacher*, 66(1), 69-77. https://doi.org/10.1002/TRTR.01092

- Reja, U., Manfreda, K. L., Hlebec, V., & Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. *Developments in applied statistics*, 19(1), 159-177.
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104(3), 700–712. https://doi.org/10.1037/a0027268
- Ríos Olaya, S. R., & Valcárcel Goyeneche, A. M. (2005). Reading: A meaningful way to promote learning English in high school. *Profile Issues in Teachers Professional Development*, 6, 59-72.
- Rixon, S. (2016). Do developments in assessment represent the 'coming of age' of young learners English language teaching initiatives? The international picture. In M. Nikolov (Eds.), Assessing Young Learners of English: Global and Local Perspectives. Educational Linguistics vol. 25 (pp. 19-41). Cham: Springer. https://doi.org/10.1007/978-3-319-22422-0 2
- Roca-Valera, M.L. & Palacios, I. M. (2013). How are spoken skills assessed in proficiency tests of general English as a Foreign Language? A preliminary survey. *International Journal of English Studies*, *13*(2), 53-68. <a href="https://doi.org/10.6018/ijes.13.2.185901">https://doi.org/10.6018/ijes.13.2.185901</a>
- Roever, C., & McNamara, T. (2006). Language testing: The social dimension. *International Journal of Applied Linguistics*, *16*(2), 242-258. https://doi.org/10.1111/j.1473-4192.2006.00117.x
- Ryan, A., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38, 437–460. doi:10.3102/00028312038002437
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. https://doi.org/10.1006/ceps.1999.1020
- Sagintaye va, A., Bridges, D., McLaughlin, C., Mehisto, P., Drummond, M. J., Ayubaye va, N., ... & Ganimurat, N. (2014). Development of Strategic Directions for Education Reforms in Kazakhstan for 2015 2020, Diagnostic Report. Astana: Indigo print. http://nur.nu.edu.kz/handle/123456789/335
- Sainsbury, M., & Schagen, I. (2004). Attitudes to reading at ages nine and eleven. *Journal of Research in Reading*, 27(4), 373–386. <a href="https://doi.org/10.1111/j.1467-9817.2004.00240.x">https://doi.org/10.1111/j.1467-9817.2004.00240.x</a>
- Schatz, A., & Krashen, S. (2006). Attitudes toward reading in grades 1-6. *Knowledge Quest*, 35(1), 46-48.
- Schumacker, R. E., & Lomax, R.G. (2010). A beginner's guide to structural equation modeling (3rd ed.). London: Routledge.
- Sebba, M. (2018). Scripts, spelling, and identities. *Brown Journal of World Affairs*, 25(1), 7–20.
- Seidenberg, M. S. (2013). The science of reading and its educational implications. Language learning and development, 9(4), 331-360. https://doi.org/10.1080/15475441.2013.812017
- Sembok, T. M., Zaman, H. B., & Kadir, R. A. (2008). (February 20–22, 2008). IRQAS: information retrieval and question answering system based on a unified logical-linguistic model. [Paper Proceeding]. In the 7th WSEAS International Conference on Artificial intelligence, knowledge engineering and data bases, Cambridge, UK.(pp. 460-464). http://www.researchgate.net/profile/Rabiah\_Abdul\_Kadir/publication/23477853

- <u>1\_IRQAS\_information\_retrieval\_and\_question\_answering\_system\_based\_on\_a\_unified\_logical-linguistic\_model/links/00b7d523b9ec23d697000000.pdf</u>
- Share, D. L. (2008). Orthographic learning, phonological recoding, and self-teaching. In *Advances in child development and behavior 36*, 31-82. https://doi.org/10.1016/S0065-2407(08)00002-5
- Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29(4), 431-449. https://doi.org/10.1016/S0346-251X(01)00039-2
- Singleton, C., & Vincent, D. (2004). Assessing literacy: Current challenges and issues [Editorial]. *Journal of Research in Reading*, 27(2), 113–117. https://doi.org/10.1111/j.1467-9817.2004.00219.x
- Smith, F. (2011). Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read, Sixth Edition (1st ed.). New York: Routledge. https://doi.org/10.4324/9780203142165
- Smith, M. C., Mikulecky, L., Kibby, M. W., Dreher, M. J., & Dole, J. A. (2000). What Will Be the Demands of Literacy in the Workplace in the Next Millennium? *Reading Research Quarterly*, *35*(3), 378–383. doi:10.1598/rrq.35.3.3
- Smith, S. A., & Li, Z. (2020). Closing the enjoyment gap: heritage language maintenance motivation and reading attitudes among Chinese-American children. *International Journal of Bilingual Education and Bilingualism*, 1–18 (in press). doi:10.1080/13670050.2020.1742653
- Snow, C. (2002). Reading for understanding: Toward an R&D Program in Reading Comprehension. Santa Monica, CA: RAND.
- Snow, C. E. 2006. What Counts as Literacy in Early Childhood?, In K. McCartney and D. Phillips (Eds.), Blackwell Handbook of Early Childhood Development. Oxford, UK: Blackwell Publishing Ltd. doi: 10.1002/9780470757703.ch14
- Snowling, M. J., Gallagher, A., & Frith, U. (2003). Family risk of dyslexia is continuous: Individual differences in the precursors of reading skill. *Child development*, 74(2), 358-373. <a href="https://doi.org/10.1111/1467-8624.7402003">https://doi.org/10.1111/1467-8624.7402003</a>
- Sparks, R. L. (2012). Individual differences in L2 learning and long-term L1–L2 relationships. *Language Learning*, 62(2), 5-27. <a href="https://doi.org/10.1111/j.1467-9922.2012.00704.x">https://doi.org/10.1111/j.1467-9922.2012.00704.x</a>
- Stanovich, K. E. (2000). Progress in understanding reading: Scientific foundations and new frontiers. New York: Guilford Press.
- Statistical Agency of the Republic of Kazakhstan. (2018), (2019). The Agency of the Republic of Kazakhstan on Statistics. Retrieved from: https://stat.gov.kz/edition/publication/collection
- Stern, H.H. (1970). Perspectives on Second Language Teaching. Toronto: Ontario Institute for Studies in Education.
- Stone, G.E. (2001). Professional Item Writing for High-Stakes Testing. USA: Matriks Consulting Ltd.
- Street, B. V. (2017). New Literacies, New Times: Developments in Literacy Studies. Literacies and Language Education. In B.V. Street & S. May (Eds.), Literacies and Language Education, Encyclopedia of Language and Education (pp. 3–15). London: Springer International Publishing. doi:10.1007/978-3-319-02252-9\_1
- Thompson, B. (2004). Exploratory and confirmatory factor analysis: Understanding concepts and applications. Washington, DC: American Psychological Association.

- UNESCO. 2008. The Global Literacy Challenge: A profile of youth and adult literacy at the mid-point of the United Nations Literacy Decade 2003–2012. http://unesdoc.unesco.org/images/0016/001631/163170e.pdf
- van Bergen, E., van Zuijen, T., Bishop, D., & de Jong, P. F. (2017). Why are home literacy environment and children's reading skills associated? What parental skills reveal. *Reading Research Quarterly*, *52*(2), 147-160. <a href="https://doi.org/10.1002/rrq.160">https://doi.org/10.1002/rrq.160</a>
- van Gelderen, A., Schoonen, R., de Glopper, K., Hulstijn, J., Simis, A., Snellings, P., & Stevenson, M. (2004). Linguistic Knowledge, Processing Speed, and Metacognitive Knowledge in First- and Second-Language Reading Comprehension: A Componential Analysis. *Journal of Educational Psychology*, 96(1), 19–30. https://doi.org/10.1037/0022-0663.96.1.19
- Verhoeven, L. (2000). Components in early second language reading and spelling. *Scientific Studies of Reading*, 4(4), 313-330. https://doi.org/10.1207/S1532799XSSR0404\_4
- Verhoeven, L. (2007). Early bilingualism, language transfer, and phonological awareness. *Applied Psycholinguistics*, 28(3), 425–439. doi: 10.1017.S0142716407070233
- Verhoeven, L., & Snow, C. E. (Eds.). (2001). Literacy and motivation: Reading engagement in individuals and groups. Mahwah, NJ: Lawrence Erlbaum Associates.
- Walpole, S., & McKenna, M. C. (2012). *The literacy coach's handbook: A guide to research-based practice*. New York: Guilford Press.
- Wang, J., Spencer, K., & Xing, M. (2009). Metacognitive beliefs and strategies in learning Chinese as a foreign language. *System*, *37*(1), 46-56. <a href="https://doi.org/10.1016/j.system.2008.05.001">https://doi.org/10.1016/j.system.2008.05.001</a>
- Wang, M. T., & Eccles, J. S. (2011). Adolescent behavioral, emotional, and cognitive engagement trajectories in school and their differential relations to educational success. *Journal of Research on Adolescence*, 22(1), 31-39. https://doi.org/10.1111/j.1532-7795.2011.00753.x
- Way, N., Reddy, R., & Rhodes, J. (2007). Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment. *American journal of community psychology*, 40(3), 194-213. https://doi.org/10.1007/s10464-007-9143-y
- Wen, Q. F. (2003). The successful way of learning English. Shanghai: Shanghai Foreign Language Education Press.
- Wigfield, A. (2004). Motivating reading comprehension: Concept-oriented reading instruction. New York: Routledge.
- Wigfield, A., Gladstone, J. R., & Turci, L. (2016). Beyond cognition: Reading motivation and reading comprehension. *Child development perspectives*, 10(3), 190-195. <a href="https://doi.org/10.1111/cdep.12184">https://doi.org/10.1111/cdep.12184</a>
- Willms, J. D., Friesen, S. & Milton, P. (2009). What did you do in school today? Transforming classrooms through social, academic and intellectual engagement. (First National Report) Toronto: Canadian Education Association.
- Wixson, K. K., Valencia, S. W., Murphy, S., and Phillips, G.W. (2013). A Study of NAEP Reading and Writing Frameworks and Assessments in Relation to the Common Core State Standards in English Language Arts. A publication of the NAEP Validity Studies Panel. San Mateo, CA: American Institutes for Research
- Wolf, M., & Stoodley, C. J. (2008). *Proust and the squid: The story and science of the reading brain*. New York: Harper Perennial.

- Woolly, G. (2011). Reading comprehension: Assisting children with learning difficulties. Dordrecht: Springer.
- Wu, M., & Adams, R. (2007). *Applying the Rasch model to psycho-social measurement: A practical approach*. Melbourne: Educational Measurement Solutions.
- Wu, X. (2003). Intrinsic motivation and young language learners: the impact of the classroom environment. *System*, *31*(4), 501-517. https://doi.org/10.1016/j.system.2003.04.001
- Yamashita, J. (2004). Reading attitudes in L1 and L2, and their influence on L2 extensive reading. *Reading in a Foreign Language*, 16(1), 1-19.
- Yamashita, J. (2013). Effects of extensive reading on reading attitudes in a foreign language. *Reading in a Foreign Language*, 25(2), 248–263.
- Yang, H. C., & Noel, A. M. (2006). The developmental characteristics of four-and five-year-old pre-schoolers' drawing: An analysis of scribbles, placement patterns, emergent writing, and name writing in archived spontaneous drawing samples. *Journal of Early Childhood Literacy*, 6(2), 145-162. <a href="https://doi.org/10.1177/1468798406066442">https://doi.org/10.1177/1468798406066442</a>
- Zhang, D., Chin, C., & Li, L. (2017). Metalinguistic awareness in bilingual children's word reading: A cross-lagged panel study on cross-linguistic transfer facilitation. *Applied Psycholinguistics*, *38*(2), 395-426. doi:10.1017/S0142716416000278
- Zhang, L. J. (2001). Awareness in reading: EFL students' metacognitive knowledge of reading strategies in an acquisition-poor environment. *Language awareness*, 10(4), 268-288. https://doi.org/10.1080/09658410108667039
- Zickuhr, K., Rainie, L., Purcell, K., Madden, M., & Brenner, J. (2012). Younger Americans' Reading and Library Habits. Washington, D.C.: Pew Research Center's Internet & American Life Project.
- Ziegler J. C., & Goswami U. (2005). Reading acquisition, developmental dyslexia, and skilled reading across languages: a psycholinguistic grain size theory. *Psychological bulletin*, 131(1), 3-29.
- Zimmerman, B. J. (2000a). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P.R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). San Diego: Academic Press.
- Zimmerman, B.J. (2000b). Self-efficacy: An Essential Motive to Learn. *Contemporary Educational Psychology*, 25 (1), 82–91. <a href="https://doi.org/10.1006/ceps.1999.1016">https://doi.org/10.1006/ceps.1999.1016</a>
- Zwiers, J. (2008). Building academic language: Essential practices for content classrooms. San Francisco: Jossey-Bass.
- Zwiers, J. (2010). Building reading comprehension habits in grades 6-12: a toolkit of classroom activities (2nd ed.). Newark, DE: International Reading Association.

### **APPENDICES**

### Appendix A: Item-Person Map of 6th grade students (2019)

A.1. in English (each 'X' represents 1.1 cases)

5			ļ
	X		Į
	X		ĺ
	X		İ
4	XXXXXXX	l	ĺ
	XXXXX		ĺ
	XXXXXX		ĺ
_	XXXXXXX		ı
3	XXXXXXXXXXXXXX		ı
	xxxxxxxxxxxxxxxxx		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	ĺ
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	_	
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	4	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
-	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	10	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	12	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	9 10 11	
0		0 10 11	,
U	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	6	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	· -	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		ı
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2	ı
-2	XXXXXXXXXXXXXXXXX		i
_	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	·	i
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		i
	xxxxxxxx		i
-3	XXXXXXXXXX	i	ĺ
	xxxxxxxxx		ı
	xxxxxx		i
-4	xxxxxx	i	ĺ
	XXXXX		ı
	XXXX		Į
	XXXX		ı
-5	XX	I	ļ
	X		ı
	X	I	Í
	X	I	Í
-6	X		ĺ

### A.2. in Kazakh (each 'X' represents 1.4 cases)

	х		
	X X		
	X X		
7	X X		
,	X		
	XXXXXX		
6	XXXXX		
o	XXXX		
	XXXXX		
5	XXXXXXXXXX		
J	XXXXXXXXXX		
	XXXXXXXXX	3	
4	XXXXXXXXXXXX	,	
-	XXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
3	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
J	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
_	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
-	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 9	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
•	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXX	8	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
-2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXX		
	XXXXXXXXXXX		
-3	XXXXXXXXX		
	XXXXXX		
	XXX		
-4	XXXXX		
	XXXX		
	XXXX		
	XX		
-5	XX		
	I		
	X		
-6	X		
	X		
-7	I		
	X		

### A.3. in Russian (each 'X' represents 1.3 cases)

	х
	X
7	X
'	X
	XX
6	
О	XXX XXXXX
	XXXXX
-	XXXXX
5	XXXX
	XXXXXXX
	XXXXXXXXXXX
_	XXXXXXXXX
4	XXXXXXXXXXXX
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	XXXXXXXXXXXXXXXXXX
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
3	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
4	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
1	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
_	XXXXXXXXXXXXXXXXX
0	XXXXXXXXXX
	XXXXXXXX
-1	XXXXXXX
	XXXXXX
-2	XXXXX
	XXXX
	XXXX
-3	
-3	XXX
	XXX
	X
	XXX
-4	XXX
	X
	I
-5	x
•	X

### Appendix B: Item-Person Map of 8th grade students (2019)

B.1. in English (Each 'X' represents 1.3 cases)

X			
XX   XX   XXX   XXX   XXX   XXX   XXX   XXX   XXXX   XXX   XXXX   XXX   XXXX   XXXXX   XXXXX		x	
XXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXX	5	XX	
XXX   XXXXXXX   XXXXXXX   XXXXXXX   XXXXXX		XX	
4		X	
XXXXXX		XXX	
XXXXX	4	XXXXXXX	
XXXXXXXXXXXX    XXXXXXXXXXXX    XXXXXX		XXXXXX	
XXXXXXXXXXXX		· · · · · · · · · · · · · · · · · · ·	
XXXXXXXXXXXXX		•	
XXXXXXXXXXXX	3		
XXXXXXXXXXXXXXXX		•	
XXXXXXXXXXXXXXXXXXX			
XXXXXXXXXXXXXXXXXX			
XXXXXXXXXXXXXXXXXXX	_	•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2	•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		•	
1		•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	·	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
0		·	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	0	•	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	U		
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		•	
-1		·	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-1		
XXXXXXXXXXXXXXXX	-	•	
-2		·	
-2			
-3 -3 -3 -3 -4 -4 -5 -5 -5 -6	-2	•	
-3  -3  -3  -3  -3  -4  -4  -4  -5  -5  -6  -6			
-3  -3  -3  -3  -3  -4  -4  -4  -5  -5  -6  -6			
-4			
-4	-3	· · · · · · · · · · · · · · · · · · ·	
-4		XX	
-4		XXX	
-5		XX	
-5	-4	xx	
-5		X	
-5		X	
-6 I		X	
•	-5	X	
•		I	
-		I	
•		l	
X	-6	I	
		X	

# B.2. in Kazakh (each 'X' represents 1.3 cases)

5	X	I
	X	İ
	XX	I
	X	I
	X	ĺ
4	XXXXXX	I
	XXXXXX	I
	XXXXXX	I
	XXXXXXXX	I
3	XXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXXXX	I
	XXXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ı
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	İ
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2 9
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	4 17
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ı
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	11 12 14 15
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	13
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	3 7 10 16
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	5
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	8
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	6
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXX	I
-2	XXXXXXX	I
	XXXXXX	I
	XXX	I
	XX	
	XXX	I
-3	XX	I
	XX	I
	X	I
	X	

# B.3. in Russian (each 'X' represents 1.0 cases)

	Х	,
	X	•
_	X	•
5	X	•
	X	•
	X	•
	XXX	•
	XXXXX	,
4	XXXXXXX	
	XXXXXX	,
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
	XXXXXXXXXXXXX	•
3	XXXXXXXXXXXXXXX	•
,	XXXXXXXXXXXX	•
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	,
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	,
2	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	•
_	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	,
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	,
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	•
1	xxxxxxxxxxxxxxxxxxxxxxxxxxxxx	•
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	18
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	İ
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	4 5 7 9
0	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	16
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	13
	xxxxxxxxxxxxxx	[3
	XXXXXXXXXXXXXXXXX	2 12 14
	XXXXXXXXXXXXXXXXXXXXXXXX	1
-1	XXXXXXXXXXXX	,
	XXXXXXXXXX	,
	XXXXXXXX	•
	XXXXXXX	•
_	XXX	,
-2	XXXX	
	XXXXX	•
	XXX	•
	XX	•
•	X	•
-3	x x	•
	x X	•
	X X	•
	A	<b>!</b>

# Appendix C: Unidimensional model of 6th grade students and items (2020)

C.1.in English (each 'X' represents 1.4 cases)

		l						- 1
3	X	l						- 1
		ı						- 1
		ı						1
		i						i
	х	i						i
2	XX							i
_	XX							i
	XXXXX							- :
	XXXXX	•						-
	XXXXX		1 =	10	, ,	20		- :
	XXXXXX		LO	то	٠.	20		-
1	XXXXXXXXXX	•						-
1		•						!
	XXXXXXXXXXXXX							!
	XXXXXXXXXXXXXXX		12	14		16		!
	xxxxxxxxxxxxx							ı
	XXXXXXXXXXXXXXXXXXXXXXXXXX							ı
0	XXXXXXXXXXXXXXXXXXXXXXXX	•						ı
	XXXXXXXXXXXXXXXXXXXXXXXXX	10						ı
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	l						- 1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	8 1	11					I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	l						- 1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	l						I
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	l						- 1
	XXXXXXXXXXXXXXXXXXXXXXXX	6						- 1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	5						- 1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2 3	3 9	)				- 1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	l						- 1
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	7						1
-2	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	ĺ						i
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	ĺ						i
	xxxxxxxxxxxxxx	ı						i
	XXXXXXXXXXXXX							i
	XXXXXXXXXXXXXXXXXXXXXX							i
-3	xxxxxxxxx							i
•	XXXXXXXXXX	•						i
	XXXXXXXX	•						i
	XXXXX	•						- :
	XXX							- :
	XXX	•						- :
		•						
-4	XX XX							!
								!
	X							!
	X	•						!
_	X							!
-5								!
	Х	l						ı

# C.2.in Kazakh (each 'X' represents 1.2 cases)

	ΧI	I
5	XXI	i
	·	i
	XX	i
	XXXXX	Ť
4	XXXXX	İ
	XXXXXX	1
	XXXXXXXX	1
3	XXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	3
2	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
1	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	20
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	1
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	•
^	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	·
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- ·
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	<b>"</b>
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2
-2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
-3	XXXXXXXXXX	İ
	XXXXXXXX	1
	XXXXXX	1
	XXX	I
-4	XXXXX	1
	XXX	1
	XXX	1
_	XX	I
-5	XXI	Ţ
	ΧĮ	!
		!
	ΧĮ	ı

# C.3.in Russian (each 'X' represents 1.8 cases)

		v	
X   XX   XX   XX   XX   XX   XX   XX		X	
X   XX   XX   XX   XX   XX   XX   XX	6		
XX   X   X   X   X   X   X   X   X	·	X	
X   XXXX   XXX   XXX   XXX   XXX   XXX   XXX   XXX   XXX   XXXX   XXXX   XXXX   XXXXXX	5		
XX	_		
XX		xxxx	
4			
XXXXXXXXX   XXXXXXXXXXX   XXXXXXXXXX	4		
XXXXXXXX   XXXXXXXXXXXXXXX   XXXXXXXX		XXX	
3		xxxxxxx	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		xxxxxx	
XXXXXXXXXXXXXXX   14	3	xxxxxxx	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		xxxxxxxxxxxx	14
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2	xxxxxxxxxxxxxxxxx	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
1		,	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	1 19
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	3 20
0		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	16
XXXXXXXXXXXXXXXXX		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
XXXXXXXXXXXXXXXXXX	0	xxxxxxxxxxxxxxxx	13 17 18
		xxxxxxxxxxxxx	
		xxxxxxxxxxxxxxxx	
XXXXXXXXXXXXXX   9			
XXXXXXXXXXXXX	-1	XXXXXXXXXXXXXXXX	6 8 10
-2		xxxxxxxxxxxxx	9
XXXXXXXXXX   XXXXXXXXXX   XXXXXXXXXX		XXXXXXXXXXXX	5 11
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-2	XXXXXXX	
XXXXXXXXXX		xxxxxxxx	
-3  XXXXXXX   XXXXXX   -4  XXXX   XXXXX   XXXXX   XXXXX   -5  XX   -6  XX   -7  X   XX   XX   XX   XX   XX		XXXXXXXXXXXX	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		XXXXXXXX	
-4	-3	XXXXXX	
-4		XXXXXX	
XXXXX   XXXX   XXXX   XXXX   XXXX   XXXX   XX   X		XXXXX	
XXXX   XXXX   XXXX	-4	XXX	
-5		XXXXX	
-5		XXXX	
x   x   x   x   -6		xxxx	
-6	-5	XX	
-6		X	
-7		X	
-7	-6	•	
x		XX	
x			
x			
· · · · · · · · · · · · · · · · · · ·	-7		
x į			
		х	

### Appendix D: Unidimensional model of 8th grade students and items (2020)

D.1 in English (each 'X' represents 1.3 cases)

	X	-
3	X	- :
3	X	-
	XXI	- ;
	XXXXX	- :
	XXX	-
2	XXXX I	-
_	XXXXX	- ;
	XXXXXXXXXXX	-
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- ;
	XXXXXXXXXXXXXXXXXIII 18 20	- ;
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- i
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- ;
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- i
·	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXX   15	- i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
_	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i.
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i.
	**************************************	i
-2	XXXXXXXXXXXX	- i
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	i
	XXXXXXXXXXXXXXX	i
	XXXXX	i
	XXXX	i
-3	XXXXX	i
_	XXX	i.
	xx j	i
	xx i	i
	XXX I	i
-4	xx	i
	xx	Ĺ
	xx	i
	x	Ĺ
	x į	- 1
-5	x)	- 1

# D.2 in Kazakh (each 'X' represents 1.2 cases)

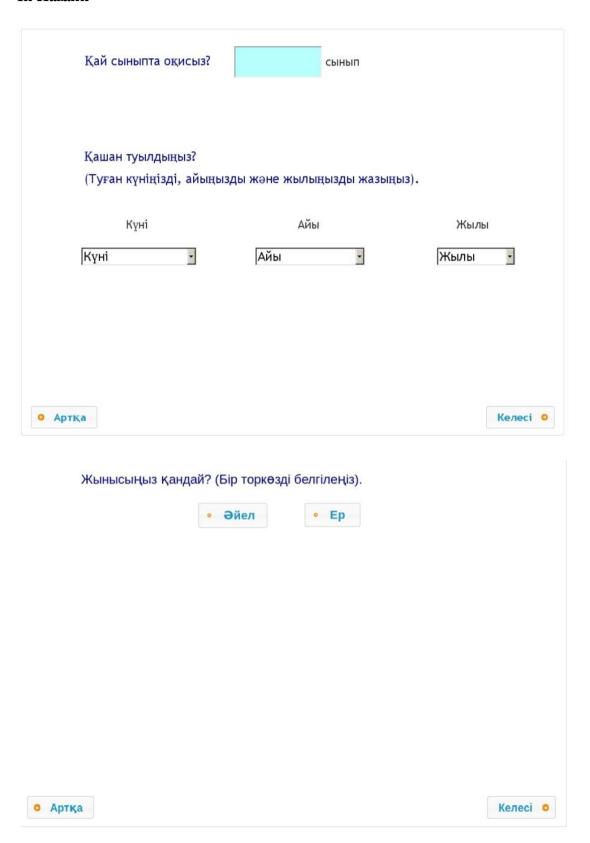
	X	•	
		•	
	X	·	
4	X	•	
		·	
	XX	·	
	XXX	•	
_	XXXXXX	•	
3	XXXXXX	•	
	XXXXXX	•	
	XXXXXX  XXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
		·	
2	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	·	
	XXXXXXXXXXXXXX	•	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
-	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	•	
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	11 12 22 24 26	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	7 10 13 16 25	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	3 20	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	23	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	8	
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	5	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	6	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
-2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•	
	XXXXXXXXX	·	
	XXXXXX	•	
	XXXXXX	·	
_	XXXX	•	
-3	XX		
	XX	·	
	XX	·	
	xxx x	·	
-4	XX	·	
-4	X X	·	
	X	•	
	X	·	
	X	•	
-5		·	
-	i	i	
	X	İ	
	X	i	

# D.3 in Russian (each 'X' represents 1.1 cases)

	XI	1
	ì	i
5	X	i
	X	1
	XXX	i
	XXXXXX	į
4	XXXXXXX	I
	XXXXX	1
	XXXXXXX	1
	XXXXXXXXXXX	1
3	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1
1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	0 22
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	8 19
	8   XXXXXXXXXXXXXXXX	·
	XXXXXXXXXXXXXXX   4	7 11 15 20 21 23
0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	I
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	· ·
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	13
-1	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	·
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	4
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
-2	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	<u>!</u>
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	XXXXXXX	
	XXXXXXX	<u> </u>
_	XXXXXXX	!
-3	XXX	ļ
	XX	
	XX	
_	XXX	
-4	X	ļ.
	X	!
	X I	!
-	 	ļ
-5	Х	

# Appendix E: Background Questionnaire (in Kazakh and Russian 6th and 8th grades) (Study 1)

### In Kazakh



Анаңыздың немесе анаңыздың орнын алмастырушы әйелдің алған орта білімінің ең жоғарғы сатысы қандай?

Егер бұл сұраққа қалай жауап беру жөнінде күмәніңіз болса, сауалнама жүргізушіден көмек сұраңыз. (Бір торкөзді белгілеңіз).

Бастапқы кәсіптік білім (кәсіптік-	техникалы <b>қ</b> мектеп және кәсіптік-техникалы <b>қ</b> училищ
Негізгі орта білім (5-9 сыныптар)	
Бастауыш білім (1-4 сыныптар)	
Ол бастауыш мектепті аяқтамаған	1
Артқа	Келесі

Анаңыздың немесе анаңыздың орнын алмастырушы әйелдің төменде келтірілген білімі туралы дипломы бар ма?

Егер бұл сұраққа қалай жауап беру жөнінде күмәніңіз болса, сауалнама жүргізушіден көмек сұраңыз. (Әр қатардан бір торкөзді белгілеңіз).

ИӘ Жоқ

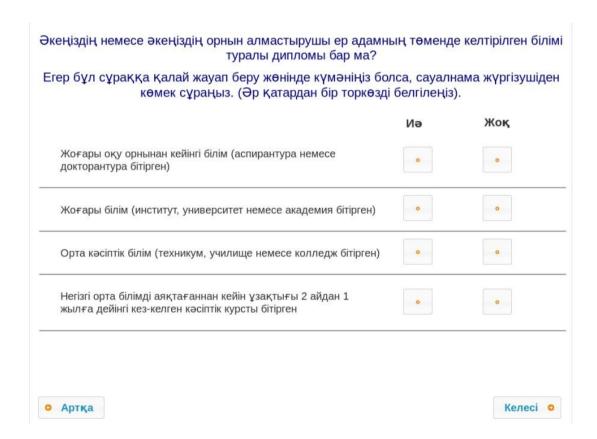
Жоғары оқу орнынан кейінгі білім (аспирантура немесе докторантура бітірген)

Жоғары білім (институт, университет немесе академия бітірген)

Орта кәсіптік білім (техникум, училище немесе колледж бітірген)

Негізгі орта білімді аяқтағаннан кейін ұзақтығы 2 айдан 1 жылға дейінгі кез-келген кәсіптік курсты бітірген

Әкеңіз немесе әкеңіздің орнын алмастырушы ер адамның алған орта білімінің ең жоғарғы сатысы қандай?
Егер бұл сұраққа қалай жауап беру жөнінде күмәніңіз болса, сауалнама жүргізушіден көмек сұраңыз. (Бір торкөзді белгілеңіз).
• Жалпы орта білім (10-11 сыныптар)
• Бастапқы кәсіптік білім (кәсіптік-техникалық мектеп және кәсіптік-техникалық училище)
<ul> <li>Негізгі орта білім (5-9 сыныптар)</li> </ul>
• Бастауыш білім (1-4 сыныптар)
<ul> <li>Ол бастауыш мектепті аяқтамаған</li> </ul>
о Артқа





# Үйіңізде төмендегілердің қайсысы бар? (Әр қатардан бір торкөзді белгілеңіз). Ив Жоқ Интернет Классикалық әдебиеттер (мысалы, А.Құнанбаев, А.С. Пушкин және басқалар) Флеңдер жинағы Фнер шығармалары (мысалы, суреттер) Оқу тапсырмаларын орындағанда пайдалануға болатын кітаптар • Келесі •



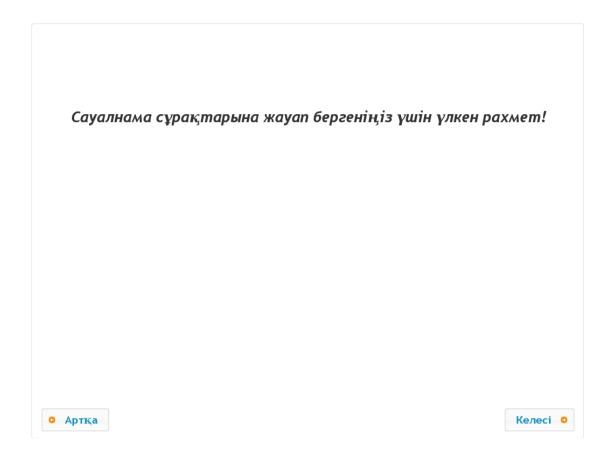


Өзіңіз туралы төмендегі айтылға		армен қаншалықты дәрежеде келісесіз немесе келіспейсіз?			
(Әр қатардан	бір торкөзді ғана белгілеңіз.)				
	Толығымен келіспеймін	Келіспеймін	Келісемін	Толы <i>зымен</i> келісемін	
Мен ағылшын тілін қызығып оқимын	0	0	0	0	
Маған ағылшын тілде оқыған ұнайды	0	•	0	•	
Менің ағылышын тілі тақырыптарымен жұмы істегеніме көңілім толады	o	0	0	0	
Маған ағылшын тілден жаңа білімді игерген ұнайды	0	0	0	0	
Мені ағылшын тілі қызықтырады	0	0	0	•	
• Артқа				Келесі •	

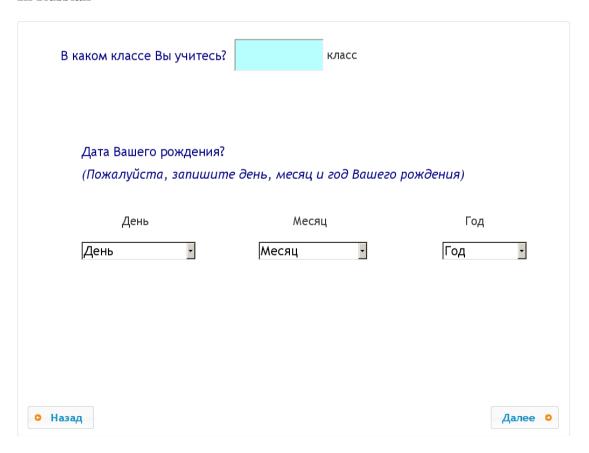
	Толыгымен келіспеймін	Келіспеймін	Келісемін	Толы <i>в</i> келісе
Мен жаңа технологияларға қызығамын	•	0	0	
Мені жаңа технологияларды қолдану қиыналысқа түсіреді	0	•	0	
Мен үшін жаңа технологияларды қолдану қиындық туғызады, мен олармен қалай жұмыс істеу керектігін білмеймін	0	0	0	
Мен жаңа технологияларды қолдануды неме қолданбауды өзім шешемін - оның сәттілікке ешбір қатысы жоқ		0	0	

	планшеттер, смартфондар, DVD плеер) пайдалану ен қаншалықты келісесіз немесе келіспейсіз?			
(Әр қатардан б	ір торкөзді	ғана белгілең	i3).	
	Толығымен келіспеймін	Келіспеймін	Келісемін	Толы <i>ғымен</i> келісемін
Мен үнемі ең соңғы шыққан техникалық құралдарды пайдалануға қызығушылық танытамын	0	0	0	•
Мен жаңа технологияларды қолданған кезімд сәтсіздік қорқынышын сезінемін	e,	0	0	•
Жаңа технологияларды қолдануда мәселелер туындаса, оны өзім шеше аламын	0	0	0	•
Егер менде мүмкіндік болса, мен техникалық құралдарды қазіргіден де жиі қолданар едім	0	0	0	0
• Артка				Келесі •

	, планшеттер, смартфондар, DVD плеер) пайдалану мен қаншалықты келісесіз немесе келіспейсіз?			
(Әр қатардан	бір торкөзді	ғана белгілеңі	3).	
	Толығымен келіспеймін	Келіспеймін	Келісемін	Толығымен келісемін
Мен жаңа техникалық құралдарды дұрыс пайдалануды үйреніп алғаннан бұрын, олард бұзып аламын ба деп қорқамын	ю	0	•	0
Менің жаңа технологияларды қолдануымны нәтижесі, тек маған ғана байланысты	•	•	•	•
Мен жаңа технологияларды қуана қолданамы	он о	•	•	•
Жаңа технологияларды қолдануды үйренуде жетістікке жетуім немесе жетпеуім маған байланысты	•	0	•	0
• Артқа				Келесі •

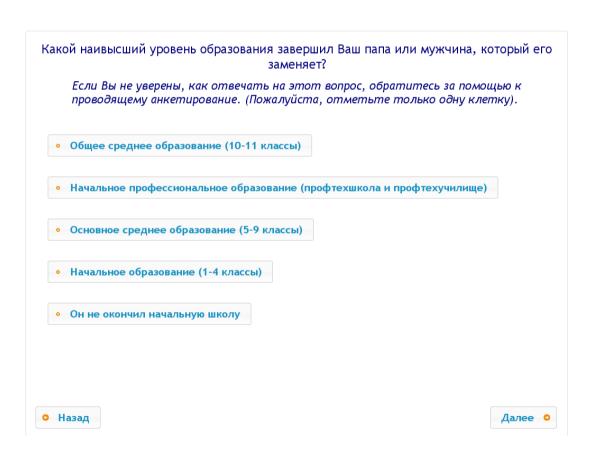


### In Russian

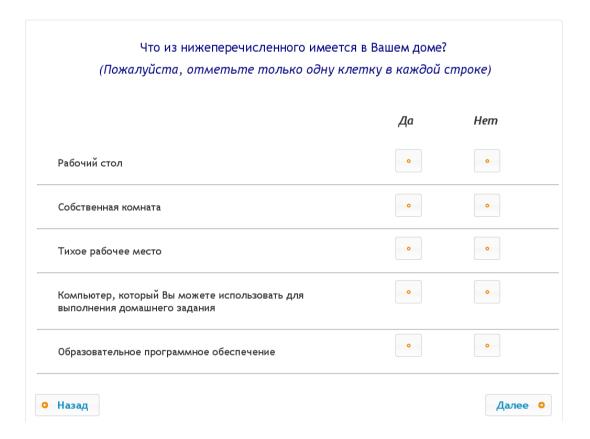




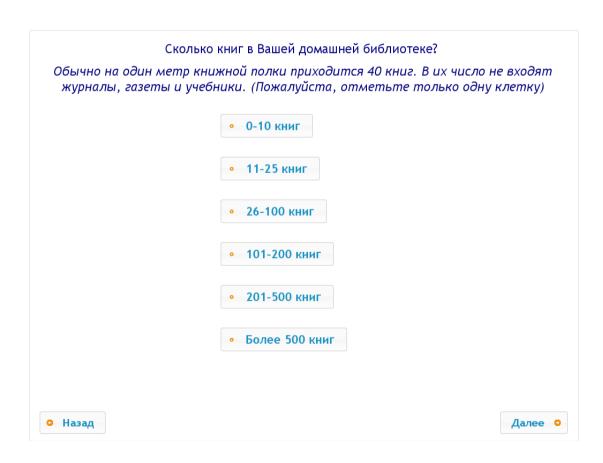
### Имеет ли Ваша мама или женщина, которая ее заменяет, диплом о получении следующего образования? Если Вы не уверены, как отвечать на этот вопрос, обратитесь за помощью к проводящему анкетирование. (Пожалуйста, отметьте только одну клетку в каждой строке). Hem Да Послевузовское образование (окончила аспирантуру или докторантуру) Высшее образование (окончила институт, университет или академию) Среднее профессиональное образование (окончила техникум, училище или колледж) После окончания средней школы окончила любые профессиональные курсы продолжительностью от 2 месяцев до 1 года • Назад Далее 😊



### Имеет ли Ваш папа или мужчина, который его заменяет, диплом о получении следующего образования?? Если Вы не уверены, как отвечать на этот вопрос, обратитесь за помощью к проводящему анкетирование. (Пожалуйста, отметьте только одну клетку в каждой строке). Да Hem Послевузовское образование (окончила аспирантуру или докторантуру) Высшее образование (окончила институт, университет или академию) Среднее профессиональное образование (окончила техникум, училище или колледж) После окончания средней школы окончила любые профессиональные курсы продолжительностью от 2 месяцев до 1 года • Назад Далее 😊



(Пожалуйста, отметьте только одну	клетку в каждой	строке)	
	Да Hem		
Подключение к Интернету	•	•	
Классическая литература (например, А. Кунанбаев, А.С. Пушкин и др.)	0	•	
Поэтические сборники	0	•	
Произведения искусства (например, картины)	0	0	
Книги, нацеленные на помощь в выполнении домашнего	э задания	0	



	оисходит на	уроке по англи	йскому языку?	
(Пожалуйста, отметьт	пе только од	ну клетку в ко	аждой строке,	).
	На каждом уроке	На большинстве уроков	На некоторых уроках	Никогда или почти никогда
Обучающиеся не слушают, что говорит учит	гель •	•	•	0
На уроках шум и беспорядок	0	0	0	0
Учителю приходится тратить много времені нтобы успокоить обучающихся	и,	0	•	•
Обучающиеся не умеют хорошо работать	0	0	0	0
Обучающиеся еще долгое время не начинаю работать после начала урока	ОТ	0	•	0
• Назад				Далее 🔾
В какой степени Вы согласны или н	не согласны с себе?	: нижеприведе	нными высказі	ываниями с
В какой степени Вы согласны или н	себе?			ываниями с
	себе?			
(Пожалуйста, выбе	себе? pume один ог Полностью	твет в каждо	й строке).	Полностьк
(Пожалуйста, выбе) Ине нравится изучать английский язык	себе? pume один ог Полностью	твет в каждо	й строке).	Полностьк согласен
(Пожалуйста, выбе)  Мне нравится изучать английский язык  Мне нравится читать на английском языке  Мне нравится выполнять задания по	себе? рите один оп Полностью не согласен	твет в каждо Не согласен	й строке). Согласен	Полностьк согласен •
(Пожалуйста, выбе)  Мне нравится изучать английский язык  Мне нравится читать на английском языке  Мне нравится выполнять задания по английскому языку  Мне нравится получать новые знания в	себе? рите один оп Полностью не согласен	твет в каждо Не согласен	й строке). Согласен	Полностьк согласен
(Пожалуйста, выбе)  Мне нравится изучать английский язык  Мне нравится читать на английском языке  Мне нравится выполнять задания по инглийскому языку  Мне нравится получать новые знания в  фере английского языка	себе? рите один ог Полностью не согласен	твет в каждо. Не согласен	й строке). Согласен	О
	себе? рите один оп Полностью не согласен	твет в каждо. Не согласен	й строке). Согласен	Олностьк согласен

Насколько Вы не согласны или о использовании новых технологий (и плеер)? (Пожалуйста, в	например, пла	аншетные ком	пьютеры, сма	
	Полностью не согласен	Не согласен	Согласен	Полностью согласен
Я интересуюсь новыми технологиями	•	•	0	•
Использование новых технологий создает проблемы для меня	•	•	0	•
Я нахожу для себя трудным использование новых технологий - я не знаю, как с ними работать	0	•	0	•
Я сам решаю, могу ли я использовать новые технологии или нет - это не имеет никакого отношения к успеху	0	•	•	0
• Назад				Далее •
Насколько Вы не согласны или о использовании новых технологий (в плеер)? (Пожалуйста, в	например, пла	аншетные ком	пьютеры, сма	
	Полностью не согласен	Не согласен	Согласен	Полностью согласен
Я всегда заинтересован в использовании сам последних технических устройств	мых <b>о</b>	•	0	0
Когда я использую новые технологии, я испытываю страх неудачи	•	•	•	•
Когда у меня появляются проблемы с технологиями, я решаю их сам	0	0	0	•
Если бы у меня была возможность, я бы использовал технические устройства чаще, чем сейчас	0	•	0	0
• Назад				Далее •

Насколько Вы не согласны или использовании новых технологий плеер)? (Пожалуйста,	(например, пла	аншетные ком	пьютеры, сма	
	Полностью не согласен	Не согласен	Согласен	Полностью согласен
Я боюсь, что смогу сломать новые техниче устройства, прежде чем научусь правильно ими пользоваться		•	0	•
Это зависит от меня, преуспею ли я в использовании новых технологий или нет	•	0	0	0
Я с радостью использую новые технологии	. 0	•	•	•
Результат моего использования новых технологий зависит только от меня.	•	0	0	0
• Назад				Далее •

# (English version)

1. Which grade are you in?		
Grade 6 Grade 8		
1 2		
2. What is the date of your birthday?		
(Please, write the day, month, and the year of your birthday)		
Day		
Month		
Year		
3. Are you Female or Male?(Please, select only one response)		
Female Male		
1 2		ad9/Dla == a
4. What is the highest level of education your mother or the woman relect only one response)	epiaces her complet	eu :(Fieuse
She did not go to school		1
She completed main secondary school (grades 1-9)		2
She completed secondary school (grades 1-11)		3
She completed college (vocational and technical school)		4
She completed university (Bachelor degree)		5
She got Master degree		6
She got PhD degree		7
I do not know		8
5. What is the highest level of education your father or the man replaces	s him completed? (Pl	ease, selec
only one response)		1
He did not go to school		1
He completed main secondary school (grades 1-9)		2
He completed secondary school (grades 1-11) He completed college (vocational and technical school)		3 4
He completed university (Bachelor degree)		5
He got Master degree		6
He got PhD degree		7
I do not know		8
6. How many books are there in your home?		
There are usually about 40 books per metre of shelving. Do not incli	ude magazines, new	spapers, or
your school books.(Please select one response)		
0-10 books		1
20-50 books		2
100 books		3
200 books		4
500 books More than 500 books		5 6
7. Which of the following are in your home? (Please select one response	in each row	0
7. Which of the following are in your nome: (Frease select one response	Yes	No
A desk to study at	1	2
A room of your own	1	$\frac{2}{2}$
A quiet place to study	1	$\frac{2}{2}$
A computer you can use for school work	1	2
Educational software	1	$\overline{2}$
A link to the Internet	1	2
Classic literature (e.g. A. Kunanbayev, A.S. Pushkin)	1	2
Books of poetry	1	2
Works of art (e.g. paintings)	1	2
Books to help with your school work	1	2
Technical reference books	1	2
A DVD player	1	2
A DVD player Flat screen TV	1	2 2
That Sciedl TV	1	<u> </u>

184

Satellite or cable TV	1	2
Books on art, music or design	1	2
Digital camera	1	2
Camcorder	1	2
Satellite antenna	1	2
8. What language do you speak at home most of the time?		
(Please select one response)		
Kazakh		1
Russian		2
Other language		3
Please specify which language		5
9. Did you go to kindergarten? (Please select one response)		
No		1
Yes, one year or less		2
Yes, more than one year		3
10 001 1 1 1 0 1 1	11 1 011 1	0.401

10. Thinking about your school. To what extent do you agree with the following statements? (Please select one response in each row)

	Strongly disagree	Disagree	Agree	Strongly agree
I feel like an outsider (or out of things) at school	1	2	3	4
I make friends easily at school	1	2	3	4
I feel like I belong at school	1	2	3	4
I feel awkward and out of place in my school	1	2	3	4
Other students seem to like me	1	2	3	4
I feel lonely at school	1	2	3	4
I feel happy at school	1	2	3	4
Things are ideal in my school	1	2	3	4
I am satisfied with my school	1	2	3	4

11. How often do these things happen in English lesson?

(Please select one response in each row)

	Every lesson	Most lessons	Some lessons	Never or hardly
				ever
Students don't listen to what the teacher says	1	2	3	4
There is noise and disorder	1	2	3	4
The teacher has to wait a long time for students	1	2	3	4
to settle down				
Students cannot work well	1	2	3	4
Students don't start working for a long time	1	2	3	4
after the lesson begins				

12. How often do these things happen in English language lessons?

(Please select one response in each row)

	Every lesson	Most lessons	Some lessons	Never or hardly
My teacher is interested in the progress of each student	1	2	3	<u>ever</u> 4
My teacher provides extra-help to student if necessary	1	2	3	4
My teacher helps students in school	1	2	3	4
My teacher continues to explain the lesson until all students fully understand	1	2	3	4
My teacher gives students the opportunity to express their opinions	1	2	3	4

13. To what extent do you agree or disagree with the following statements about yourself? (*Please select one response in each row*)

disaaree	ngly
disagree ag	ree

I like learning English	1	2	3	4
I like reading in English	1	2	3	4
I like doing English language tasks	1	2	3	4
I like to get new knowledge in English	1	2	3	4
language				
I am interested in English	1	2	3	4

14. Thinking about your school. To what extent do you agree with the following statements?(Please select one response in each row)

	Strongly disagree	Disagree	Agree	Strongly agree
If I make more effort I will succeed in school	1	2	3	4
Only I decide how to study at school: good or bad	1	2	3	4
The situation in the family or other problems do not allow me to spend a lot of time for studying	1	2	3	4
If I had other teachers I would have studied harder	1	2	3	4
If I wanted I could do well at school	1	2	3	4

15. To what extent do you agree with the following statements? (*Please select one response in each row*)

	Strongly	Disagree	Agree	Strongly
	disagree			agree
English is important for society	1	2	3	4
English is very important for me	1	2	3	4
I think English is a language of international communication	1	2	3	4
When I finish school I will have many opportunities to use English	1	2	3	4
I will use English language in many ways when I become an adult	1	2	3	4

16. How much do you disagree or agree with the following statements about the use of new technologies (for example, tablet computers, Smartphone, DVD player)? (Please select one response in each row)

-	Strongly	Disagree	Agree	Strongly
	disagree			agree
I am interested in new technologies	1	2	3	4
Using new technologies creates problems for me	1	2	3	4
I find it difficult to use new technologies – I do not	1	2	3	4
know how to work with them				
I decide whether I can use new technologies or not	1	2	3	4
<ul> <li>it has nothing to do with success.</li> </ul>				
I am always interested in using the latest technical	1	2	3	4
devices				
When I use new technologies I feel the fear of	1	2	3	4
failure				
When I problems with technologies I solve them	1	2	3	4
myself				
I had the opportunity I would use technical devices	1	2	3	4
more often than now				
I am afraid that I can break new technical devices	1	2	3	4
before learning how to use them				
It depends on me whether I succeed in using new	1	2	3	4
technologies or not				
I feel happy to use new technologies.	1	2	3	4
The result of my use of new technologies depends	1	2	3	4
only on me				

Thank you very much for your cooperation in completing this questionnaire!

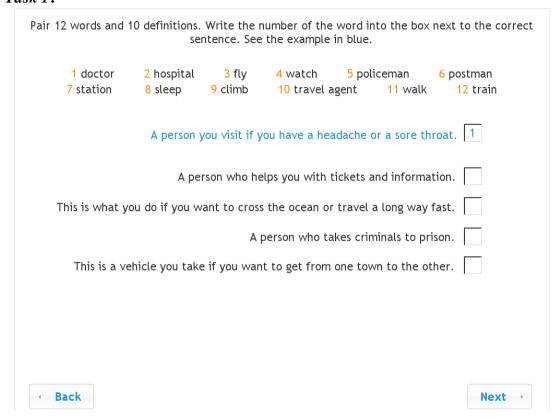
### Appendix F: English Reading comprehension test (6th grade) (Study 1)

Polous		ill find the	a daar	vintian	a of ba	olio (O	Test :		title of	aaab b	ook in	the list (	A MA and n
		the grid.							uue oi	each b	OOK III	trie list (	A–M) and p
here	is an e	xample	(0) for y	you at	the be	ginning							
0.	space		his gift	box in	cludes	a book	with t	asic in	structio				sile and a ami paper,
1.	humo		nality -	and a	a happ	y endir	ng with	balloo	ns and	a cak	e! Thr		th drama, Is throw a
2.	BAAA cow,	Aing and	CLUC quietest	King. t anima	When al of all	Hefty H I who s	lugh ar aves th	id Lank ie day!	y Len <sub>l</sub>	olan a	plot to	steal the	SSing and fine prize her black
3.	kept i		e by the	e wicke	d circu								oor Harry, dom of the
		Answ	ers										
		0	1	2	3	4	5	6	7	8	9	10	

### Test 2 There are ten gaps (0-10) in the text below. Find the missing parts in the list (A-M) and put the letters in the grid. There are two parts you will not need. There is an example (0.) for you at the beginning. First Day of School I don't want to start school. I don't want to do anything but stay in bed. Stay in bed, with the covers "Take a shower, Dave," my mother says, on the morning when school starts. "Wash \_\_\_1\_\_. I'll bet it's been seven days. That's not like you." She is wrong. It's been \_\_\_ 2 \_\_\_ since I've bathed. I know I smell, but I don't care. I roll over and pull the bedsheet up over my ear. "Please, honey," Mom says. "Don't wait too long to get ready for school." As if I am planning to jump out of bed this moment and head right for the shower. Answers 1 3 10 2 4 5 6 7 8 9 Back Next o

### Appendix G: English Reading comprehension test (8th grade) (Study 1)

### *Task 1*:



# Task 1: Find the pairs of these definitions from the list (A - K). There is an extra word you don't need. See the example.

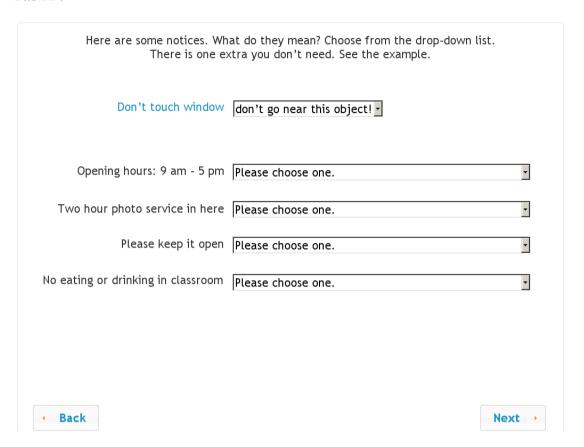
- A A person you visit if you have a headache or a sore throat.
- B A person who helps you with tickets and information.
- C This is what you do if you want to cross the ocean or travel a long way fast.
- D A person who takes criminals to prison.
- E This is a vehicle you take if you want to get from one town to the other.
- F A place where you visit someone sick or ill.
- G A person who delivers letters.
- H You do this when you are tired and you want to relax.
- I You can do this in a park, street or forest.
- J You can do this if you want to see far and there is a tree near you.
- K A place where you go to buy your ticket if you want to travel somewhere.

1 doctor	4 watch	7 station	10 travel agent
2 hospital	5 police man	8 sleep	11 walk
3 fly	6 postman	9 climb	12 train

### Put your answers in here:

A	В	C	D	E	F	G	H	I	J	K
1										

### *Task 2*:



Task 2: Here are some notices. What do they mean? Choose from the answers 1-12. There is one extra you don't need. See the example.

DON'T TOUCH WINDOW A opening hours: 9 am - 5 pm В TWO HOUR PHOTO SERVICE IN HERE  $\mathbf{C}$ Please keep it open D  $\mathbf{E}$ No eating or drinking in classroom F **Entrance**  $\mathbf{G}$ TODAY: 2 for the price of 1 Η PLEASE USE OTHER DOOR Ι special student price! ask at desk J *Use before 01.02.2002* 1 if you want a cheap ticket ask here 2 make sure you are not hungry or thirsty in here 3 this is the place where you can go in 4 this is the place where you cannot go in 5 you can visit this place for eight hours 6 after this date you must not eat this food

7 don't go near this object!

- 8 you can buy books here
- 9 don't shut this
- you can get your pictures fast in here
- you can get everything for half price for one day only
- this is the library desk

### Put your answers in here:

A	В	C	D	E	F	G	H	I	J
7									

# *Task 3:*

Read this short interview from a British youth magazine. the list on the bottom. There is an extra answer you don't the box next to the question. See the example in blue.	•	
What's it like to be 12 in another country? We	put the question to someone in the	USA.
What's your name? 3	What's your favourite TV programm	e?
What do you do?	What's your favourite magazine?	
Where do you live?	Your favourite food?	
Describe a typical day.	Any you hate?	
What do you do in your spare time?	Who are your best friends?	
1 Up by 7am, go to school till 2.30pm. Some days I'll g go to the movie. Then I'll be with my family for dinner 2 I don't read any. I prefer books like Harry Potter and	, do my school work and go to bed b	
3 Laura Hilius.		
4 Anything sweet, I love cakes, and icecream.		
5 Hang out with friends, play computer games, talk on	the phone, listen to music	
6 I don't really like maths and science.		_
. Park	•	Next
• Back		Next •

Task 3: Read this short interview from a British youth magazine. Match the questions (A - J) with the answers (1 - 11). There is an extra answer you don't need. See the example.

What's it like to be 12 in another country? We put the question to some one in the USA

- **A** What's your name?
- **B** What do you do?
- **C** Where do you live?
- **D** Describe a typical day.
- **E** What do you do in your spare time?
- **F** What's your favourite TV programme?
- **G** What's your favourite magazine?
- **H** Your favourite food?
- I Any you hate?
- **J** Who are your best friends?
- 1 Up by 7am, go to school till 2.30pm. Some days I'll go out with friends till 5.30pm, some days I'll go to the movie. Then I'll be with my family for dinner, do my school work and go to be d by 10pm.
- 2 I don't read any. I prefer books like Harry Potter and the Philosopher's Stone.
- 3 Laura Hilius.
- 4 Anything sweet, I love cakes, and ice-cream.
- 5 Hang out with friends, play computer games, talk on the phone, listen to music....
- 6 I don't really like maths and science.
- 7 Lake Forest, CA, with my mom, dad, sisters, and Sneeze, our dog.
- 8 My sisters: Cathy, 13, and Jane, 15.
- **9** Fish, smells awful...
- 10 Nature films on animals, and science fiction.
- 11 I go to Pinewood School.

### Put your answers in here:

A	В	C	D	E	F	G	H	I	J
3									

## Task 4:

Read the quiz questions on the top and find the right a the number of the correct answer into the box next to	inswer. There is one extra answer you don't need. Write the question. See the example in blue.
Why is it hot or cold	in some places? 3
Which is the biggest bird of prey?	Why are many tundra flowers red or yellow?
Why do some flowers smell sweet?	Which is the most dangerous snake?
Which cat runs the fastest?	How different are our pet cats from wild cats?
Which is the biggest snake?	Why are rainforests cut down?
1 They are destroyed so the land can be used for crops, or for gazing. Tropical soils are fertile and cocoa and sugar cane can be grown after the trees have been felled.	6 The reticulated python lives in parts of Southeast Asia. It grows to an amazing 10 metres.
2 There are relatively few bees this far north, and their main pollinators are flies. Flies cannot distinguish colours like bees can, so the flowers do not need to be so colourful.	7 They dig beneath the snow with their hooves and antlers to seek out tender lichens, mosses and grasses.
3 When the sun is low in the sky, its rays hit the earth at an angle. When that happens we don't feel the sun's warmth.	8 The saw-scaled carpet viper is extremely aggressive and its poison can kill humans. It lives in Africa and Asia.
• Back	Next -

**Task 4:** Read the following quiz questions (A - I) and find the right answer (1-10). There is one extra answer you don't need. See the example.

- **A** Why is it hot or cold in some places?
- **B** Which is the biggest bird of prey?
- C Why do some flowers smell sweet?
- **D** Which cat runs the fastest?
- **E** Which is the biggest snake?
- **F** Why are many tundra flowers red or yellow?
- **G** Which is the most dangerous snake?
- **H** How different are our pet cats from wild cats?
- I Why are rainforests cut down?
- 1 They are destroyed so the land can be used for crops, or for gazing. Tropical soils are fertile and cocoa and sugar cane can be grown after the trees have been felled.
- 2 There are relatively few bees this far north, and their main pollinators are flies. Flies cannot distinguish colours like bees can, so the flowers do not need to be so colourful.
- 3 When the sun is low in the sky, its rays hit the earth at an angle. When that happens we don't feel the sun's warmth.
- **4** It's a way of attracting bees, flies, butterflies and other insects.
- 5 The Andean condor measures up to 110 cm long and weighs up to 12 kg. Its wingspan is over 3 metres.

- **6** The reticulated python lives in parts of Southeast Asia. It grows to an amazing 10 metres.
- 7 They dig beneath the snow with their hooves and antlers to seek out tender lichens, mosses and grasses.
- 8 The saw-scaled carpet viper is extremely aggressive and its poison can kill humans. It lives in Africa and Asia.
- **9** They have exactly the same body structure and skeleton. Both rely heavily on smell for information about the world. All are meateaters and cannot live on a diet of plant food.
- 10 The cheetah is one of the speediest of all animals over short distances. It has been timed running at 105 kph over 100 metres.

(Source: Giant Book of Questions and Answers. 1999. Bath: Parragon.) Put your answers in here:

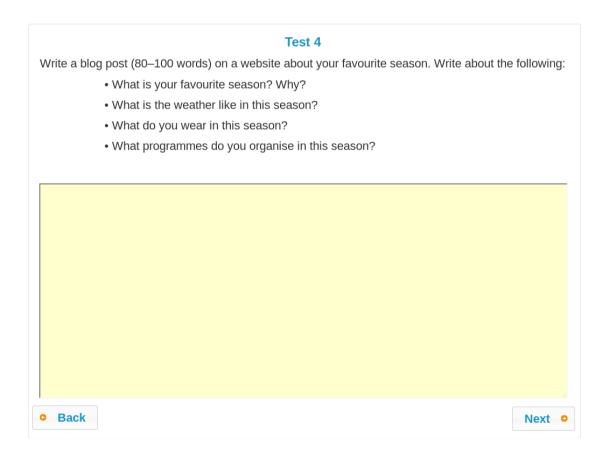
A	В	C	D	Е	F	G	H	I
3								

# Appendix H: English comprehension tests: Reading and Writing skills (6th grade) (Study 2)

uuc)	(Diu	~ <i>y</i> = <i>y</i>											
							Test :	1					
		ill find th the grid.							title of	each b	ook in	the list	(A–M) and put
There	is an e	xample	(0) for y	ou at	the beq	ginning							
0.	space		nis gift	box in	cludes	a book	with t	pasic in	structio				ssile and a ami paper,
1.	humo		nality -	and a	happ	y endir	ng with	balloo	ns and	a cak	e! Thr		ith drama, ds throw a
2.	BAAA cow, i	Aing and	CLUC	King. \anima	When all	Hefty H who s	lugh ar aves th	nd Lank ne day!	y Len	plan a	plot to	steal the	SSing and e fine prize n her black
3.	kept i		by the	wicke	d circu								ooor Harry, dom of the
		0	1	2	3	4	5	6	7	8	9	10	
0 B	ack	J											Next •
		-			1.000	1 12				1 0			

### Test 2 There are ten gaps (0-10) in the text below. Find the missing parts in the list (A-M) and put the letters in the grid. There are two parts you will not need. There is an example (0.) for you at the beginning. First Day of School I don't want to start school. I don't want to do anything but stay in bed. Stay in bed, with the covers \_\_\_0\_\_. All day. "Take a shower, Dave," my mother says, on the morning when school starts. "Wash \_\_\_1\_\_. I'll bet it's been seven days. That's not like you." She is wrong. It's been \_\_\_ 2 \_\_\_ since I've bathed. I know I smell, but I don't care. I roll over and pull the bedsheet up over my ear. "Please, honey," Mom says. "Don't wait too long to get ready for school." As if I am planning to jump out of bed this moment and head right for the shower. **Answers** 10 0 1 2 3 4 5 6 9 8 J Back Next o

# Test 3 You are celebrating your birthday this weekend. Invite your English friend to your party. Write an e-mail (80–100 words) and include the following: • When will you have the party? (Day, hour) • Where will you have the party? • Who will be there? • What will you eat and drink?



# Appendix I: Background Questionnaire (in Kazakh and Russian 6th grade) (Study 2)

### In Kazakh

### 1. Қай сыныпта оқисыз?

6 сынып	8 сынып
1	2

### 2.Қашан туылдыңыз?

(Туған күніңізді, айыңызды және жылыңызды жазыңыз)

Күні Айы Жылы

Жылы

### 3. Жынысыңыз қандай?

### (Бір торкөзді белгілеңіз)

Әйел	Ep	
1	2	

4. Анаңыздың немесе анаңыздың орнын алмастырушы әйелдің алған білімінің ең жоғарғы сатысы қандай? (Бір төркөзді белгіленіз)

1 1 1	
Ол мектепті аяқтамаған	1
Ол негізгі орта білім мектепті бітірген (1-9 сыныптар)	2
Ол жалпы орта білім мектепті бітірген (1-11 сыныптар)	3
Ол колледж бітіріді (кәсіптік және техникалық училище, техникум)	4
Ол университет бітірді (бакалавр дәрежесі бар)	5
Оның магистр дәрежесі бар	6
Оның PhD доктор дәрежесі бар	7
Мен білмеймін	8

5. Әкеңіз немесе әкеңіздің орнын алмастырушы ер адамның алған білімінің ең жоғарғы сатысы қандай? (Бір төркөзді белгілеңіз)

Ол мектепті аяқтамаған	1
Ол негізгі орта білім мектепті бітірген (1-9 сыныптар)	2
Ол жалпы орта білім мектепті бітірген (1-11 сыныптар)	3
Ол колледж бітіріді (кәсіптік және техникалық училище, техникум)	4
Ол университет бітірді (бакалавр дәрежесі бар)	5
Оның магистр дәрежесі бар	6
Оның PhD доктор дәрежесі бар	7
Мен білмеймін	8

### 6. Үйіңізде қанша кітап бар?

Әдетте ұзындығы 1 м сөреге 40-қа жуық кітап сияды. Журналдарды, газеттерді және оқулықтарды қоспаңыз. (Бір торкөзді белгілеңіз)

*	,,,	, 1	,	,	٠ ـ	-	
0-10 кітап							1
20-50 кітап							2
100 кітап							3
200 кітап							4
500 кітап							5
500 кітаптан көп							6

### In Russian

1 .В каком классе Вы учитесь?

6 класс	8 класс
1	2

### 2. Дата Вашего рождения?

(Пожалуйста, запишите день, месяц и год Вашего рождения)

День Месяц

Год

### 3.Ваш пол?

(Пожалуйста, отметьте только одну клетку)

Жен	Муж	

4. Какой наивысший уровень образования завершила Ваша мама или женщина, которая ее заменяет? (Пожалуйста, отметьте только одну клетку)

Она не окончила школу	1
Она окончила основную среднюю школу (1-9 классы)	2
Она окончила общую среднюю школу (1-11 классы)	3
Она окончила колледж (профессиональное и техническое училище, техникум)	4
Она окончила университет (степень бакалавра)	5
Она имеет степень магистра	6
Она имеет степень доктора наук PhD	7
Я не знаю	8

5. Какой наивысший уровень образования завершил Ваш папа или мужчина, который его заменяет? (Пожалуйста, отметьте только одну клетку)

Он не окончил школу	1
	2
Он окончил основную среднюю школу (1-9 классы)	2
Он окончил общую среднюю школу (1-11 классы)	3
Он окончил колледж (профессиональное и техническое училище, техникум)	4
Он окончил университет (степень бакалавра)	5
Он имеет степень магистра	6
Он имеет степень доктора наук PhD	7
Я не знаю	8

### 6. Сколько книг в Вашей домашней библиотеке?

Обычно на один метр книжной полки приходится 40 книг. В их число не входят журналы, газеты и учебники. (Пожалуйста, отметьте только одну клетку)

$\frac{-ij}{2}$	
0-10 книг	1
20-50 книг	2
100 книг	3
200 книг	4
500 книг	5
Более 500 книг	6

### (English version)

1 .Which grade are you in?

Grade 6	Grade 8
1	2

2. What is the date of your birthday?

(*Please*, write the day, month, and the year of your birthday)

Day Month Year

3. Are you Female or Male?

(Please, select only one response)

Female	Male
1	2

4. What is the highest level of education your mother or the woman replaces her completed? (*Please*, *select only one response*)

r	
She did not go to school	1
She completed main secondary school (grades 1-9)	2
She completed secondary school (grades 1-11)	3
She completed college (vocational and technical school)	4
She completed university (Bachelor degree)	5
She got Master degree	6
She got PhD degree	7
I do not know	8

5. What is the highest level of education your father or the man replaces him completed? (*Please*, *select only one response*)

He did not go to school	1
He completed main secondary school (grades 1-9)	2
He completed secondary school (grades 1-11)	3
He completed college (vocational and technical school)	4
He completed university (Bachelor degree)	5
He got Master degree	6
He got PhD degree	7
I do not know	8

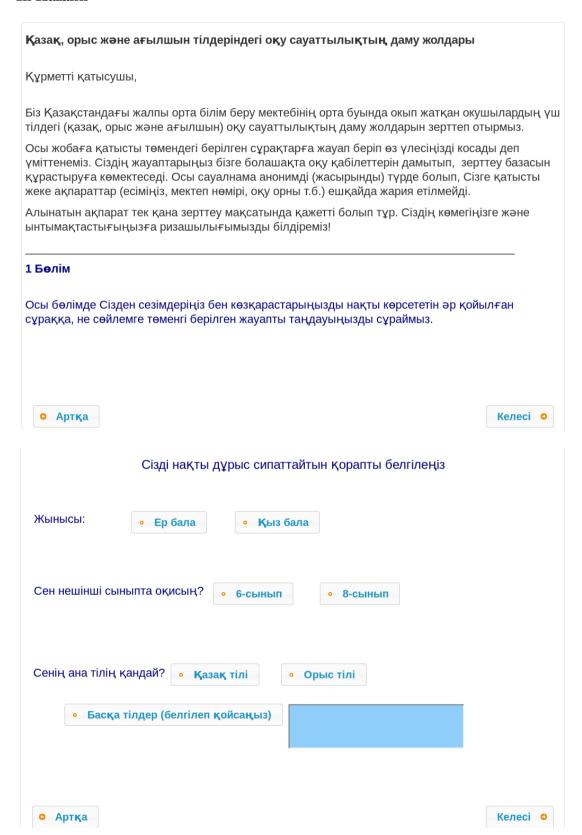
How many books are there in your home?

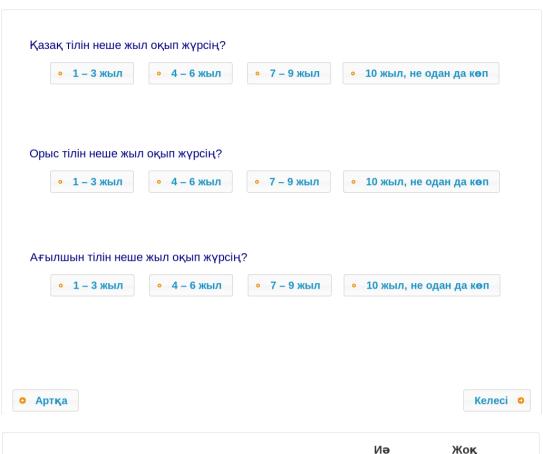
There are usually about 40 books per metre of shelving. Do not include magazines, newspapers, or your school books. (Please, select only one response)

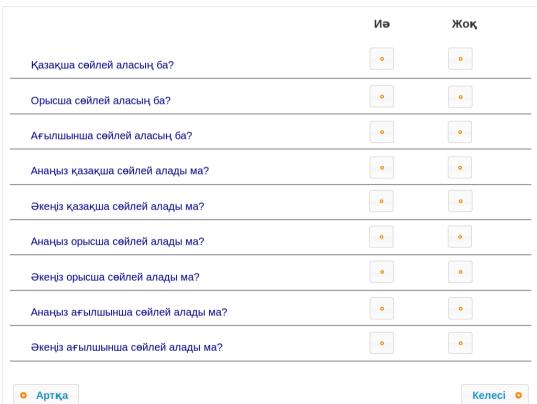
re is purposed, or your series of occursi(1 recise, series of one	y one response,
0-10 books	1
20-50 books	2
100 books	3
200 books	4
500 books	5
More than 500 books	6

# Appendix J: Background Questionnaire (in Kazakh and Russian 6th and 8th grades) (Study 3)

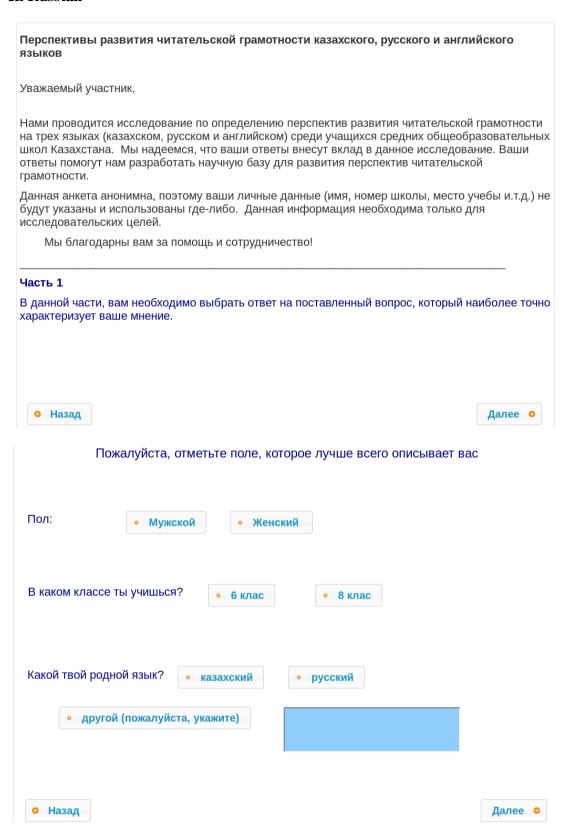
### In Kazakh

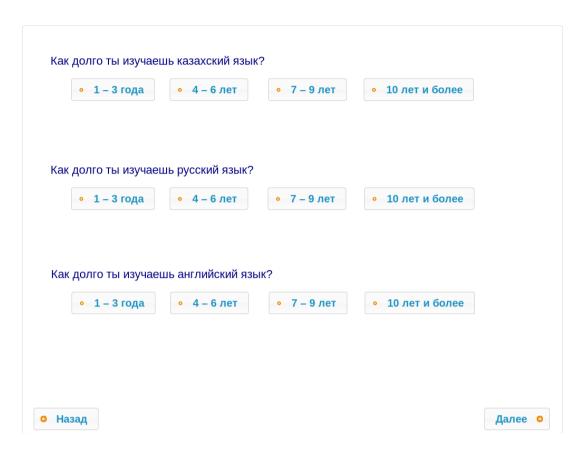


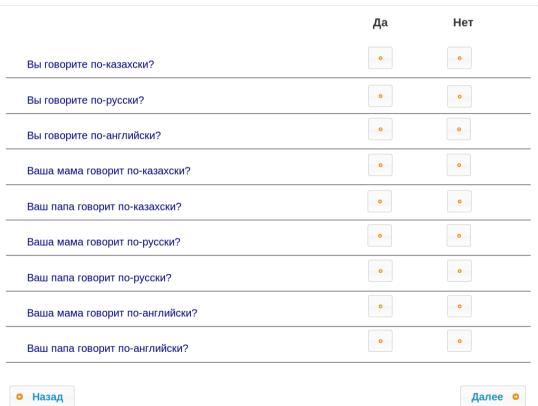




### In Russian







### (English version)

Developing perspectives in Reading literacy in Kazakh, Russian, and English

Dear participant,

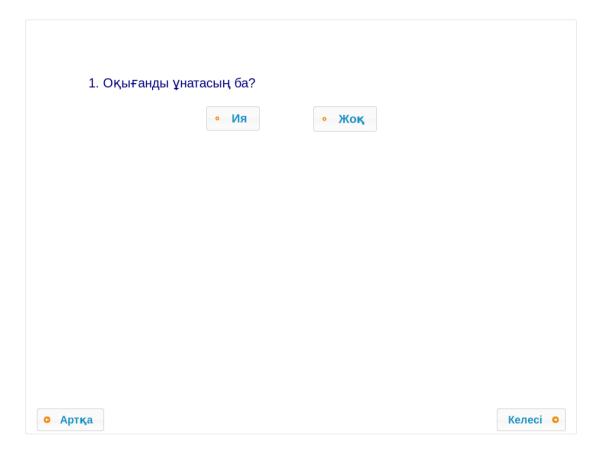
We are doing a research regarding the perspectives of reading literacy in three languages (Kazakh, Russian, and English) among young language learners in Secondary schools of Kazakhstan. We hope to have your contribution to this study by giving the answers to the questions below. Your answers will help us to build a research framework for the development of reading perspectives. This questionnaire is anonymous and any personal information (name, number of your school, place of study etc.) will not be shown and used. The information is only for the purpose of the research. We really appreciate your help and cooperation!

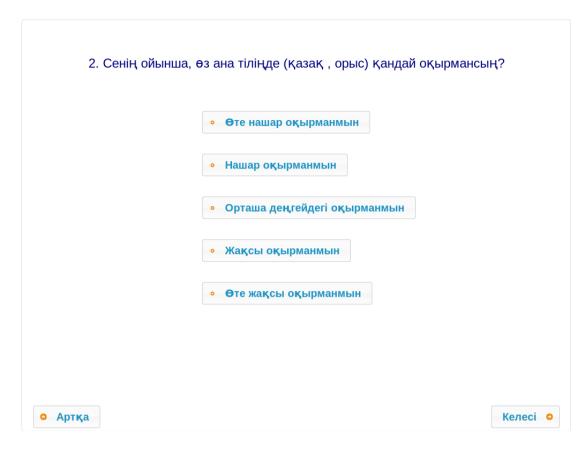
Please tick the box that best describes you	
1. Gender: MaleFemale	
2. What grade are you?6 <sup>th</sup> grade8 <sup>th</sup> grade	
3. What is your mother tongue?  Kazakh Russian other (please sp	ecify)
4. How long have you been learning Kazakh language?1 - 3 years4 - 6 years7 - 9 years	10 years or more
5. How long have you been learning Russian language?1 - 3 years4 - 6 years7 - 9 years	10 years or more
6. How long have you been learning English language? 1 - 3 years4 - 6 years7 - 9 years	10 years or more
7. What is the highest level of education your mother or the w completed? ( <i>Please</i> , <i>select only one response</i> )	oman replaces her
She did not go to school	1
She completed main secondary school (grades 1-9)	2
She completed secondary school (grades 1-11)	3
She completed college (vocational and technical school)	4
She completed university (Bachelor degree)	5
She got Master degree	6
She got PhD degree	7
I do not know	8
8. What is the highest level of education your father or the	man replaces him
completed? (Please, select only one response)	1
He did not go to school	1
He completed main secondary school (grades 1-9)	2
He completed secondary school (grades 1-11)	3

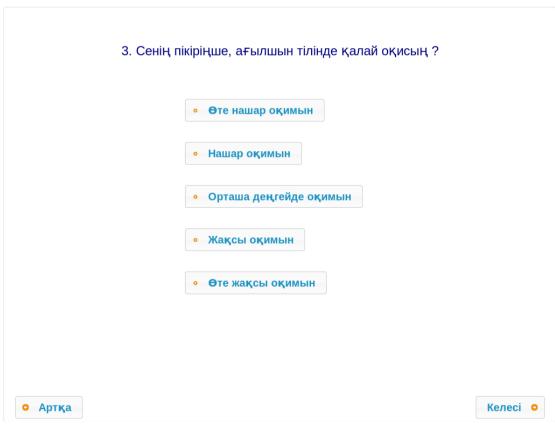
He completed college (vocational and to	echnical school)		4
He completed university (Bachelor degree	ree)		5
He got Master degree			6
He got PhD degree			7
I do not know			8
9. Can you speak Kazakh?	Yes	No	
10. Can you speak Russian?	Yes	No	
11. Can you speak English?	Yes	No	
12. Can your mother speak Kazakh?	Yes	No	
13. Can your father speak Kazakh?	Yes	No	
14. Can your mother speak Russian?	Yes	No	
15. Can your father speak Russian?	Yes	No	
16. Can your mother speak English?	Yes	No	
17. Can your father speak English?	Yes	No	

# Appendix K: Reading attitude (in Kazakh and Russian 6th and 8th grades) (Study $\mathbf{3}$ )

# In Kazakh

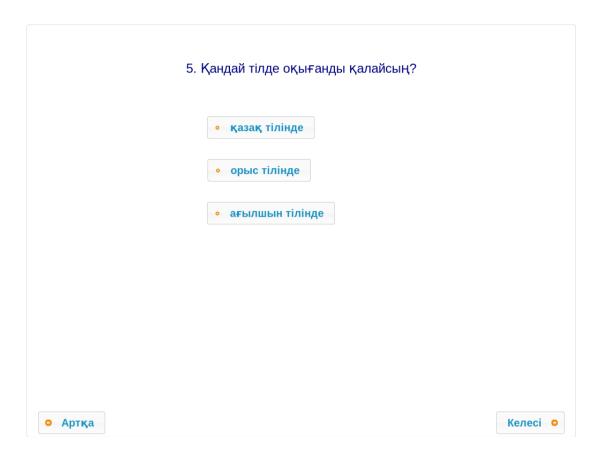






4. Келесі жауаптардь	ІҢ Қайсысым Толығымен келіспеймін	мен қаншалы <i>Келіспеймін</i>	Қты келісесің <i>Келісемін</i> , <i>келіспеймін</i>	, келіспейс Келісемін	ің: Толығымен келісемін
Қызықты болғандықтан, оқимын.	o o	•	•	•	•
Оқығаннан ләззәт алатындықтан, оқуға құштармын.	•	•	0	•	•
Оқу білімімді арттырады.	•	•	0	•	•
Маған қажетті болғанда ғана оқим	IЫН. <mark>о</mark>	0	0	0	•
Оқу жағы көбінесе ұлдарға қараға қыздарға тән.	анда <mark>。</mark>	•	•	•	•
Оқу қызықты емес.	•	•	•	•	•
Мен кітапханаға барғанды ұнатамы	olH o	0	0	0	•
• Артқа					Келесі •

	Толығымен келіспеймін	Келіспеймін	Келісемін, келіспеймін	Келісемін	Толығымен келісемін
Ағылшын тіліне қарағанда, өз ана ілімде оқығанды ұнатамын.	•	•	0	•	•
Электрондық кітаптарды оқығанды ұнатамын.	0	0	0	0	•
Оқу –ғаламтор жүйесі мен компьютермен жұмыс істеуге қажет.	0	•	0	•	•
(өбінесе үйде оқимын.	•	0	0	0	•
Кітаптарды оқуға – топтағы бірге қып жатқан балалар мені ынталандырады.	•	•	0	•	•



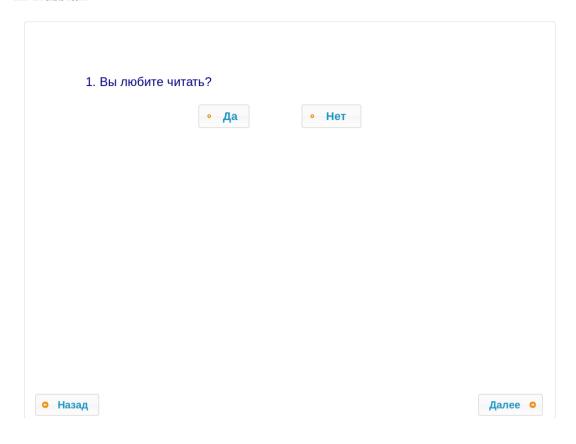


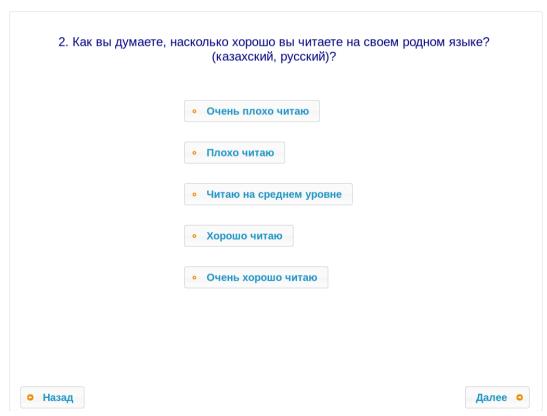
	7. Оқығаның саған жеткілікті ме?	
	• Жоқ, мен көп оқығым қелмейді	
	• Жоқ, бірақ, көп оқығым келеді	
	• Na	
• Артқа		Келесі •
	8. Егер, көп оқушы едім	
	• бос уақытым көп болса,	
	• Отбасым мені көп оқуға ынталандырса,	
	• Мектеп оқуға ынталандырса,	
	<ul><li>Кітаптарда көп суреттер болса,</li><li>Кітаптарым көп болса,</li></ul>	
	• Достарым көп оқыса,	
	• Маған оқу оңай болса,	
	• Мені қызықтыратын нәрселер туралы болса,	
• Артқа		Келесі •

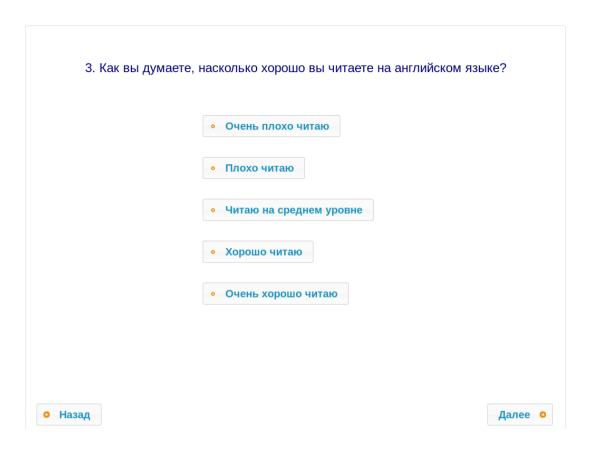
9. Үйде, не мектептен тыс жиі оқисың ба?	
• Ешқашан, мүлдем оқымаймын	
• Алты айда бір, не екі рет	
• Айына бір, не екі рет	
• Аптасына бір, не екі рет	
• Күнде, жиі оқимын	
• Артқа	Келесі •

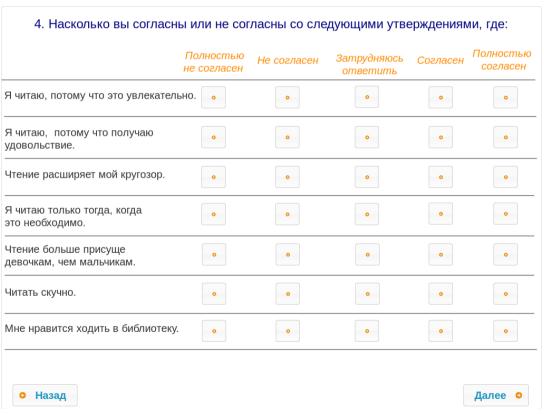


### In Russian

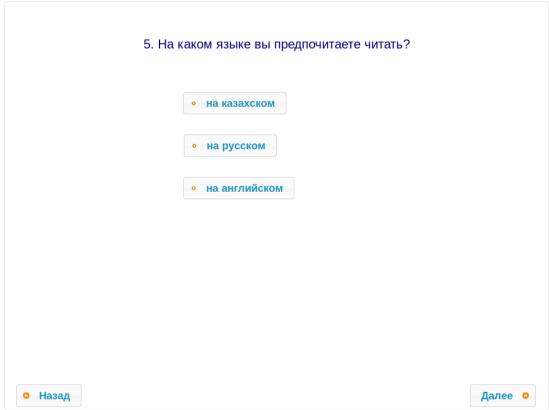


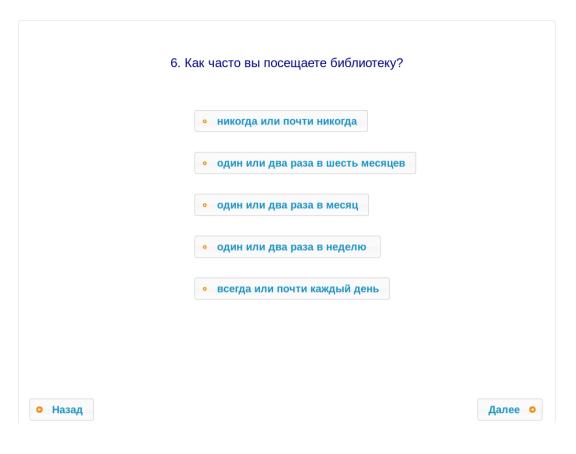


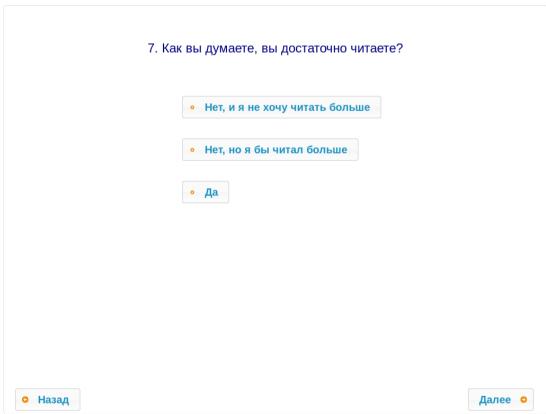


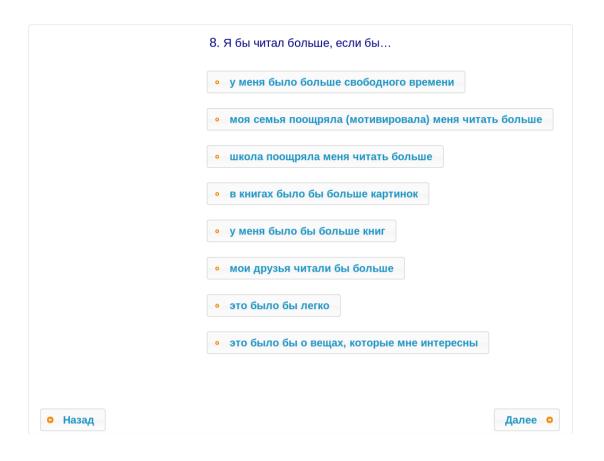


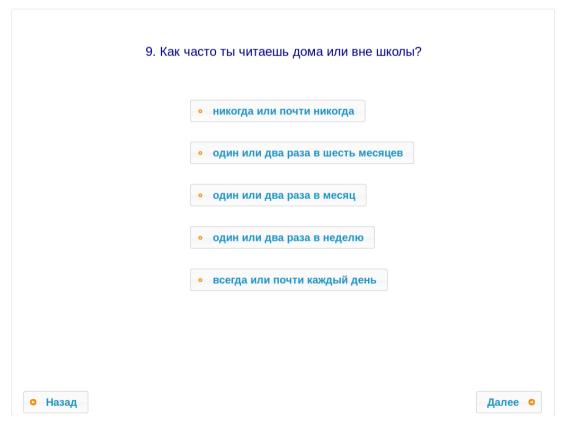
	Полностью не согласен	Не согласен	Затрудняюсь ответить	Согласен	Полностью согласен
Предпочитаю читать на своем одном языке, чем на английском.	0	0	0	•	0
Я предпочитаю читать электронные ниги.	•	0	0	•	0
Нтение необходимо для работы в интернете и на компьютере.	•	•	0	•	•
R в основном читаю дома.	0	0	0	•	•
Лои одноклассники мотивируют иеня читать больше.	0	•	0	•	0
• Назад					Далее •
5. Ha v:	SKOW BSFIRE I	RLI ППЕЛПОЦИТ	гаете читать?		













# (English version)

In this part, for each of the question below circle the response that best characterizes how you feel about the following questions and statements.

- 1. Do you enjoy reading?
  - 1) Yes 2) No
- 2. How good do you think you are at reading in your mother tongue (Kazakh or Russian)?
  - 1) Very poor reader
  - 2) Poor reader
  - 3) Medium level reader
  - 4) Good reader
  - 5) Very good reader
- 3. How good do you think you are at reading in English?
  - 1) Very poor reader
  - 2) Poor reader
  - 3) Medium level reader
  - 4) Good reader
  - 5) Very good reader
- 4. Do you agree or disagree with the following statement where:
  - 1) Strongly disagree
  - 2) Disagree
  - 3) Neither agree nor disagree
  - 4) Agree
  - 5) Strongly agree

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I read because it is fun.	1	2	3	4	5
2. I read because it gives me a rest.	1	2	3	4	5
3. Reading broadens my knowledge.	1	2	3	4	5
4. I only read when I have to.	1	2	3	4	5
5. Reading is more for girls than for boys.	1	2	3	4	5
6. Reading is boring	1	2	3	4	5

7. I like going to the library.	1	2	3	4	5
8. I prefer to read in my mother tongue than in	1	2	3	4	5
English. 9. I prefer to read electronic books.	1	2	3	4	5
10. Reading is necessary for working on the Internet and computer.	1	2	3	4	5
11. I mostly read at home.	1	2	3	4	5
12. My group mates motivate me to read more.	1	2	3	4	5

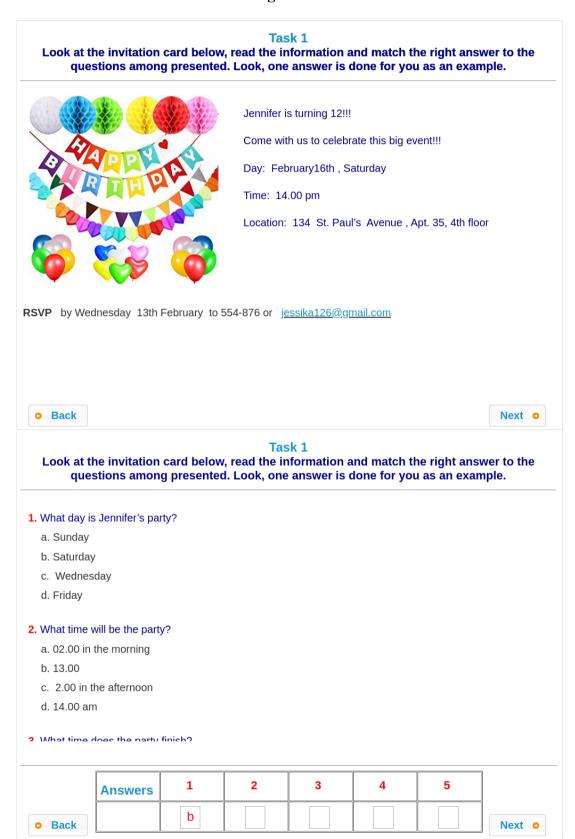
- 5. What language do you prefer to read in?
  - 1) Kazakh
  - 2) Russian
  - 3) English
- 6. How often do you visit library?
  - 1) Never or almost never
  - 2) Once or twice in six months
  - 3) Once or twice in a month
  - 4) Once or twice in a week
  - 5) Every day or almost every day
- 7. Do you think you read enough?
  - 1) No, and I don't want to read more
  - 2) No, but I would like to read more
  - 3) Yes
- 8. I would read more if .....
  - 1) I had more free time
  - 2) My family encouraged me to read more
  - 3) My school encouraged me to read more
  - 4) Books had more pictures
  - 5) I had more books
  - 6) My friends read more
  - 7) I found it easier
  - 8) There were about things I was interested in
- 9. How often do you read at home or outside of school?
  - 1) Never or almost never
  - 2) Once or twice in six months
  - 3) Once or twice in a month
  - 4) Once or twice in a week
  - 5) Every day or almost every day

- 10. Who and how often do you talk or discuss about your reading with?
  - 1) Never or almost never
  - 2) Rarely or seldom
  - 3) Sometimes
  - 4) Often
  - 5) Always or almost every day

	Never or almost never	Rarely or seldom	Sometime s	Often	Always /or almost every day
1. Mother	1	2	3	4	5
2. Father	1	2	3	4	5
3. Grandparents	1	2	3	4	5
4. Teacher	1	2	3	4	5
5. Friend/s	1	2	3	4	5
<ul><li>6. Classmate/s</li><li>7. Siblings</li></ul>	1	2	3	4	5
(sister or brother)	1	2	3	4	5

# Appendix L: Self-developed Reading comprehension test –first draft (6th grade in English, Kazakh, and Russian) (Study 3)

# **Test in English for Grade 6**



# Task 2 Find out the pairs for the definitions below. Look, one answer is done for you as an example. There is an extra word you don't need. A. A person who cooks delicious food in restaurants or cafes. B. A person who reads the news on TV and radio station. C. A person who receives calls and visitors in restaurants, hotels, or any public places. D. A person who cuts and styles people's hair E. A person fixes broken water pipes. F. A person who puts out fires. G. A person who represents people in court. H. A person who performs medical operations. I. Children with incredible talents. 1. receptionist 2. hairdresser

Ē

G

Н

Ī

Next o

В

3

Back

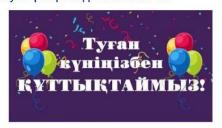
С

D

# Қазақ тілінен тест 6-сынып

#### № 1 Тапсырма

Төмендегі шақыру қағазын қарап, ақпаратты оқы және қойылған сұрақтарға дұрыс жауап бер. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынған.



#### Құрметті туған-туысқандар, достар!

Сіздерді, немереңіз Әйгерімнің 13 жас мүшелі тойына арналған салтанатты дастарханға шақырамыз!

Той: 8-тамызда, сағат 15.00-де басталады

Той иелері: Ерсұлтан – Арайлым

	Жауаптар	1	2	3	4	5	
• Артқа		С					Келесі о

# № 2 Тапсырма

Төмендегі берілген сөздердің мағыналарын тап. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды. Тізімде бір артық сөз бар.

- А. Ауада ұшатын қанаты бар әуе көлігі.
- В. Дүкендерде заттарды сататын адам.
- С. Ақпараттық ізденістерді гипермәтін мүмкіндіктерімен біріктіретін Интернет жүйесі.
- D. Азаматтың жеке басын куәландыратын негізгі құжат.
- Е. Әнді шебер орындайтын адам.
- **F.** Жолаушыларды, жүк пен поштаны тасымалдайтын, ұшақ ұшып, қонатын кәсіпорын.
- **G.** Азаматтардың құқықтарын сотта қорғайтын адам.
- Н. Медициналық операцияларды орындайтын адам.
- I. Мейрамханаларда, қонақ үйлерде қәсіби түрде тамақ пісіретін (дайындайтын) адам.
  - **1.** әуежай

o Ap

**2.** ғаламтор

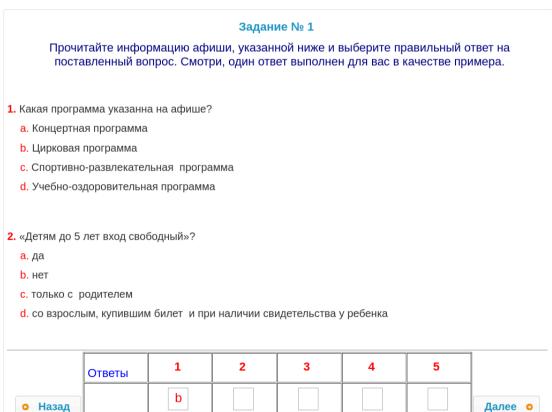
#### Жауаптар

	Α	В	С	D	E	F	G	н	I
тқа	4								

Келесі о

# Тест по русскому языку 6 класс





# Задание № 2

Внимательно прочитай уведомления указанные ниже. Что они могут означать? Выбери подходящее значение к каждому уведомлению. Смотри, один ответ выполнен для вас в качестве примера. В списке значение одного уведомления лишнее.

- А. ОСТОРОЖНО ОКРАШЕНО!
- В. ПАРКОВКА ЗАПРЕЩЕНА!
- С. Новости 24/7!
- **D.** часы работы: с 9.00 до 17.00
- Е. Акция! 2 вещи по цене 1
- **F.** Использовать до 28.03.2019
- **G.** ВЫХОД

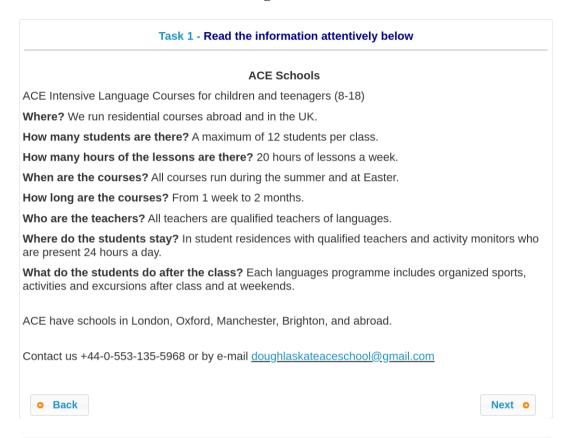
• Назад

- Н. ВНИМАНИЕ! ВЕДЁТСЯ ВИДЕОНАБЛЮДЕНИЕ!
- І. ПЕНСИОНЕРАМ И СТУДЕНТАМ СКИДКИ!
- 1. Это место для выхода.
- 2. Это место для входа.

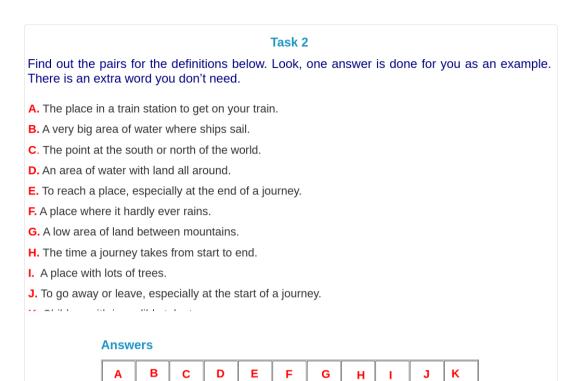
Α	В	С	D	E	F	G	н	I	
8									Далее 💿

# Appendix M: Self-developed Reading comprehension test –first draft (8th grade in English, Kazakh, and Russian) (Study 3)

# **Test in English for Grade 8**



#### Task 1 Decide are the statements True or False to the text? Look, one answer is done for you as an example. 1. ACE schools teach mathematics. True False 2. ACE schools only have schools in the UK. True False 3. ACE schools teach mostly children and teenagers. True False 4. There are more than 12 students in each class. True False 5. Courses last between one week and two months. True False 6. Students have to stay in hotels when studying at ACE schools. True False There is always a teacher or activity monitor to support the students. • True False There are many activities to do after the classes. True False Back Next o

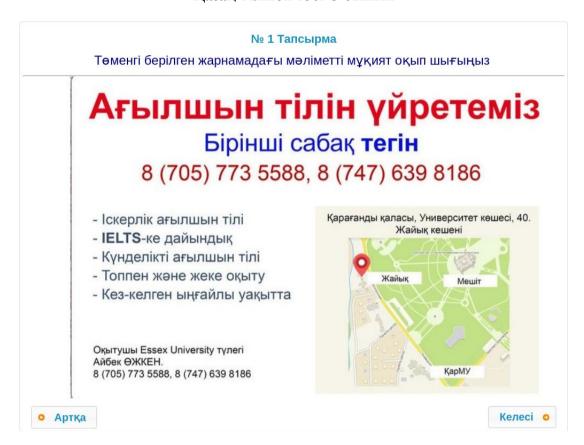


Next o

8

Back

# Қазақ тілінен тест 8-сынып



# № 1 Тапсырма

Шешім қабылда, жарнамадағы көрсетілген мәлімет берілген сөйлемдер бойынша Шын не Жалған? Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды.

<ol> <li>Жарнамада ағылшын мектебі туралы жазылған.</li> </ol>	• Жалған
2. Жарнамада ағылшын тілін үйрететін арнайы курс туралы жазылған.	• Шын • Жалған
<ol> <li>Оқытушы Ұлы Британия университетінің түлегі болып келеді.</li> </ol>	• Шын • Жалған
4. Ағылшын тілі курсында балаларды топпен ғана оқытуға қарастырылған.	• Шын • Жалған
<ol> <li>Ағылшын тілі курсының мекенжайы Қарағанды Ұлттық университетінің кешені.</li> </ol>	• Шын • Жалған
<mark>6.</mark> Бірінші сабақ төлем ақысыз өткізіледі.	• Шын • Жалған
7. Жарнамада ақпарат беруші өз байланыс телефон нөмірлерін жазып қойған.	• Шын • Жалған
<mark>8.</mark> Курс барысында арнайы IELTS-ке дайындық <b>ө</b> ткізілмейді.	• Шын • Жалған
• Артқа	Келесі •

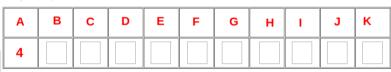
#### № 2 Тапсырма

Берілген сұрақтарға дұрыс ақпаратты таңда. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды. Тізімде бір артық мәтін бар.

- А. Скейтбординг тақтайшасы қалай аталады?
- В. Жаттығуға арналған киімдерді қалай сақтау керек?
- С. Осы құбылысты су тасқынынан кейін қай жерден байқауға болады?
- D. Ресми спорт болмаса да, балалардың шеберліктерін қайдан байқауға болады?
- Е. Қауіпті найзағай қалай пайда болады?
- **F.** Мұзды үңгірлер қалайша пайда болған?
- **G.** Ерекше күш-қуаты бар жануар қай елде мекендейді?
- Н. Жылына екі рет болатын құбылыс?
- I. Суық күндерде спортпен қалай шұғылдануға болады?
- **J.** Әлемдегі ең жылдам спринтер?
- К. Қалай дұрыс демалу керек?

• Артқа

# Жауаптар



Келесі 😊

### Тест по русскому языку 8 класс

#### Задание № 1

Прочитай и найди подходящий ответ на поставленные вопросы интервью. Смотри, один ответ выполнен для вас в качестве примера. В интервью один ответ лишний.

- А. А вы бы хотели написать, например, приключенческий роман для детей? Или что-то в жанре фэнтези?
- В. Поговорим о музыке. Какой момент вы больше всего любите при создании песни?
- С. Кто он, ваш зритель? Это преимущественно взрослая аудитория?
- **D.** Кстати, о публике, как вам кажется, современная молодежь менее избирательна и требовательна, чем старшее поколение? Поэтому многие артисты стремительно набирают популярность и так же быстро ее теряют?
- **Е.** Вы ведь недавно презентовали «Умную книгу-раскраску для детей и взрослых». Как родилась идея ее создания?
- **F.** Вы верите в то, что во взрослом возрасте можно круто изменить свою жизнь? Поменять профессию, переехать в другую страну, начать с нуля?
- **G.** У вас насыщенная творческая жизнь: вы записываете альбомы, снимаете клипы, выступаете с концертами. Все это в большей степени для себя или для зрителей?

...

#### Ответы

A B C D E F G H
7

Далее 👴



## Задание № 2 Внимательно прочитайте информацию в объявлении ниже и укажите, Верно или Не верно данное утверждение? Смотри, один ответ выполнен для вас в качестве примера. 1. Образовательный центр ведет набор на специализированные курсы кройки и шитья. • Не верно • Верно 2. В центре ведется набор детей дошкольного возраста по изучению казахского языка. • Верно • Не верно 3. Центр ведет набор на курсы рисования песком. • Не верно • Верно 4. Центр предлагает большой выбор языковых курсов для детей и взрослых. • Не верно • Верно 5. Центр осуществляет подготовку детей к школе. • Верно • Не верно 6. В центре работает логопед. • Верно • Не верно 7. Центр предлагает широкий спектр изучения английского языка для детей и взрослых. • Верно • Не верно 8. Центр ведет подготовку к сдаче международных языковых экзаменов. • Не верно • Верно

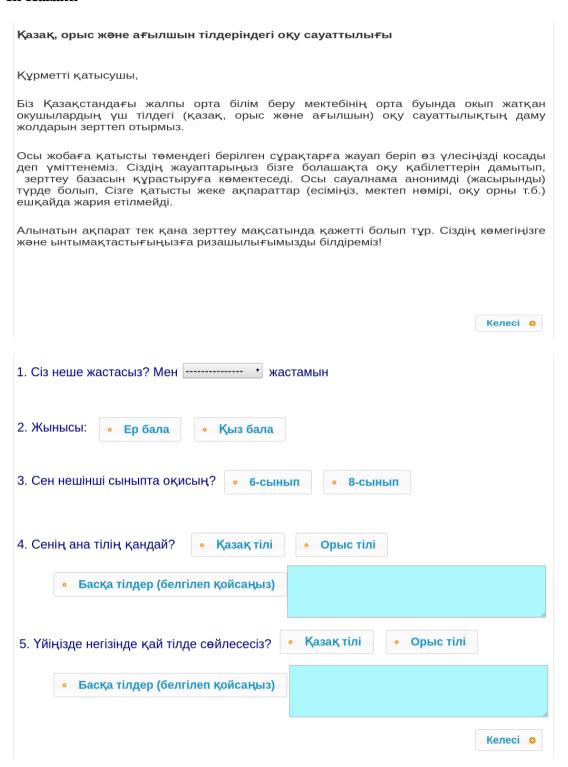
Далее 😊

• Назад

# 

Doctoral School of Education
University of Szeged
H-6722 Szeged, Petőfi Sándor sgt. 30-34. Hungary
Өз жеке кодыңызды енгізіп, содан кейін «Келесі» түймешігін басуыңызды сұраймыз
Пожалуйста введите свой код и нажмите кнопку «Далее»
Homany reta became eson to a retaining retaining Autor
Сіздің кодыңыз: Ваш код:
Келесі / Далее
Сауалнаманы толтыру үшін қай тілді таңдайсыз?
Какой язык вы выбираете для заполнения анкеты?
• Қазақша / Казахский
• Орысша / Русский
Келесі / Далее •

#### In Kazakh



6. Анаңыздың немесе анаңыздың орнын алмастырушы әйелдің алған білімінің ең жоғарғы сатысы Қандай?					
(Бір торкөзді белгілеңіз)					
• Ол мектепті аяқтамаған					
• Ол негізгі орта білім мектепті бітірген (1-9 сыныптар)					
• Ол жалпы орта білім мектепті бітірген (1-11 сыныптар)					
• Ол колледж бітіріді (кәсіптік және техникалық училище, техникум)					
• Ол университет бітірді (бакалавр дөрежесі бар)					
• Оның магистр д <b>ә</b> режесі бар					
• Оның PhD доктор дәрежесі бар					
• Мен білмеймін					
о Артқа					
7. Әкеңіздің немесе әкеңіздің орнын алмастырушы ер адамның алған білімінің ең жоғарғы сатысы Қандай?					
(Бір торкөзді белгілеңіз)					
• Ол мектепті аяқтамаған					
<ul> <li>Ол негізгі орта білім мектепті бітірген (1-9 сыныптар)</li> </ul>					
• Ол жалпы орта білім мектепті бітірген (1-11 сыныптар)					
• Ол колледж бітіріді (кәсіптік және техникалық училище, техникум)					
• Ол университет бітірді (бакалавр д <del>ә</del> режесі бар)					
<b>∘</b> Оның магистр д <b>ө</b> режесі бар					
• Оның PhD доктор д <b>ә</b> режесі бар					
• Мен білмеймін					

Келесі 💿

о Артқа

# 8.Үйіңізде төмендегілердің қайсысы бар? (Әр қатардан бір торкөзді белгілеңіз)

			Ия	Жоқ
	Оқу үстелі		0	0
	Жеке бөлмеңіз		0	0
	Оқу тапсырмаларын орындағанда пайдалануға болаты	н кітаптар	0	0
	Оқу тапсырмаларын орындауға қолданылатын компью	гер	0	0
	Интернет желісіне қосылу		0	0
0	Артқа			Келесі о
	9. Сіздің мектебіңіз туралы ой Қорытыңыз. Т келісес		ндармен Сіз Қа	аншалы <b>Қ</b> ты
	(Әр қатардан бір тор	к <b>ө</b> зді белгіле <b>ң</b> із	)	
	Толы <i>ғ</i> ымен Келіс келіспеймін	пеймін Келісі	емін, Келісег еймін	толы <i>ғымен</i> мін келісемін

	Толы ғымен келіспеймін	Келіспеймін	Келісемін, келіспеймін	Келісемін	Толы <i>ғ</i> ымен келісемін
Мен өзімді мектепте ыңғайсыз және жат сезінемін.	0	•	•	•	0
Мектепте <b>ө</b> зімді жал <b>ғ</b> ыз сезінемін.	0	•	0	•	0
Мен <b>ө</b> зімді мектепте бақытты сезінемін	0	•	0	•	0
Мектепте бәрі ойдағыдай.	0	0	0	0	•
Мені <b>ң</b> мектепке к <b>өң</b> ілім толады	0	•	0	•	0
Мен мектепте <b>ө</b> зімді аутсайдер (шет) қал <b>ғ</b> андай сезінемін.	0	0	0	0	0
• Артқа					Келесі •

#### In Russian

Читательская грамотность на казахском, русском и английском языках

Уважаемый участник,

Нами проводится исследование по определению перспектив развития читательской грамотности на трех языках (казахском, русском и английском) среди учащихся средних общеобразовательных школ Казахстана. Мы надеемся, что ваши ответы внесут вклад в данное исследование. Ваши ответы помогут нам разработать научную базу для развития перспектив читательской грамотности. Данная анкета анонимна, поэтому ваши личные данные (имя, номер школы, место учебы и.т.д.) не будут указаны и использованы где-либо. Данная информация необходима только для исследовательских целей.

Мы благодарны вам за помощь и сотрудничество!

	Далее •
1. Сколько Вам лет?	
2. Пол: • Мужской • Женский	
3. В каком классе ты учишься? • 6 класс	• 8 класс
4. Какой твой родной язык? • казахский	• русский
• другой (пожалуйста, укажите)	
5. На каком языке Вы разговариваете дома, большую часть времени?	• на казахском
• на другом (укажите, на каком)	
	Далее •

6. Какой наивысший уровень образования завершила Ваша мама или женщина, которая ее заменяет?

(Пожалуйста, отметьте только одну клетку)

	• Она не окончила школу	
	• Она окончила основную среднюю школу (1-9 классы)	
	• Она окончила общую среднюю школу (1-11 классы)	
	• Она окончила колледж (профессиональное и техническое училище,	техникум)
	• Она окончила университет (степень бакалавра)	
	• Она имеет степень магистра	
	• Она имеет степень доктора наук PhD	
	• Я не знаю	
о Назад		Далее о
7. Какой	и наивысший уровень образования завершил Ваш папа или мужчина, кот заменяет?	орый его
	(Пожалуйста, отметьте только одну клетку)	
	• Он не окончил школу	
	• Он окончил основную среднюю школу (1-9 классы)	
	• Он окончил общую среднюю школу (1-11 классы)	
	• Он окончил колледж (профессиональное и техническое училище, тех	сникум)
	• Он окончил университет (степень бакалавра)	
	• Он имеет степень магистра	
	• Он имеет степень доктора наук PhD	
	• Я не знаю	
о Назад		Далее 💿
• пазад		Harice 0

# 8. Что из нижеперечисленного имеется в Вашем доме?

(Пожалуйста, отметьте только одну клетку в каждой строке)

	Да	Нет
Рабочий стол	•	0
Собственная комната	•	0
Книги, нацеленные на помощь в выполнении домашнего задания	•	•
Компьютер, который Вы можете использовать для выполнения домашнего задания	•	•
Подключение к Интернету	•	0
о Назад		Далее •

# 9. Подумайте о Вашей школе. Насколько Вы согласны или не согласны со следующими утверждениями?

(Пожалуйста, выберите один ответ в каждой строке)

	Полностью не согласен	Не согласен	Затрудняюсь ответить	Согласен	Полностью согласен
Я чувствую себя неловко и неудобно в школе	0	•	•	•	0
Я чувствую себя одиноко в школе	0	•	0	•	0
Я чувствую себя счастливым/ой в школ	ie •	•	0	•	•
В моей школе все идеально	0	•	0	•	•
Я доволен/на своей школой	•	•	•	•	•
Я чувствую себя аутсайдером (т.е. лишним) в школе	0	0	0	•	0
о Назад					Далее •

# Appendix O: Reading attitude (in Kazakh and Russian 6th and 8th grades) (Study 4)

# In Kazakh

10. Төмендегі айтылғандармен ҚаншалыҚты дәрежеде келісесіз немесе келіспейсіз? (Әр Қатардан бір торкөзді ғана белгілеңіз)					
	Толы <i>ғ</i> ымен келіспеймін	Келіспеймін	Келісемін, келіспеймін	Келісемін	Толы <i>ғ</i> ымен келісемін
Қызықты болғандықтан, оқимын.	•	•	•	0	•
Оқығаннан лөззөт алатындықтан, оқуға құштармын.	•	•	•	0	•
Оқу білімімді арттырады.	0	•	0	0	0
Маған қажетті болғанда ғана оқимын.	0	0	0	0	0
Оқу жағы көбінесе ұлдарға Қарағанда, қыздарға төн.	0	•	0	•	•
Оқу қызықты емес.	0	•	0	0	0
• Артқа					Келесі о

# 10. Төмендегі айтылғандармен ҚаншалыҚты дәрежеде келісесіз немесе келіспейсіз? (Әр Қатардан бір торкөзді ғана белгілеңіз)

	Толы <i>ғ</i> ымен келіспеймін	Келіспеймін	Келісемін, келіспеймін	Келісемін	Толы <i>ғ</i> ымен келісемін
Мен кітапханаға барғанды ұнатамын.	0	•	0	0	•
Ағылшын тіліне қарағанда, <b>ө</b> з ана тілімде оқығанды ұнатамын.	0	0	0	•	•
Электрондық кітаптарды оқығанды ұнатамын.	0	0	0	0	•
Оқу — аламтор жүйесі мен компьютермен жұмыс істеуге қажет.	•	•	0	•	0
Көбінесе үйде оқимын.	0	0	0	•	•
Кітаптарды оқуға – топтағы бірге оқып жатқан балалар мені ынталандырады.	0	0	0	0	0
• Артқа					Келесі •

#### 11. Төмендегі айтылғандармен қаншалықты дәрежеде келісесіз немесе келіспейсіз? (Әр қатардан бір торкөзді ғана белгілеңіз) Толығымен Келісемін, Толы ғымен Келісемін Келіспеймін келіспеймін келісемін келіспеймін Мен ағылшын тілін қызығып 0 0 0 0 0 оқимын Маған ағылшын тілде оқыған 0 0 0 0 0 ұнайды Менің ағылшын тілі 0 0 0 0 таҚырыптарымен жұмыс істегеніме көңілім толады Маған ағылшын тілден жаңа 0 0 • 0 білімді игерген ұнайды Мені ағылшын тілі 0 0 0 0 0 қызықтырады Келесі 😊 • Артқа 11. Төмендегі айтылғандармен қаншалықты дәрежеде келісесіз немесе келіспейсіз? (Әр қатардан бір торкөзді ғана белгілеңіз) Келісемін, Толы*ғ*ымен Толығымен Келісемін Келіспеймін келіспеймін келісемін келіспеймін Ағылшын тілі қоғам үшін 0 0 0 0 0 маңызды Менің пікірімше, ағылшын тілі 0 0 0 0 халықаралық қарым-қатынас тілі болып табылады Мен мектепті аяқтағаннан кейін, 0 0 0 • 0 мен үшін ағылшын тілді қолдануға көп мүмкіндіктер болады Мен есейгенде ағылшын тілді көптеген салаларда пайдаланамын Ағылшын тілі мен үшін өте 0 0 0 0 маңызды

Келесі 💿

• Артқа

#### 12. Төмендегі айтылғандармен қаншалықты дәрежеде келісесіз немесе келіспейсіз? $(\partial_{p}$ Қатардан бір торк $\theta$ зді Ғана белгілеHіз)Келісемін, Толығымен Толы*ғ*ымен Келісемін Келіспеймін келіспеймін келісемін келіспеймін Мен жаңа технологияларға 0 0 0 0 қызығамын Мені жаңа технологияларды 0 0 0 0 0 қолдану қиыналысқа түсіреді Мен үшін жаңа технологияларды қолдану қиындық туғызады, 0 0 0 0 0 мен олармен қалай жұмыс істеу керектігін білмеймін Мен үнемі ең соңғы шыққан техникалық құралдарды 0 0 0 0 пайдалануға қызығушылық танытамын • Артқа Келесі 0 12. Төмендегі айтылғандармен қаншалықты дәрежеде келісесіз немесе келіспейсіз? (*Әр Қатардан бір торк* **Ө**зді **Ғ**ана белгіле**Ң**із) Келісемін, Толығымен Толы ғымен Келіспеймін Келісемін келіспеймін келісемін келіспеймін Мен жаңа технологияларды 0 0 0 • 0 қолданған кезімде, сәтсіздік қорқынышын сезінемін Менің жаңа технологияларды 0 0 0 • 0 қолдануымның нәтижесі, тек маған ғана байланысты Мен жаңа технологияларды 0 0 0 0 0 қуана қолданамын. Жаңа технологияларды қолдануды үйренуде жетістікке 0 0 0 0 жетуім немесе жетпеуім маған байланысты.

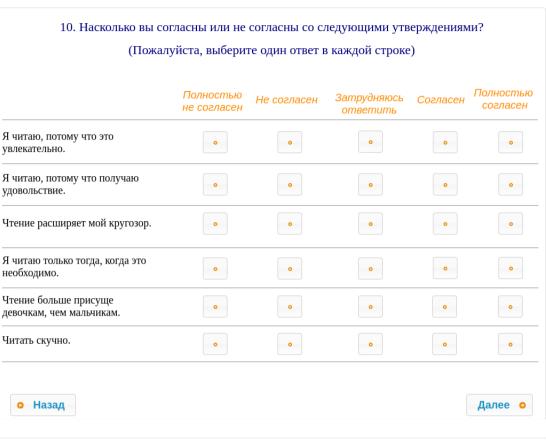
• Артқа

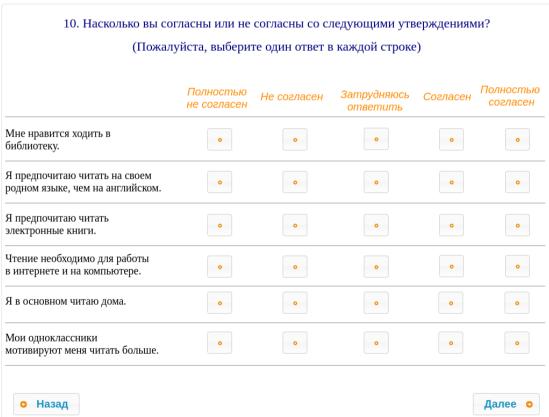
Келесі о

13. Сабағыңызда мұндай жағдайлар қаншалықты жиі болып тұрады? (Әр <i>қ</i> атардан бір торк <b>ө</b> зді Ғана белгіле <b>ң</b> із)						
	Ешқашан	Аз, сирек	Кейде	Жиі	Әрбір сабақта	
Оқытушы не айтып жатқанын оқушылар тыңдамайды	•	0	•	0	•	
Сабақта шу мен тәртіпсіздік бар	•	0	•	0	•	
Оқытушы оқушылардың тынышталуын ұзақ уақыт күтеді	0	0	0	•	•	
Оқушылар сабақта жақсы жұмыс істей алмайды	0	0	•	0	•	
Сабақ басталған соң оқушылар көп уақытқа дейін жұмысты бастамайды	0	0	•	0	•	
• Артқа					Келесі о	

( <i>Ә</i> р Қатардан бір торк <b>ө</b> зді Ғана белгіле <b>ң</b> із)						
	Ешқашан	Аз, сирек	Кейде	Жиі	Әрбір сабақта	
Оқытушы әр оқушының білім алуына қызығушылық білдіреді	0	•	0	0	•	
Оқытушы қажет еткенде оқушыға қосымша к <b>ө</b> мек береді	•	0	•	0	0	
Мектепте оқытушы оқушыларды <b>ң</b> 5ілім алуына к <b>ө</b> мектеседі	0	0	•	0	0	
Оқытушы барша оқушылар сабақты толығымен түсінгенше үйретуді жалғастырады	•	•	0	0	•	
Оқытушы оқушыларға ойларын ортаға салуға мүмкіндік береді	0	0	0	0	0	

#### In Russian





<ol> <li>Насколько вы согласны или не согласны со следующими утверждениями?</li> <li>(Пожалуйста, выберите один ответ в каждой строке)</li> </ol>						
	Полностью не согласен	Не согласен	Затрудняюсь ответить	Согласен	Полностью согласен	
Мне нравится изучать английский язык	•	•	•	•	•	
Мне нравится читать на английском языке	•	•	•	•	0	
Мне нравится выполнять задания по английскому языку	•	•	•	•	0	
Мне нравится получать новые знания в сфере английского языка	•	•	•	•	•	
Я интересуюсь английским языком	•	•	•	•	•	
• Назад					Далее •	

11. Насколько вы согласны или не согласны со следующими утверждениями? (Пожалуйста, выберите один ответ в каждой строке)						
	Полностью не согласен	Не согласен	Затрудняюсь ответить	Согласен	Полностью согласен	
Английский язык важен для общества	•	•	0	0	•	
Я нахожу, что английский язык – язык международного общения	•	•	•	0	•	
Когда я закончу школу, для меня будет много возможностей использовать английский язык	•	0	0	•	0	
Я буду использовать английский язык во многих направлениях, когда буду взрослым	•	•	0	•	•	
Английский язык важен для меня	•	0	•	•	•	
• Назад					Далее о	

12. Насколько вы согласны или не согласны со следующими утверждениями?						
(Пожалуйста, выберите один ответ в каждой строке)						
	Полностью не согласен	Не согласен	Затрудняюсь ответить	Согласен	Полностью согласен	
Я интересуюсь новыми технологиями	0	•	•	•	0	
Использование новых технологий создает проблемы для меня	•	0	0	•	0	
Я нахожу для себя трудным использование новых технологий - я не знаю, как с ними работать	0	•	0	0	0	
Я всегда заинтересован в использовании самых последних технических устройств	•	•	0	•	•	
о Назад					Далее •	

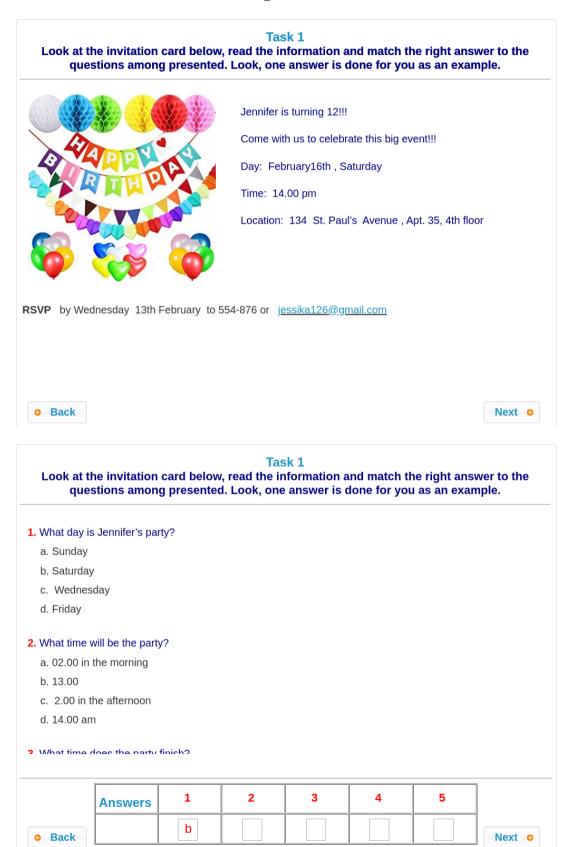
	Полностью не согласен	Не согласен	Затрудняюсь		Полностью
	110 000/100011		ответить	Согласен	согласен
Когда я использую новые ехнологии, я испытываю страх ıeyдачи	0	•	•	•	0
Это зависит от меня, преуспею ии я в использовании новых ехнологий или нет	0	•	•	•	•
I с радостью использую новые ехнологии.	0	•	0	•	0
езультат моего использования новых технологий зависит только т меня.	•	•	•	•	•

(Пожалуйста, выберите один ответ в каждой строке)						
Никогда	Редко	Иногда	Часто	Каждый урок		
0	0	•	•	0		
0	•	•	0	•		
0	•	•	•	0		
•	•	•	•	0		
•	•	•	0	•		
	•	Никогда Редко	Никогда Редко Иногда	Никогда Редко Иногда Часто		

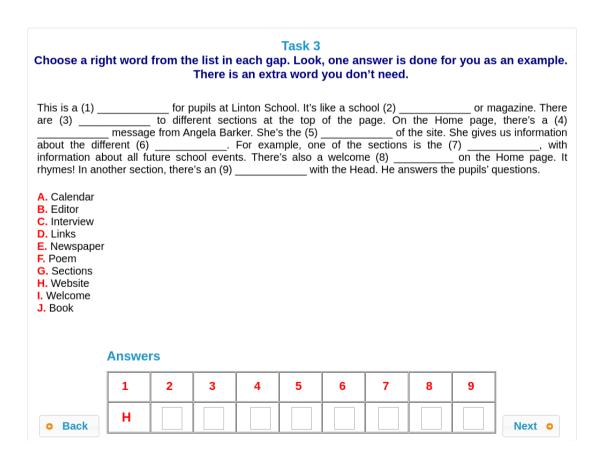
13. Как часто следующее происходит на уроке? (Пожалуйста, выберите один ответ в каждой строке)									
	Никогда	Редко	Иногда	Часто	Каждый урок				
Учитель интересуется успеваемостью каждого ученика	0	0	0	0	0				
При необходимости учитель оказывает дополнительную помощь ученику	•	•	•	0	•				
В школе учитель помогает ученикам	•	•	•	0	•				
Учитель продолжает объяснять урок, пока все ученики не поймут	•	•	0	0	0				
Учитель дает ученикам возможность выражать свое мнение	•	•	•	0	0				

# Appendix P: Adapted Self-developed Reading comprehension test —second draft (6th grade in English, Kazakh, and Russian) (Study 4)

# Test in English for Grade 6



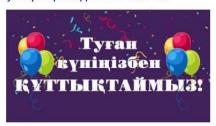
# Task 2 Find out the pairs for the definitions below. Look, one answer is done for you as an example. There is an extra word you don't need. A. A person who cooks delicious food in restaurants or cafes. B. A person who reads the news on TV and radio station. C. A person who receives calls and visitors in restaurants, hotels, or any public places. D. A person who cuts and styles people's hair E. A person fixes broken water pipes. F. A person who puts out fires. G. A person who represents people in court. H. A person who performs medical operations. I. Children with incredible talents. 1. receptionist 2. hairdresser **Answers** F Α В C D Е G н ı 3 Back Next o



# Қазақ тілінен тест 6-сынып

#### № 1 Тапсырма

Төмендегі шақыру қағазын қарап, ақпаратты оқы және қойылған сұрақтарға дұрыс жауап бер. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынған.



#### Құрметті туған-туысқандар, достар!

Сіздерді, немереңіз Әйгерімнің 13 жас мүшелі тойына арналған салтанатты дастарханға шақырамыз!

Той: 8-тамызда, сағат 15.00-де басталады

Той иелері: Ерсұлтан – Арайлым

	Жауаптар	1	2	3	4	5	
• Артқа		С					Келесі о

#### № 2 Тапсырма

Төмендегі берілген сөздердің мағыналарын тап. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды. Тізімде бір артық сөз бар.

- А. Ауада ұшатын қанаты бар әуе көлігі.
- В. Дүкендерде заттарды сататын адам.
- С. Ақпараттық ізденістерді гипермәтін мүмкіндіктерімен біріктіретін Интернет жүйесі.
- **D.** Азаматтың жеке басын ку**ә**ландыратын негізгі құжат.
- Е. Әнді шебер орындайтын адам.
- **F.** Жолаушыларды, жүк пен поштаны тасымалдайтын, ұшақ ұшып, қонатын кәсіпорын.
- G. Азаматтардың құқықтарын сотта қорғайтын адам.
- **Н.** Медициналық операцияларды орындайтын адам.
- **І.** Мейрамханаларда, қонақ үйлерде қәсіби түрде тамақ пісіретін (дайындайтын) адам.
  - **1.** әуежай
  - **2.** ғаламтор

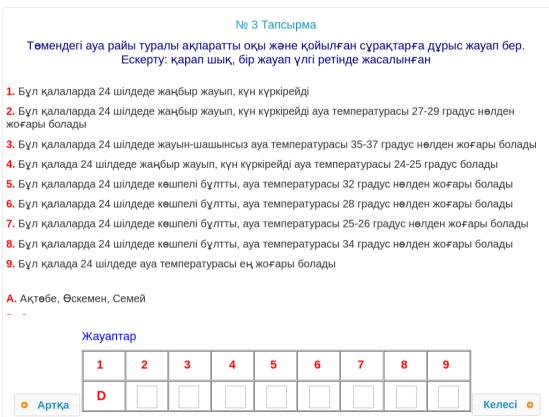
• Артқа

#### Жауаптар

Α	В	С	D	E	F	G	Н	I
4								

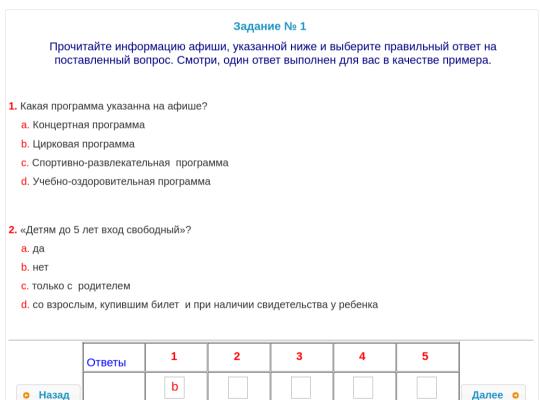
Келесі о

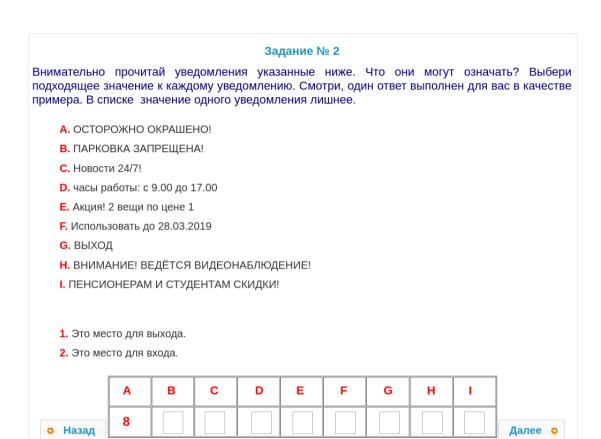




# Тест по русскому языку 6 класс









### Задание № 3

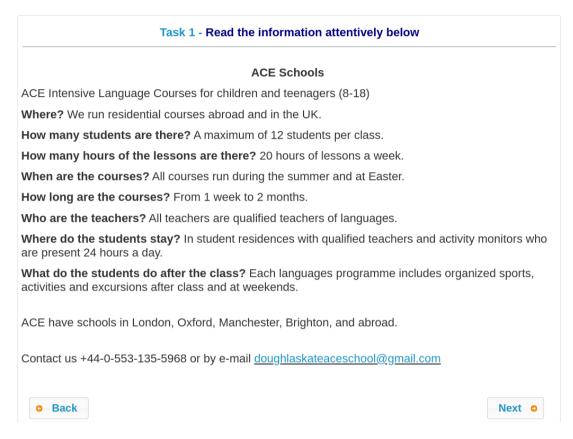
Прочитайте следующую информацию о погоде, указанной ниже и выберите правильный ответ на поставленный вопрос. Обратите внимание, один ответ выполнен для вас в качестве примера.

- 1. В этом городе 25 апреля без осадков, температура воздуха будет около нуля
- 2. В этих городах 25 апреля ясно, воздух прогреется до 7 градусов тепла
- **3.** 25 апреля в этом городе ожидается переменная облачность, температура воздуха будет ниже нуля
- 4. 25 апреля в этом городе облачно, температура воздуха будет ниже нуля
- 5. 25 апреля в этих городах ясно, температура воздуха будет 2 градуса ниже нуля
- 6. В этом городе 25 апреля ожидаются дожди, температура воздуха будет плюс 13
- **7.** 25 апреля в этом городе переменная облачность, кратковременный дождь температура будет плюс 8
- **8.** 25 апреля в этих городах ожидается переменная облачность, температура воздуха будет выше нуля
- 9. 25 апреля в этих городах ясно, температура воздуха будет 3-4 градусов ниже нуля

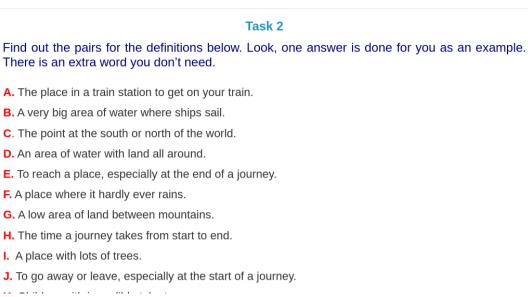
1 2 3 4 5 6 7 8 9 B											-
B I I I I I I I I I I I I I I I I I I I		1	2	3	4	5	6	7	8	9	
	о Назад	В									

# Appendix Q: Adapted Self-developed Reading comprehension test —second draft (8th grade in English, Kazakh, and Russian) (Study 4)

### **Test in English for Grade 8**



### Task 1 Decide are the statements True or False to the text? Look, one answer is done for you as an example. 1. ACE schools teach mathematics. True **False** 2. ACE schools only have schools in the UK. False True 0 3. ACE schools teach mostly children and teenagers. True False 4. There are more than 12 students in each class. False True Courses last between one week and two months. True False 6. Students have to stay in hotels when studying at ACE schools. True False 7. There is always a teacher or activity monitor to support the students. True False 8. There are many activities to do after the classes. True False Back Next o

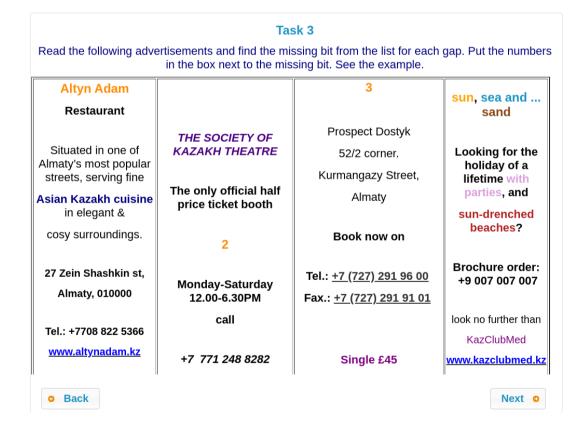


Answers

A B C D E F G H I J K

8 B C D E F G H I D E

Next o



### Task 3

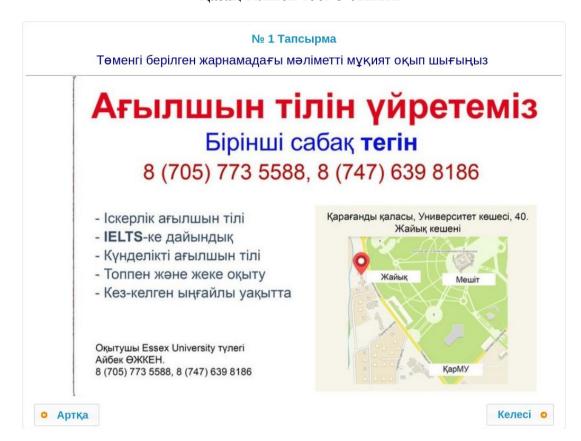
Read the following advertisements and find the missing bit from the list for each gap. Put the numbers in the box next to the missing bit. See the example.

А	BEST VALUE FOR TODAY'S EVENING PERFORMANCES	2	F	HOTEL KAZAKHSTAN	
В	Learn more. & earn more.		G	9000 words & 350 topics for PC	
С	www.thepad-uk.com		Н	Open for Lunch and Dinner	
D	YES, I WANT TO SUBSCRIBE TO TIME OUT		I	solo artists & bands	
E	Experience different cultures		J	or contact your travel agent	

Back

Next o

### Қазақ тілінен тест 8-сынып



### № 1 Тапсырма Шешім қабылда, жарнамадағы көрсетілген мәлімет берілген сөйлемдер бойынша Шын не Жалған? Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды. Жарнамада ағылшын мектебі туралы жазылған. • Шын 2. Жарнамада ағылшын тілін үйрететін арнайы курс туралы жазылған. • Шын • Жалған 3. Оқытушы Ұлы Британия университетінің түлегі болып келеді. • Шын • Жалған 4. Ағылшын тілі курсында балаларды топпен ғана оқытуға қарастырылған. • Шын • Жалған 5. Ағылшын тілі курсының мекенжайы Қарағанды Ұлттық университетінің • Шын • Жалған 6. Бірінші сабақ төлем ақысыз өткізіледі. • Шын 7. Жарнамада ақпарат беруші өз байланыс телефон нөмірлерін жазып • Шын Жалған қойған. • Шын • Жалған 8. Курс барысында арнайы IELTS-ке дайындық өткізілмейді. • Артқа Келесі о

### № 2 Тапсырма

Берілген сұрақтарға дұрыс ақпаратты таңда. Ескерту: қарап шық, бір жауап үлгі ретінде жасалынды. Тізімде бір артық мәтін бар.

- А. Скейтбординг тақтайшасы қалай аталады?
- В. Жаттығуға арналған киімдерді қалай сақтау керек?
- С. Осы құбылысты су тасқынынан кейін қай жерден байқауға болады?
- **D.** Ресми спорт болмаса да, балалардың шеберліктерін қайдан байқауға болады?
- Е. Қауіпті найзағай қалай пайда болады?
- **F.** Мұзды үңгірлер қалайша пайда болған?
- **G.** Ерекше күш-қуаты бар жануар қай елде мекендейді?
- Н. Жылына екі рет болатын құбылыс?
- I. Суық күндерде спортпен қалай шұғылдануға болады?
- **J.** Әлемдегі ең жылдам спринтер?
- К. Қалай дұрыс демалу керек?

• Артқа

### Жауаптар

Келесі о

### № 3 Тапсырма

**Берілген сұрақтарға дұрыс ақпаратты таңда. Ескерту:** Алматы қаласының кітапханалар жүйесінде жаңа оқырмандар жұмыс уақыттарын көре алатын электронды қосымша бет бар. **Сұрақтарға жауап бергенде, осы қосымша бетке қараңыз.** 

	Жұмыс уан	қыты			
iwater decement in tentograph withou	VATTANI UTAMAMA	«Жамбыл Жабаев» атындағы жасөспірімдер кітапханасы	Қазақстан Республикасының Ұлттық кітапханасы	С. Бегалин атындагы мемлекеттік балалар кітапханасы	Қазақстан жазушыларыны кітапханасы
	Дүйсенбі	9.00 – 22.00	9.00 — 20.00 Әр айдың соңғы жұмыс күні - тазалық күні	9.00 – 18.00	10.00 – 18.00
	Сейсенбі	9.00 - 22.00	9.00 - 20.00	9.00 - 18.00	10.00 - 18.00
	Сәрсенбі	9.00 - 22.00	9.00 - 20.00	9.00 – 18.00	10.00 - 18.00
	Бейсенбі	9.00 - 22.00	9.00 - 20.00	9.00 - 18.00	10.00 - 18.00
	670	000 000	0.00 20.00	0.00 10.00	1000 1000
	Жауапта	ap <b>1</b>	2	3	4

### № 3 Тапсырма Берілген сұрақтарға жоғарыдағы кестеге сәйкес дұрыс жауапты табыңыз

VISTTANA INTARAAAA	«Жамбыл Жабаев» атындағы жасөспірімдер кітапханасы	Қазақстан Республикасының Ұлттық кітапханасы	С. Бегалин атындагы мемлекеттік балалар кітапханасы	Қазақстан жазушыларының кітапханасы
Дүйсенбі	9.00 – 22.00	9.00 — 20.00 Әр айдың соңғы жұмыс күні - тазалық күні	9.00 – 18.00	10.00 - 18.00
Сейсенбі	9.00 - 22.00	9.00 - 20.00	9.00 - 18.00	10.00 - 18.00
Сәрсенбі	9.00 - 22.00	9.00 - 20.00	9.00 - 18.00	10.00 - 18.00
Бейсенбі	9.00 - 22.00	9.00 - 20.00	9.00 - 18.00	10.00 - 18.00
670	0.00 00.00	200	0.00 10.00	10.00 10.00

Жауапта	5	6	7	8	9	
• Артқа						Келесі

### Тест по русскому языку 8 класс

### Задание № 1

Прочитай и найди подходящий ответ на поставленные вопросы интервью. Смотри, один ответ выполнен для вас в качестве примера. В интервью один ответ лишний.

- А. А вы бы хотели написать, например, приключенческий роман для детей? Или что-то в жанре фэнтези?
- В. Поговорим о музыке. Какой момент вы больше всего любите при создании песни?
- С. Кто он, ваш зритель? Это преимущественно взрослая аудитория?
- D. Кстати, о публике, как вам кажется, современная молодежь менее избирательна и требовательна, чем старшее поколение? Поэтому многие артисты стремительно набирают популярность и так же быстро ее
- E. Вы ведь недавно презентовали «Умную книгу-раскраску для детей и взрослых». Как родилась идея ее создания?
- F. Вы верите в то, что во взрослом возрасте можно круто изменить свою жизнь? Поменять профессию, переехать в другую страну, начать с нуля?
- концертами. Все это в большей степени для себя или для зрителей?

G. - У вас насыщенная творческая жизнь: вы записываете альбомы, снимаете клипы, выступаете с Ответы В C D E F н 7 Назад Далее •



### Задание № 2 Внимательно прочитайте информацию в объявлении ниже и укажите, Верно или Не верно данное утверждение? Смотри, один ответ выполнен для вас в качестве примера. 1. Образовательный центр ведет набор на специализированные курсы кройки и шитья. • Верно • Не верно 2. В центре ведется набор детей дошкольного возраста по изучению казахского языка. • Верно • Не верно 3. Центр ведет набор на курсы рисования песком. • Верно • Не верно 4. Центр предлагает большой выбор языковых курсов для детей и взрослых. • Верно • Не верно 5. Центр осуществляет подготовку детей к школе. • Верно • Не верно 6. В центре работает логопед. • Верно • Не верно 7. Центр предлагает широкий спектр изучения английского языка для детей и взрослых. • Верно • Не верно 8. Центр ведет подготовку к сдаче международных языковых экзаменов. • Не верно • Верно • Назад Далее 💿

#### Задание № 3 Внимательно прочитай информацию указанную ниже и найди ответ на поставленный вопрос. Расписание музеев г. Алматы Режим работы Государственны Музей й музей искусств Центральный народных Музей республики государственны музыкальных Музей Природы Археологии Казахстан й музей РК инструменто имени А. в имени Кастеева Ыхласа перерыв перерыв Без перерыва Без перерыва Без перерыва 12.30-13.30 13.00-14.00 9:00-18:00 10:00-17:00 9:00-18:00 Понедельник выходной выходной Вторник 10:00-18:00 выходной 10:00-19:00 10:00-17:00 9:00-18:00 9:00-18:00 10:00-18:00 10:00-19:00 10:00-17:00 9:00-18:00 Среда 10:00-18:00 10:00-19:00 9:00-18:00 Четверг 9:00-18:00 10:00-17:00 Пятница 10:00-18:00 9:00-18:00 10:00-19:00 10:00-17:00 9:00-18:00 Ответы 1 2 3 4 5 6 7 8 Назал Далее о

### Задание № 3

### Выберите правильный ответ, используя информацию в таблице «Расписание музеев г. Алматы»

### Расписание музеев г. Алматы

Режим работы					
	Государственны й музей искусств республики Казахстан имени А. Кастеева	Центральный государственны й музей РК	Музей народных музыкальных инструменто в имени Ыхласа	Музей Археологии	Музей Природы
	Без перерыва	перерыв 12.30-13.30	Без перерыва	Без перерыва	перерыв 13.00-14.00
Понедельник	выходной	9:00-18:00	выходной	10:00-17:00	9:00-18:00
Вторник	10:00-18:00	выходной	10:00-19:00	10:00-17:00	9:00-18:00
Среда	10:00-18:00	9:00-18:00	10:00-19:00	10:00-17:00	9:00-18:00
Четверг	10:00-18:00	9:00-18:00	10:00-19:00	10:00-17:00	9:00-18:00
Пятница	10:00-18:00	9:00-18:00	10:00-19:00	10:00-17:00	9:00-18:00
Суббота	10:00-18:00	9:00-18:00	10:00-19:00	выходной	выходной

Ответы

9	10	11	12

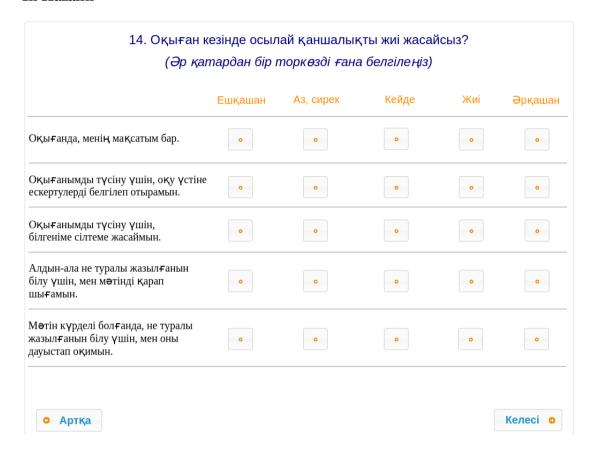
о Назад

Далее 😊

# Appendix R: Reading Strategy (in Kazakh, and Russian 6th and 8th grades) (Study 5)

This instrument was adapted from Metacognitive Awareness of Reading Strategies Inventory (MARSI) Version 1.0 Kouider Mokhtari and Carla Reichard © 2002 for Kazakhstan

### In Kazakh



# 14. Оқыған кезінде осылай қаншалықты жиі жасайсыз? (Әр қатардан бір торкөзді ғана белгілеңіз)

	Ешқашан	Аз, сирек	Кейде	Жиі	Әрқашан
Негізгі ақпаратты туралы ойлау үшін, м <b>ә</b> тін бойынша қысқаша қорытынды жасаймын.	0	•	•	0	•
Мен мәтіннің мазмұны оқу мақсатыма сәйкес екендігі жайлы ойлап жүремін.	•	•	•	0	•
Мен ақырын оқимын, бірақ нені оқып жатқанымды дұрыс түсіну үшін, ерекше зер салып оқимын.	0	0	•	0	0
Мәтінді дұрыс түсінгенімді білу мақсатында басқалармен оқыған мәтін бойынша әңгімелесемін.	0	•	•	0	0
Мәтін көлеміне және оның құрылымына, оның ерекшеліктеріне назар аударатындай, мәтін мазмұнын жалпы шолып өтемін.	•	0	•	0	0
• Артқа					Келесі •

### 14. Оқыған кезінде осылай қаншалықты жиі жасайсыз? (Әр қатардан бір торкөзді ғана белгілеңіз) Ешқашан Аз, сирек Кейде Жиі Әрқашан Бірдемені назардан тыс қалтырып 0 0 0 кетсем, мен мәтін мазмұнының сол 0 0 жеріне қайта оралуға тырысамын. Жақсы есте сақтау үшін, м**ә**тіндегі 0 0 0 • тиісті ақпаратты белгілеп, шығарып аламын. Оқу жылдамдылығым не оқып 0 0 0 0 • жатқаным арқылы белгіленеді. Нені оқу керек, ал нені оқымай 0 • түсіріп тастау керектігін $\Theta$ зім шешемін. Оқығанымды жақсы түсіну үшін, 0 0 • 0 сөздік сияқты анықтамалық материалдар қолданамын. • Артқа Келесі 💿

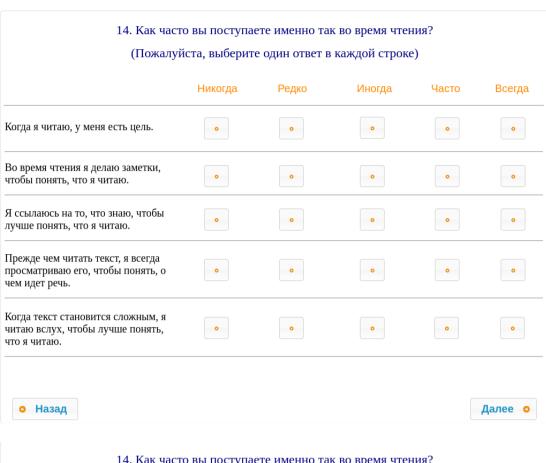
14. Оқыған кезінде осылай қаншалықты жиі жасайсыз? (Әр қатардан бір торкөзді ғана белгілеңіз)								
	Ешқашан	Аз, сирек	Кейде	Жиі	Әрқашан			
М <b>ә</b> тін күрделене түскенде, не оқып жатқаныма мұқият назар аударамын.	0	0	0	0	0			
Өзімнің қабылдауымды жақсарту үшін, кестелер, диаграммалар мен суреттерді қолданамын.	•	•	0	0	0			
Анда-санда не оқып жатқанымды ойластырып тоқтаймын.	•	•	0	0	•			
Мәтін бойынша не оқып жатқанымды жақсы ұғу үшін, көмекші кеңестерді пайдаланамын.	0	•	0	•	0			
Не оқып жатқанымды жақсы гүсіну үшін, өз сөзіммен ойларымдь құрастырып өзгертіп қайта жеткізем		•	0	0	0			

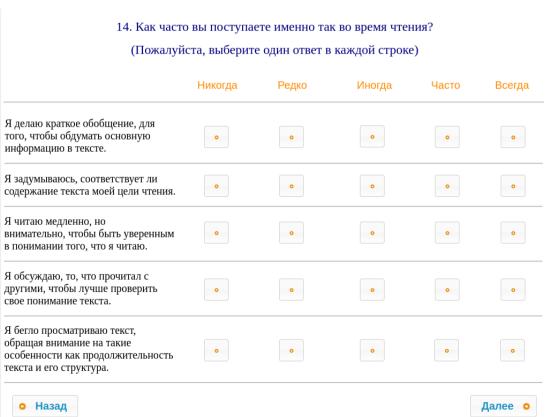
14. Оқыған кезінде осылай қаншалықты жиі жасайсыз? (Әр қатардан бір торкөзді ғана белгілеңіз)							
(-)	Ешқашан	Аз, сирек	Кейде	Жиі	Әрқашан		
Оқыған кезде, мазмұнын жақсы түсіну үшін, оқығанымды бейнелеуге, көрсетуге тырысамын.	0	•	•	0	0		
Қаралау шрифт пен курсив сияқты типографиялық құралдарды тиісті ақпаратты жақсы анықтау үшін пайдаланамын.	0	0	0	0	0		
Мәтінде берілген ақпаратты бағалап, сыни тұрғыдан талдап отырамын.	0	0	•	0	0		
Байланыс ойларды табу үшін, мен м <del>ә</del> тінді басынан аяғына дейін қайтадан оқимын.	0	0	0	0	0		
Даулы пікірдегі ақпараттарды қығанда, <b>ө</b> зімні <b>ң</b> түсінігімді гексеремін.	•	•	•	•	0		
• Артқа					Келесі о		

Ешқашан	Аз, сирек	Кейде	Жиі	Эркашац
		• •	71011	Әрқашан
•	0	0	0	0
0	•	0	0	0
0	0	0	0	0
0	•	0	0	0
0	0	0	0	0
	•			

ЫНТЫМАҚТАСТЫҚ БІЛДІРГЕНІҢІЗ ҮШІН КӨП РАХМЕТ!

### In Russian





<ol> <li>Как часто вы поступаете именно так во время чтения?</li> <li>(Пожалуйста, выберите один ответ в каждой строке)</li> </ol>							
	Никогда	Редко	Иногда	Часто	Всегда		
Когда я упускаю что-то из виду, я стараюсь снова вернуться на тоже место в тексте.	0	0	0	0	0		
Я выделяю или обвожу необходимую мне информацию в тексте, чтобы лучше ее запомнить.	0	0	0	•	0		
Скорость моего чтения зависит от ого, что я читаю.	0	•	•	0	0		
I решаю, что мне читать, а что пропустить.	•	•	0	0	0		
Н использую справочные иатериалы, такие как словари, чтобы ıyчше понять, то, что я читаю.	0	0	0	0	•		
лучше понять, то, что я читаю.  • Назад					Далее •		

14. Как часто вы поступаете именно так во время чтения? (Пожалуйста, выберите один ответ в каждой строке)					
	Никогда	Редко	Иногда	Часто	Всегда
Когда текст, становится сложным, я обращаю более пристальное внимание на то, что я читаю.	0	0	0	0	•
Н использую таблицы, циаграммы, рисунки, чтобы лучше понять, то, что я читаю.	0	0	0	0	•
время от времени я станавливаюсь, чтобы обдумать, то, то я читаю.	0	0	0	0	0
использую подсказки по тексту, чтобы лучше понять, то, что я читаю.	0	0	•	0	0
Я пересказываю (излагаю идеи воими словами), чтобы лучше понять, что я читаю.	0	0	0	0	•
о Назад					Далее •

(Пожалуйс	та, выберите	е один ответ в	каждой строко	2)	
	Никогда	Редко	Иногда	Часто	Всегда
Когда я читаю, я пытаюсь мысленно изобразить или визуализировать информацию, чтобы лучше ее понять.	•	•	0	•	0
Я использую такие типографические средства, как жирный шрифт и курсив, чтобы лучше определить нужную информацию.	0	0	•	0	•
Я критически анализирую и оцениваю информацию, представленную в тексте.	•	0	•	•	0
Я перечитываю текст от начала и до конца, чтобы найти в нем связь идей.	0	0	0	0	•
Я проверяю свое понимание, когда сталкиваюсь с противоречивой информацией.	0	•	0	0	0

(Пожалуйста, выберите один ответ в каждой строке)					
	Никогда	Редко	Иногда	Часто	Всегда
Я пытаюсь угадать, о чем текст, когда читаю.	0	•	0	0	•
Когда текст становится сложным я перечитываю его снова, чтобы лучше его понять.	•	•	•	0	0
Я задаю себе вопросы, на ответы которые, я хотел бы получить в тексте.	•	0	•	0	0
Я проверяю, верны ли мои предположения о тексте или нет.	•	•	•	•	•
Я пытаюсь угадать значение незнакомых слов или фраз.	0	0	0	•	0

БЛАГОДАРИМ ВАС ЗА УЧАСТИЕ И СОТРУДНИЧЕСТВО	Ţ

# Appendix S: Permission letters from the Ministry of Education and Science of the Republic of Kazakhstan

### ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ



# МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РЕСПУБЛИКИ КАЗАХСТАН

010000, Астана каласы, «Министрліктер Үйі» тел.: (7172) 74-24-28, факс: (7172) 74-24-16

010000, город Астана, «Дом Министерств» тел.: (7172) 74-24-28, факс: (7172) 74-24-16

2017 жылғы 8 желтоқсан№ ФЛ-А-2323/11-2

на №ФЛ-А-2323 от 23.11.2017 года

Управление образования Павлодарской области

копия Ахметовой Айгуль Aigul0884@mail.ru

В Министерство образования и науки Республики Казахстан, поступило обращение Ахметовой Айгуль Булатовны с просьбой провести тестирование и анкетирование на трех языках в школах города Павлодара среди учащихся 6,8 классов.

В соответствии с подпунктом 22-1) пункта 2 статьи 6 Закона Республики Казахстан «Об образовании», образовательный мониторинг осуществляет местный исполнительный орган области.

На основании вышеизложенного, просим рассмотреть данное обращение в соответствие с нормами действующего законодательства Республики Казахстан.

Приложение: копия обращения.

Вице-министр

А. Аймагамбетов

исп. Б. Кабатова т. 74-20-32,<u>b.kabatova@edu.gov.kz</u>

034214

### ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ



### МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РЕСПУБЛИКИ КАЗАХСТАН

010000, Астана каласы, «Министрліктер Үйі» тел.: (7172) 74-24-28, факс: (7172) 74-24-16 2019 жылғы 05 қыркүйек ФЛ-А-2041/11-5 010000, город Астана, «Дом Министерств» тел.: (7172) 74-24-28, факс: (7172) 74-24-16

MP-135

Павлодарская область, г. Павлодар, ул. 1 Мая, д. 280, кв. 112 Ахметовой А.

Министерство образования и науки Республики Казахстан сообщает, что по вопросу проведения завершающего этапа тестирования и анкетирования среди учащихся 6, 8 классов школ: № 9, 22, 25, 29, 35, 39, 42 города Павлодар в период с 13 января по 5 февраля 2020 года Вам необходимо обратиться в Управление образования Павлодарской области.

Вице-министр

m

Ш. Каринова

Дюсембаева А.Т. 74 22 93

005827

Бланк сериялык нөмірсіз жарамсыз болып табылады. Жауап кліттарарда міндетті түрде білдің Жежәне күні көрсетілу керек Бланк без серийного номера недействителен. При отнете обязательно семляться на нап № и дату.

### Appendix T: Permission letters from the Department of Education of Pavlodar region

ПАВЛОДАР ОБЛЫСЫНЫҢ ӘКІМДІГІ «ПАВЛОДАР ОБЛЫСЫНЫҢ БІЛІМ БЕРУ БАСҚАРМАСЫ» МЕМЛЕКЕТТІК МЕКЕМЕСІ ШЫҒЫС № \$\langle L.S. / FM. A - 269 \langle L. \langle L. \langle A - 269 \langle L. \langle A \langle

на №ФЛ-А-2323 от 23.11.2017 года

Aхметовой А.Б. Aigul0884@mail.ru

### Уважаемая Айгуль Булатовна!

На Ваше обращение, поступившее в Министерство образования и науки Республики Казахстан с просьбой оказать содействие в проведении научнометодического исследования по теме докторской диссертации в школах г.Павлодара, управление образования Павлодарской области сообщает.

Мы готовы оказать Вам содействие в проведении тестирования и анкетирования на трех языках среди учащихся 6,8 классов общеобразовательных школ № 9, № 22, № 25, № 29, № 35, № 39, № 42.

В соответствии со статьей 12 Закона Республики Казахстан «О порядке рассмотрения обращений физических и юридических лиц» от 12 января 2007 года № 221 Вы вправе обжаловать данный ответ.

И.о. руководителя управления, заместитель руководителя

Ж. Карамбаев

Исп. Жылкыбаева Г. тел.: 652218



На № 8/2-34/ЭП-107 от 15.10.2019 г.

### Уважаемая Айгуль Булатовна!

На Ваше обращение, с просьбой оказать содействие в проведении научных исследований на трех языках в школах г.Павлодара, сообщаем.

Управление образования Павлодарской области не возражает в проведении завершающего этапа тестирования и анкетирования среди учащихся 6, 8 классов общеобразовательных школ №№ 9, 22, 25, 29, 35, 39, 42 г.Павлодара в период с 13 января по 5 февраля 2020 года.

В соответствии с пунктом 6 статьи 14 Закона РК «О порядке рассмотрения обращений физических и юридических лиц» вы вправе обжаловать решение, принятое по обращению.

Заместитель руководителя м Кону Ж. Карамбаев

Исп.:Жылкыбаева Г.А. Тел.: 652218

KASAKCTAH PEC APTODAT KABAGU 51. MEMBEKETTIK MENALMEU. MEMBEKETTIK MENALMEU. MEMBEKETTIK MENALMEU. MEMBEKETTIK MENALMEU.

Руководителю докторантуры Школы Образования Бено Чапо

На Ваше письмо по вопросу оказания содействия в проведении научно – методического исследования, сообщаем.

Отдел образования не возражает в проведении научно – методического исследования в школах № 9, № 22, № 25, № 29, № 35, № 39, № 42 г. Павлодара.

Руководитель отдела

Olen

Г. Кадырбаева

Азанбаева, 301491

### Appendix U: Letters of Request and agreement form



DOCTORAL SCHOOL OF EDUCATION UNIVERSITY OF SZEGED

Petőfi sgt. 30-34., H-6722 Szeged, Hungary Tel.: (+36-62) 544163, 544032; Fax: (+36-62) 420034

April 3, 2018
N: R-162-1-DSE-US | 2018

### Dear Dynislam Bolatkhanuly,

In order to evaluate 6th and 8th grades students' reading skills in three languages (English, Kazakh, and Russian) we carried out an assessment in Pavlodar's Secondary schools No.25, 42, 22, 9, 39, 35, and 29 from January 15th till February 5th, 2018. You and the Department of Education of Pavlodar region gave us an opportunity to organize this study in schools for which we would like to express our gratitude. We hope, in the future we can broaden our research partnership between Hungary and Kazakhstan. Therefore, we would kindly ask you if you are ready and agree to take part in further evaluation process on the base of these schools No.25, 42, 22, 9, 39, 35, and 29 next year 2019 probably in the middle of January and beginning of February. If you accept and are not against our proposal we will send you an information letter as soon as possible so that the schools will be prepared.

Thank you for your cooperation!

Sincerely yours

Prof. Dr Benő Csapó

The head of Doctoral School of Education

Aigul B. Akhmetova PhD student

### Құрметті Дінислам Болатханұлы!

6-шы және 8-ші сынып оқушылары арасында үштілділік (ағылшын, қазақ және орыс) тілдері көлемінде оқу дағдыларын бағалау мақсатында біз Павлодар қаласының № 25, 42, 22, 9, 39, 35 және 29 жалпы орта білім беру мектептерінде 2018 жылдың 15 каңтар - 5 ақпан аралығында Халықаралық тестілеу жобасын өткіздік. Сізге және Павлодар облысының Білім беру басқармасына аталмыш зерттеуді мектептерде ұйымдастыруға жағдай жасағаныңыз үшін Алгыс білдіреміз! Болашақта Венгрия мен Қазақстан мемлекеттері арасында ғылыми қарымқатынастар әрі қарай дамып, нығайя түседі деген сенім артамыз. Сондықтан Сізден келесі 2019 жылдың каңтар айының ортасы мен акпан айының басында No.25, 42, 22, 9, 39, 35 және 29 мектептердің базасы негізінде оқушылардың білімдерін әрі қарай бағалау үрдісіне қатысып, мектептердің дайын болуына ат салысуыңызды сұраймыз. Сіз келісім беріп, ұсынысымызды қолдасаңыз, Сізге міндетті түрде ақпараттық хат жіберіледі.

Ынтымақтастық үшін рахмет!

Игі ниетпен.

Профессор, доктор Бено Чапо

Докторлық Білім беру мектебінің бастығы

Айгүл Болатқызы Ахметова

Докторант

### DOCTORAL SCHOOL OF EDUCATION UNIVERSITY OF SZEGED



Petőfi sgt. 30-34., H-6722 Szeged, Hungary Tel.: (+36-62) 544163, 544032; Fax: (+36-62) 420034

June 6th, 2019

N: R-143-3-DSE-US 2019

### Dear Samal Ospanovna Aitkazina,

As the agreement of your participation in the research project that we discussed earlier we are writing to give you some practical details about what we have planned to do in the evaluation process for the event, which will take place in seven schools No.25, 42, 22, 9, 39, 29, 35 of Pavlodar, Kazakhstan during several weeks beginning from 13<sup>th</sup> January- till 5<sup>th</sup> February, 2020.

The students of 6<sup>th</sup> and 8<sup>th</sup> grades of these schools in Pavlodar will take part in the research study. First of all, the instruction will be announced and each student will be given a unique code number, so that the names and personal information will not be shown (anonymously). Then, the student enters the eDia platform system with a given code number and answers an online questionnaire which has similar questions for 6<sup>th</sup> and 8<sup>th</sup> grades. After that the student performs the tests in English, Kazakh, and Russian.

The tests will be delivered online therefore, the classrooms with a number of personal computers and an internet access are required. The students of  $6^{th}$  and  $8^{th}$  grades will do different tests in three languages separately they will not be the same. The time for the questionnaire and tests are not fixed or limited online but the duration the students do the tests will be taken into account by the instructor for further analysis.

After the assessment a statistical analysis will be done and sent to each school within three months after the assessment. As the results are the general evidence, the further steps for the improvements of reading literacy will be established and suggested.

If you have any further questions do not hesitate to contact us by e-mail address akhmetovaaigul@edu.u-szeged.hu

Thank you for your cooperation!

Sincerely yours,

Prof. Dr. Benö Csapó

The head of Doctoral School of Education

Aigul B. Akhmetova PhD student

daminoso, 1.8. all 24 at

### **DECLARATION**

I hereby declare that this dissertation is my original work. I have duly acknowledged all materials and sources of information used in this dissertation. This dissertation has not previously been submitted for any academic degree at any university or institution.