Mapping Educational Change in Kazakhstan

Based on an in-depth ten-year study, this novel book examines the reform of Kazakhstan's education system, from the initial plans and models of change through to the implementation at all stages and places in the education system. Through an exploration of a wide range of data, it maps the problems, models, challenges, interventions and successes of educational change. It covers the viewpoints of all stakeholders involved – policymakers, teachers, regional officials, head teachers, parents and pupils – to provide a comprehensive assessment of people's perspectives at all levels. The book will be invaluable to those interested in the implementation of radical development and change, and it is essential reading for researchers and students in education reform and education policy, as well as teachers and educational professionals. This title is part of the Flip it Open programme and may also be available Open Access. Check our website Cambridge Core for details.

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Mapping Educational Change in Kazakhstan

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To the children and teachers of Kazakhstan and to the future.

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Kulyash Shamshidinova (Chapter 1) is the Chairperson of the Nazarbayev Intellectual Schools. In 2019, she served as Minister of Education and Science of the Republic of Kazakhstan. Prior to becoming the NIS Chairperson, she was twice appointed to the position of the Vice-Minister of Education and Science of the Republic of Kazakhstan for a period of five years (2002–2005 and 2007–2009). Previously, she has held the positions of CEO of the Bobek National Scientific Practical Education and Health Centre, Deputy Mayor of Taldykorgan, Instructor of the Taldykorgan Oblast Party Committee, Secretary of the Taldykorgan City Party Committee and Deputy Director of the Taldykorgan Oblast In-Service Teacher Training Institute. She began her career as a chemistry teacher and a secondary school principal in the Almaty oblast.

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Aidana Shilibekova (Chapters 2 and 7) is the Director of the Center for Pedagogical Measurements at Nazarbayev Intellectual Schools and holds the Candidate of Pedagogical Sciences. Previously, she was a computer science teacher, taught at the Pedagogical Institute and worked as an analyst in the Statistics Department of the centre. She is a certified trainer and assessment expert in the level courses of the Center for Pedagogical Excellence. In 2015–2016, she completed a scientific internship under the Bolashak Programme at the University of Leicester, UK. She has participated in the development of criteria-based assessment methodology, final attestation, as well as in conducting research projects on the satisfaction of graduates of Intellectual Schools, the effectiveness of criteria-based assessment, piloting of the renewed content of education and so on. Under her leadership, the Center for Pedagogical Measurements is engaged in the development of innovative approaches to assessment, including machine learning and computer testing technologies, changes to the format and procedures of final attestation.

Michelle Somerton (Chapter 5) is a specialist in inclusive education with research interests in barriers to learning for children with autism and developmental disorders. Dr Somerton has worked in Australia and Central Asia (the post-Soviet

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context) and taught inclusive education policy, leadership, research methods in education and development of inclusive schools. She has many years of experience in teaching and research supervision of master and doctoral students and has been appointed Chair of the Nazarbayev University Special Learning Needs Committee.

Xeniya Tursunbayeva (Chapter 14) is Director of the Department for Research, Innovations and Analytics at 'Orleu' National Centre for Professional Development. She started her career teaching English and linguistics at a regional Kazakhstani university. Studying for a PhD in education, she volunteered in several research projects, including gifted education and students' well-being in school. From 2018 to 2021, she took part in the collaborative project Translation and Continuity of the Educational Innovations in the Secondary Education System of Kazakhstan as part of her work in the Research Department of Nazarbayev Intellectual Schools AEO. Xeniya is a representative of the Emerging Researchers' Group of the European Educational Research Association that promotes early-career research and emerging scholars on an international scale.

Liz Winter, PhD (Chapters 6, 8, 12, 13 and 16), is currently a lecturer in educational psychology in the School of Education at the University of Exeter. Her current research interests focus on post-pandemic school engagement and social equity. Dr Winter worked extensively in Kazakhstan from 2012 to 2022 for the University of Cambridge as a partner-advisor supporting the establishment and later quality assurance of the Nazarbayev University Graduate School of Education. This ten-year collaboration included significant research activities to gather evidence from schools on the piloting and roll-out of the renewed content of education, the introduction of per-capita funding and, with funding from the British Council, school students' wellbeing and engagement in Kazakhstan. Aside from academic publications, Dr Winter has provided policy papers to the Ministry of Education and Science in Kazakhstan on topics such as the National Qualifications Framework and the professional development of teachers.

Natallia Yakavets, PhD (Chapters 5, 6 and 15), is Assistant Professor in Educational Leadership and Management in the School of Education, University of Nottingham. Previously she was a senior research associate in the Faculty of Education at the University of Cambridge. She holds a PhD in educational leadership and management from The Open University, UK. Her central research interests are leadership in transitional and post-Soviet contexts, school improvement, teacher professional education, educational reform and inclusive education. She has been carrying out research in the educational contexts in Kazakhstan since 2012. She has worked with the United Nations Children's Fund to support the Kazakhstan Ministry of Education and Science in developing and piloting an early warning system for preventing, identifying and responding to school dropouts of children with special educational needs and behavioural difficulties (2018–2021). Dr Yakavets has presented the results of her research at many international conferences and meetings.

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Almira Yembergenova (Chapter 4) is currently doing her PhD at Nazarbayev University Graduate School of Education (NUGSE). She has previously worked at the Nazarbayev Intellectual School in Karaganda as an English teacher and a teacher of global perspectives and project work. After completing an MSc in educational leadership at Nazarbayev University, she has worked as a trilingual education coordinator and Head of the Department of English Language and Global Perspectives and Project Work at NIS Karaganda. Since 2021, she has been working as a research assistant at NUGSE. Her research interests are Kazakh language teaching in secondary schools, teaching subjects in second or third languages and the use of content and language integrated learning (CLIL) in multilingual education.

Zhanyl Zhontayeva, PhD (Chapters 1, 8 and 15), is the Director of Professional Development Programmes in the Graduate School of Education (GSE) at Nazarbayev University. She has worked as a teacher, a director of a school and the Head of the Department of Education in the Kyzylorda region. Also, Zhanyl was Director of the Department of Preschool and Secondary Education in the Ministry of Education and Science of the Republic of Kazakhstan. In her position, she was involved in developing strategic documents on secondary education in Kazakhstan. At the GSE, Zhanyl coordinates professional development programmes for educators at all levels. Most of the programmes comply with implementing educational reforms such as inclusive education, per-capita funding, leadership, curriculum design and in-service teacher training. Moreover, she has participated in the development of ten curriculum designs for higher education institutions in Kazakhstan while coordinating the professional development programme on curriculum design. She has been involved in joint research projects with the University of Cambridge Faculty of Education on school education. Zhanyl has also been taking part in the World Bank project on the development of thirty educational programmes for teacher education in the Republic of Kazakhstan.

Dinara Ziyedenova (Chapter 7) is Deputy Director of the Center for Pedagogical Measurements at Nazarbayev Intellectual Schools (NIS) and holds a master's in philology. She was a teacher of a foreign language at university and the Nazarbayev Intellectual School and served as a senior manager in the Education Quality Assessment Department of the NIS. Dinara is actively involved in research and international projects together with NIS strategic partners. She has participated in the development and implementation of the renewed content of primary education in thirty pilot schools, as well as of methodology and teaching materials for the criteria-based assessment system.

PREFACE

The publication of *Mapping Educational Change in Kazakhstan*, a decade in the making, is the result of an unprecedented collaboration between education practitioners and researchers in both Britain and Kazakhstan, who have taken on the immense project of reforming Kazakhstan's education sector. Not only that, they have also set out to introduce national reforms in a little over half the time that such changes would generally be brought into effect.

The first part of this project came to fruition in 2014 with the publication Reform by Cambridge University Press of Educational and Internationalisation: The Case of School Reform in Kazakhstan.¹ This happened at a critical moment in the history of the country. Faced with substantial problems in the wake of the collapse of the Soviet Union, Kazakhstan's leaders recognised that a fundamental element in preparing their newly independent country for the future was a wholesale transformation of its education system to bring it into line with international norms. That required both an understanding of where things stood at that time and where they needed to go.

This 2014 volume set out the background and provided the rationale for the desperately needed changes in a country expecting an increase in the number of young people of around 50 per cent by 2030 and hoping to use education to catapult itself into the top thirty most-developed countries in the world by that time.

At the centre of the reforms – which were developed by a team from the University of Cambridge's Faculty of Education working with the Nazarbayev Intellectual Schools (NIS), the Graduate School of Education at Nazarbayev University and the Ministry of Education – was the retraining of all of Kazakhstan's teachers, who had been taught to operate in a system that did not encourage inquisitiveness in either teachers or pupils and against a background in which teaching itself was seen as a poorly rewarded, low-status profession.

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¹ David Bridges (ed), *Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan*, Cambridge: Cambridge University Press, 2014.

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Those involved in drawing up these reforms understood that education also had to become student-centred while at the same time dealing with the implementation of a policy of trilingualism. In addition, the Kazakh language itself was due to switch from Cyrillic to Latin script by 2025, and there were also substantial problems to be overcome in setting up a finance model that ensured pupils were treated equally in both urban and more remote rural schools.

In more general terms, Kazakhstan's leaders recognised that education reform should also honour both its recent and distant cultural heritage, as well as reach the standards found in the international sector.

By any measure, these were huge objectives. Yet, by working together with international experts, Kazakhstan's education sector eagerly took up the reform initiatives such as the NIS, which rapidly became centres of excellence and allowed new thinking to be spread quickly throughout the whole country.

This book, which is a companion volume to the 2014 publication, covers the period from 2015 to 2022. Amongst other things, it examines the scaling up to national level of the experience of the NIS, where many of the reforms under discussion were first piloted. The book presents empirical research evidence from across the country, as collected by the same teams – both Kazakh and international – that worked on the first book, many of whom have now been working together for more than a decade. The reform of the entire education system of Kazakhstan has been designed from the outset so that data collection and analysis would be central to the entire process.

This book examines the empirical evidence in three distinct areas of work in order to study what is in effect a sustained attempt to reform a whole school system as a way of bridging the gap between the old Soviet traditions and the newer thinking now prevalent in Western Europe. That in itself is remarkable; it is not often that researchers, policymakers and practitioners are able to share their experiences and, at the same time, contribute to a debate that feeds directly into the processes of policy development at the highest levels of government.

The essays in the first section of the book analyse the reforms that have taken place, such as trilingualism, the teaching of science, new structures and the ways in which scaling up has been organised, particularly in relation to equal access to education.

The second section examines the goals and outcomes of both national and local piloting of new approaches, again using empirical research. It also looks into new ways of financing schools, particularly through per-capita funding and how to encourage leadership qualities in teachers.

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The final section is based on three important case studies from three separate regions of Kazakhstan and aims to assess how the reforms have been rolled out and to what effect. Each study looks at stakeholders' perspectives on education reform and seeks to extrapolate regional management issues.

Although the timeframe for overhauling Kazakhstan's education system has been short, it is by no means over. It has been remarked that thirty years after it declared its independence, Kazakhstan is at a turning point in its transition from a Soviet client state to a fully fledged independent state. It lies at the heart of Asia and provides a natural bridge between East and West. At the same time, it is subject to instability from neighbouring regions, as events in 2022 have shown only too well. Whatever happens over the next few years, it is highly likely that education policy will be a major part of the debate. The reforms outlined here, together with the educational structures they have created, will continue to play a part in ensuring Kazakhstan delivers to its people an education system which they can be proud of.

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This book is the culmination of a very successful and sustained partnership between Nazarbayev Intellectual Schools, the Nazarbayev University Graduate School of Education, the University of Pennsylvania Graduate School of Education (which focuses mainly on higher education) and the University of Cambridge Faculty of Education, latterly, particularly those in the Education Reform and Innovation team. It is a result of the very unusual and positive climate of that partnership that the group were able to have constructive, critical discussions and undertake research and development. Thank you to all the members of that partnership, most of whom are authors in this book.

The whole endeavour would not have been possible without the teachers and students in both Nazarbayev Intellectual Schools and, later, the mainstream schools of Kazakhstan. Their commitment and serious hardworking attitudes are memorable. We are very grateful for their patience and participation.

We thank also Cambridge University Press and Rebecca Taylor, in particular, for helping us publish such a detailed study of a country over time; it is unusual and hopefully highly valuable. Thank you also to Julie Potter and Paola Contreras for their careful work on the final manuscript, which kept me (Colleen McLaughlin) sane, and to Isabel Collins at Cambridge University Press for doing all the final production.

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