Case study: Implementing large-scale education reform for primary and secondary education in Mongolia

Over a seven-year period we worked with the Government of Mongolia to implement the Mongolia-Cambridge Education Initiative (MCEI): an ambitious collaborative project to change the education system in Mongolia. The aim was to improve educational outcomes, align the education system to international standards and secure the skills needed for the country's growing economy.
The challenge

The government of Mongolia set itself the ambitious goal of undertaking wholesale education of the primary and secondary education system so that it met international standards. The government recognised weaknesses in an education system that had not been reformed for a long time. The curriculum needed to be modernised, and the government wanted to introduce a new, more modern and interactive pedagogical approach. The aim was to develop a system in which high-quality education was available across the entire country, where every child could flourish and realise their individual talents. There was an additional goal of measuring Mongolian achievement in maths and science against that of the global community through participation in the Programme for International Student Assessment (PISA) tests.

In 2011, the government commissioned Cambridge Assessment International Education to advise the Ministry of Education, Culture, Sciences and Sports (MECSS) on how best to achieve these goals, and to work with MECSS, national institutions, educational professionals, schools, teachers, universities and colleges in the design and delivery of a new education system.

Our response

We formed the Mongolia-Cambridge Education Initiative (MCEI). The goal of the MCEI was to undertake a joint collaborative programme to reform education in Mongolia using the combined skills and knowledge of the Mongolian government, Cambridge Assessment International Education, Cambridge Assessment English and the Faculty of Education at the University of Cambridge.

From the beginning of the MCEI, the Government of Mongolia (GoM) has stressed that, in the reformed education system, every child will be valued as an individual and access to high-quality education will be available equally across the country. The standard of the system will be equal to that of internationally high-performing jurisdictions and will provide the skills needed in the growing economy.

Scope of reform

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<th>Curriculum</th>
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<td>• Developing and implementing a new national curriculum to develop skills and knowledge to international standards:</td>
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<td>• English, maths and science for primary</td>
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<td>• English, maths, physics, biology and chemistry for secondary.</td>
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<th>Pedagogy</th>
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<td>• Development of textbooks and teacher guides to support the new curriculum.</td>
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<td>• Extensive training programme to cascade training on new approaches to teaching and learning throughout the education system.</td>
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<td>• Developing new formative-assessment practices so that teachers can evaluate their students and target their teaching more effectively.</td>
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<td>• Development of a new initial teacher education programme.</td>
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<th>Assessment</th>
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<td>• Aligning assessment to the updated curriculum by testing the new skills as well as subject new content.</td>
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<td>• Training of experts new examination question, in grading and statistics.</td>
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<td>• Teacher and school assessment.</td>
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Implementing large-scale education reform for primary and secondary education in Mongolia continued

Implementation

Following a detailed needs analysis, a roadmap was produced that set out how we would bring about the changes required in the education system. The first two years of the project were focussed on developing new curricula and implementing an extensive programme of teacher training. The following years were focussed more on improving assessment practices and the development of a National Curriculum and Assessment Model (NCAM) as a way to implement the new Curriculum with the new Assessment model seamlessly.

Our approach is to transfer expertise to local partners, and for that reason reform is introduced in manageable and logical stages. We piloted the changes with 30 state schools (later becoming 40) across the country before rolling out more widely. Training underpins each stage of the reform. By providing a 'cascade' training programme of new pedagogy we have been able to ensure that all teachers at all levels have available training to teach in a way that maximises learning.

Cascade training model

![Cascade training model diagram](image)

In addition to developing new curricula in English, Maths and Science Cambridge also provided expertise and consultation to support Mongolian specialists to develop other subjects in Mongolian language, art and design, music, physical education, and human and nature.

Outcomes

The achievements of MCEI are substantial:

- Six years of primary curricula in three subjects and five years of senior secondary curricula in five subjects have been developed to international standards which develop skills as well as knowledge.
- For each year and each subject in the new curriculum, support materials have been provided for teachers, including teacher guides and schemes of work.
- A customised training system has enabled many hundreds of teachers to develop the pedagogical skills in active learning that are needed to deliver the new curriculum.
- A customised monitoring programme has been developed to ensure the new curriculum and active learning approach is embedding in classrooms.
- New school-based formative assessment practices have been introduced and teachers trained to implement them, so that each learner can be evaluated and teachers can target their teaching more effectively.
- National assessments comprising multiple-choice and objective questions have been adapted with the introduction of essay-type and extended-response questions. This is part of a long-term plan to improve national external assessments by testing skills such as application of knowledge, critical thinking and problem solving.
- Recommendations have been provided for the improvement of teacher assessment, school assessment and standards in ‘pre-service’ teacher education.
- A customised school leadership programme has begun to change the emphasis from school management to leadership of learning.

Although all areas of MCEI achievement need time to become embedded, four main areas are ready for new stages of development. These improvements are needed to further strengthen the general education system so that learners going on to university, technical and vocational education and training (TVET) and employment are well prepared.

“Undoubtedly, the support and efforts provided by Cambridge have had an invaluable positive influence in advancing the quality of education reform in Mongolia, and in providing more efficient and successful methodologies for teaching practice, implementation of the new curriculum, and very good quality formative assessment practice.”

UNESCO evaluation report, 2016
Summary
The reform of a complex education system is a long-term commitment and the areas of development implemented so far need time to become embedded.

The achievements of MCEI have been substantial in all areas of the education system, although more work needs to be done to align Mongolia’s education system to international standards and develop the skills Mongolian students will need for the country’s economic development.

Cambridge International continues to engage with MECSS to explore with them further initiatives that can be implemented in partnership to help MECSS achieve its reform goals in improving outcomes.

Areas for future collaboration would be:
- Further improve assessment by extending the types of questions, improving examination results analysis and interpretation, and instigating an effective criteria-based assessment method that can be used to complement written assessments, for the Mongolian context.
- Ensure effective progression between the courses at school and university, TVET and employment.
- Improve school teacher and school leader quality through effective teacher assessment
- Finalise the framework of the assessments used with the new curriculum (NCAM) and the pathways through the curriculum for learners of different abilities and interests.

Find out more
For more details about working with us to make positive improvements to education in your country, please contact our Education Services team for an initial discussion. Getting in touch with Cambridge International is easy:

Email: educationservices@cambridgeinternational.org
Call: +44 1223 376474
Visit: www.cambridgeinternational.org/education-services