

KEY POINTS

- Adopting K-12 aligns the school education system to international norms, which in turn allows students to access postsecondary institutions globally.
- Sustainable K-12 reforms are implemented with support of appropriate legal framework, strong leadership, and political commitment.
- While there are underlying principles that drive K-12 reform, each country has to contextualize priority, approach, and the pace of the implementation to ensure minimum disruption to the operations of the school system and maximum return.
- Educators' and educational institutions' capacity to support complex and parallel tasks such as curriculum revision, teacher upgrade, and infrastructure expansion is critical for successful implementation of K-12 reform.
- Strategic and effective consultation with all stakeholders to sensitize, explain the rationale for the reform, and build ownership can significantly support implementation of the K-12 initiative.

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K-12 TRANSITIONS: APPROACHES
AND LESSONS LEARNED¹

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WHY K-12?

More than 140 countries offer what has become the international norm for pretertiary education, namely a kindergarten through grade 12 (K-12) system. Why kindergarten? Because, research attests to the long-term learning and social benefits of school readiness programs. Why 12 grades? Because experience in many countries shows that a K-12 system of schooling is the minimum necessary to acquire the knowledge and expertise for university education, employment training, or decent work.²

TYPES OF K-12 TRANSITIONS

Five widely differing cases were reviewed in a desk study, revealing three variations in K-12 transitions:

- (i) **Expanding the system.** This group includes countries that previously offered only 10 or 11 years, such as Mongolia and the Philippines, then added 1 or 2 more years of schooling. The challenge is to expand strategically, avoiding an over- or undersupply of schools, classrooms, and/or teachers.

In Mongolia, enrollment in comprehensive upper secondary schools (USSs) fell short of projections due to a decline in the school age population and the introduction of programs offered by the Ministry of Labor that provided an alternative pathway with monthly stipends for students. The result was an excess of teachers and classrooms in schools under the authority of the Ministry of Education, Culture, and Sports

¹ This brief draws on a study report on “Transitions to K-12 Education Systems—Experiences from Five Case Countries.” The study was financed under Regional Technical Assistance (TA-8303 REG): Partnership for Innovation in Education in Asia and the Pacific. Asian Development Bank. 2015.

² According to the International Labour Organization (ILO), decent work involves opportunities for work that is productive and delivers a fair income, security in the workplace, and social protection.

caused by gaps in planning and coordination between the two ministries.

In the Philippines, two contextual features combined to offer a unique solution. The first feature is that the government would like at least 40% of all USS students to attend private institutions offering the USS program. This is in accordance with a long tradition and existing legal framework for public-private partnerships in education provision in the country. The government's strategy is to offer subsidies valued at just under the cost of public provision to students, enabling them to enroll in private schools should they choose to do so. This scheme will increase the diversity in USS supply and reduce the risk to the government of building surplus classrooms or hiring too many teachers.

The second feature of the case of the Philippines has to do with the supply of graduates entering higher education institutions (HEIs). Instead of entering an HEI after grade 10, students will spend 2 more years in secondary school, creating 2 years of missing cohorts. This can be managed in different ways: For example, an HEI may temporarily hire out the space to accommodate grades 11 and 12 and gradually transition to offering other higher education programs to reduce the disruption.

- (ii) **Making 12 years compulsory.** Offering 12 years of free education is not the same as making enrollment in grades 1–12 compulsory. While both the Philippines and Mongolia offer K–12 education, compulsory education is deemed to be grades K–12 and 1–9, respectively, at least in the medium term. Some countries already offer grades 1–12 (Indonesia, Poland, Turkey), but compulsory education may be until grade 8, 9, or 12.

Successful implementation of compulsory education warrants acknowledgment of quality, relevance, and value in the program by all stakeholders. In Poland and Turkey, the extension of compulsory education was accompanied by a reconfiguration

In today's globalized economy, economic progress and educational achievement are inextricably linked; consequently, a high-quality education is no longer just a pathway to opportunity—but a prerequisite for success.

of lower secondary schools (LSSs) and the USS curriculum into two levels.

Furthermore, Poland's extension was accompanied by extensive teacher preparation and an overhaul of the assessment system; and Turkey's extension involved introducing LSSs, simplifying USS choices, and repurposing the USS entry examination.

- (iii) **Reducing from 13 to 12 years.** Ontario, Canada reconfigured school education from 1–13 to K–12, necessitating a retooling of the secondary education curriculum. The change was intended to align with other Canadian provinces and to save money. While Ontario reduced a grade level from its secondary education program, it has added universal full-day kindergarten, which is expected to be fully implemented throughout the province by the end of 2015.

IS K–12 NECESSARY?

Preparing and executing a transition to K–12 requires political commitment and financial investment as well as enough human resources capable of planning, developing, implementing, and sustaining a complex reform. So far 140 countries have decided that the potential contributions to individual, social, and economic development are worth the investment in restructuring. Macrolevel rationales for K–12 reform can be grouped into six categories:

- (i) **Meeting international standards.** Credentials will be accepted by schools, universities, training programs, and employers in other countries.
- (ii) **Providing equity.** Disadvantaged students will be qualified for decent work or further study.
- (iii) **Preparing for life.** Secondary school graduates will be able to get jobs faster, and higher education will be more efficient.
- (iv) **Competing globally.** A cohort of entrepreneurs and employees will be created in emerging economies, and workforce attainment will be at parity with comparator countries.
- (v) **Fostering national cohesion.** Core values and national identity will be conserved.
- (vi) **Decongesting an overcrowded curriculum.** Students will have time to learn the subject matter and skills (cognitive and noncognitive) taught in 21st century curricula.

EXPECT RESISTANCE

Any change is uncomfortable and not readily embraced. It becomes difficult if there is no constituency advocating expansion or restructuring of school education systems. Indeed, the proposal for K-12 is typically met with opposition. While resistance to change is inevitable, a favorable turnaround in public opinion can be swift if rationales

- (i) **Are compelling.** For many former Soviet and Eastern bloc countries, meeting Organisation for Economic Co-operation and Development or European norms is an important part of their strategies for economic, social, and political transformation.
- (ii) **Are communicated well.** In the Philippines, for example, a newly elected government’s agenda for education reform that included transition from a 10-year to a 12-year school education cycle was met with resistance from opposition politicians, the press, the public, and the education establishment. However, over time, as the President’s vision was communicated widely, the messages were presented consistently, and the reasons were explained clearly, the resistance abated, and public opinion polls noted a turnaround from a largely negative to a positive attitude.
- (iii) **Demonstrate visible success.** Poland performed poorly in the first Program for International Student Assessment. Three years later there was a dramatic improvement in

overall performance, driven largely by extraordinary gains by weaker and disadvantaged students. The obvious explanation for this surge in learning was that the first cohort was taught under the old system (8 years of primary plus 4 years of secondary education), and the new cohort under the reconfigured system (6 years of primary education, 3 years of LSS, and 3 years of USS with some vocational education programs under USS being 4 years).

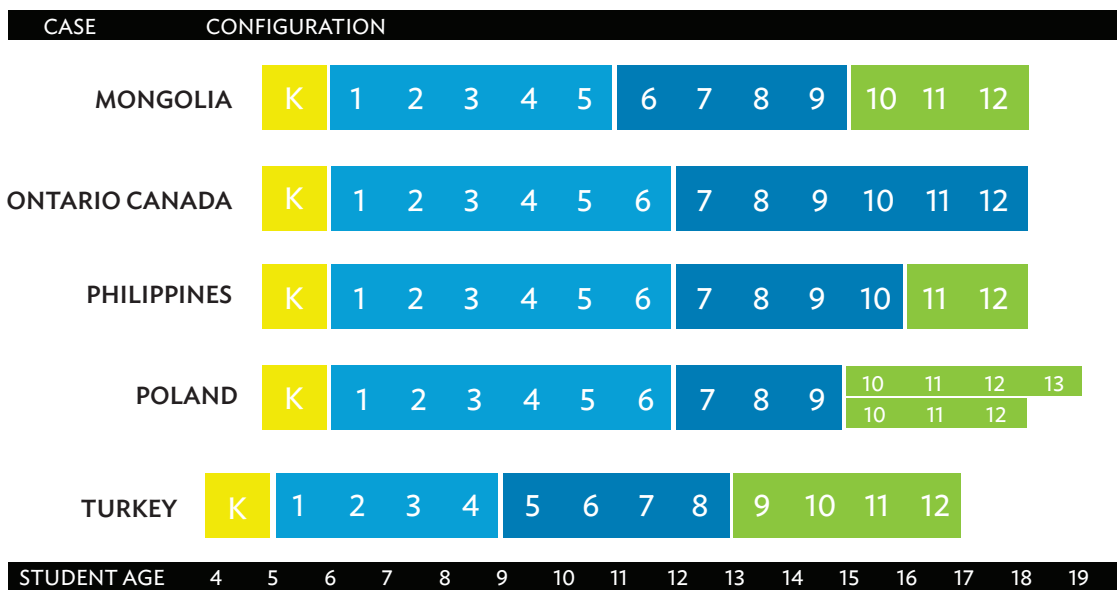
Many countries change governments periodically, and the time needed to prepare and implement K-12 reform can bridge different governments. New governments sometimes aspire to sweep in new programs; therefore broad-based public support and a clear and time-bound framework can sustain momentum for K-12.

IS THAT LEGAL?

In some, cases (Mongolia, Philippines, Poland, and Turkey) the legal framework needed to be revised in order to restructure school education and ensure sustainability of the change across administrations. The legal framework for transitioning to K-12 sets the boundaries for the specific program options in each K-12 jurisdiction.

The education laws at a minimum (i) set the threshold age of entry, (ii) define compulsory education, and (iii) describe the configuration of grades 1-12 (see figure).

Configuration of K-12 Education in Five Case Jurisdictions



Even though all jurisdictions in the study offer tuition-free K–12 education, compulsory education is defined differently, in terms of either age (e.g., ages 6–18 in Ontario) or grade level (e.g., grades 1–9 in Mongolia). Of the five cases, only the Philippines has declared K–12 both free and compulsory.

In addition to the K–12 structure, legal parameters regulate matters such as types of schools (e.g., public, private, general, religious, vocational, technical, boarding, all grades), teacher rights and qualifications, and public–private partnerships for education, to name a few. Other laws shaping options for K–12 include fiscal laws that cover school finance, and decentralization laws that specify relationships of authority and accountability for school management and governance. K–12 programs are prepared and implemented within these legal parameters.

BUNDLE UP

Restructuring existing school education to K–12 typically entails

- (i) **Revising all or part of the curriculum.** While curricula undergo periodic revision, in all case jurisdictions, restructuring the alignment of the additional years necessitated some curriculum revision.

For example, in Turkey, changing from 8 years of primary to 4 years of primary plus 4 years of LSS meant extensive changes to the curriculum for grades 5, 6, 7, and 8, including adding elective courses in specialized areas and extending the school day to accommodate curricular changes. Changes in assessment, textbooks, and teaching and learning materials accompanied the reform.

- (ii) **Preparing and assigning teachers.** Adding new categories of teachers—at the primary, LSS, or USS levels—or new subjects and programs means identifying and assigning teachers qualified to teach those grades or the new subjects and programs.

In Mongolia, for example, extending school education to grade 12 was accompanied by hiring a significant number of additional teachers to assure that all schools were prepared to offer the new program. Also, extensive overhaul of the entire curriculum beginning with grade 1 meant that teachers needed to be trained to use new teaching methods.

In Ontario and Poland, extensive teacher development programs were undertaken. These programs were peer-to-peer, allowing teachers' networks to quickly spread effective practices.

In the Philippines, the secondary education program offers specializations in technical and vocational education and training (TVET), sports, and arts and design as well as in academic areas. The supply of qualified teachers for these new areas was supplemented by temporarily lifting restrictions on unlicensed and part-time teachers in narrowly defined circumstances.

- (iii) **Aligning physical space with program changes.** Meeting minimum service standards for learning environments, e.g., teacher/student ratios, can strain resources in large systems (e.g., Philippines, Turkey) as well as in countries with low population densities (Mongolia). K–12 programs for 21st century education require information and communication technology for schools. Many science, technology, engineering, mathematics, and TVET programs require special laboratories or workshops. Creative solutions are needed when fiscal space is not sufficient to meet the requirements for physical space.

In the Philippines, decades of underfunding had left the education system short of teachers, useful classrooms, furniture, and other facilities. As part of the basic education system overhaul, the government undertook a massive program to remedy input deficits so that the new curriculum could be delivered as designed. In addition, the specialized programs in sports, arts and design, TVET, and laboratory sciences require specialized physical space.

WHAT DID THEY DO?

Options for K–12 development, transition, and implementation are determined by the context, K–12 rationale of each jurisdiction, and legal framework of each jurisdiction. Some key practices from each of the five study jurisdictions are summarized in the following table.

K-12 reform is more than structural change of the national education system; it should transform school experience and challenge all stakeholders to rethink teaching and learning and put in place learning models that are rigorous, relevant, and better focused on real-world experiences.

Key Practices from Case Study Jurisdictions

KEY PRACTICES

MONGOLIA

Phased transition to K–12. Over the past decade, successive waves of reform have

- restructured the Mongolian education system three times,
- initiated three rounds of curriculum revision,
- dropped the threshold age of entry from 8 to 7 to 6,
- lengthened the school program from 10 to 11 to 12 years, and
- increased participation at all education levels.

Implemented the new K–12 curriculum stepwise. Between school year (SY) 2008/2009 and SY2014/2015, Mongolia introduced a new curriculum each year in one or two grades while teaching the old curriculum in uninitiated grades.

Bundled structural change with curriculum and teacher development reforms focusing on achieving international standards for participation, curriculum, teaching methods, and student knowledge and skills competences.

Collaborated with a private international provider, Cambridge University of the United Kingdom, to align the national education system to Cambridge international education standards over time.

ONTARIO-CANADA

Transitioned from a 13- to a 12-year system between 1999 and 2003. The push towards universal full-day kindergarten is being completed in 2015.

Expanded choices emphasizing destinations in a continuously evolving secondary education curriculum; a few innovations are as follows:

- Grades 9 and 10 students can choose academic courses (focused more on theory) or applied courses (emphasizing applications). Locally developed courses called essentials courses are also provided in some schools for students who were struggling to achieve graduation requirements.
- Grades 11 and 12 students choose from “destination” courses that are intended to lead them to university, college, or work.
- A specialist high-skills major allows students to complete a minimum bundle of courses in specific high-skills areas such as arts, business, information technology, and construction and manufacturing.
- Dual-credit programs allow students to earn several credits toward a diploma through apprenticeship and university courses.

Upgraded graduation requirements. To earn the Ontario Secondary School Diploma students must complete 30 credits of 110 hours each (including 18 required courses), render 40 hours of community involvement, and pass a literacy test (or equivalent course).

Kept teens in school. A Multiyear Student Success Strategy was undertaken to improve student graduation rates due to concern over approximately 30% of students leaving secondary school before completing the program. Seven years later the figure was 17%.

PHILIPPINES

Added two grades (11 and 12) to secondary education. The program includes core curriculum and specialized studies in four tracks: academic, TVET, sports, and arts and design. Due to the extension of secondary school by 2 years, colleges and universities will be missing two cohorts from 2016 to 2020, leaving excess capacity in those institutions, which are permitted to offer USS programs.

Implemented public-private partnerships in education provision. About 1 million students received subsidies in 2015 to enroll in private LSSs. Department of Education policy is to enroll, through a voucher program, about 40% of all USS students in private schools or public and private universities that offer the USS program.

Bridged input deficits. Simultaneously with K–12 reform, an intensive program was launched to remedy input deficits in infrastructure and teachers that had accumulated due to decades of underfunding.

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KEY PRACTICES

POLAND**Phased reforms:**

- First reforms added LSS (grades 7, 8, and 9) to the basic education configuration, thereby delaying specialized programs until grade 10.
- Second reforms centered on improving vocational USSs. A dual vocational education program is offered as an option for USS (3- or 4-year program).
- Ongoing reforms to extend comprehensive education first to grade 9, then to grade 10, significantly raised the average performance of the system through focus on weaker students and students in vocational schools.

Provided equivalence of school infrastructure. Teachers have similar working conditions whether they are posted in rural or urban areas.

Invested significantly in teachers to upgrade the teaching profession and prepare teachers to deliver a more challenging curriculum requiring unfamiliar teaching practices.

Strengthened teachers' professional independence. Poland took time to raise the capacity of teachers to implement the reformed curriculum. Teachers have independence in terms of teaching, which, together with improved curriculum and higher quality examinations, boosted not only the average outcomes of students but worked for all learners, both at the bottom and at the top of performance distribution.

TURKEY**Phased transition to K-12.** Successive waves of reform have

- restructured the school education system four times between 1997 and 2012,
- reintroduced LSS through a 4+4+4 education system configuration,
- lowered the age of grade 1 entry to 5.5 or 5 at parental request, and
- extended compulsory education from 8 to 12 years.

Eased admission to USS to align with 12 years of compulsory education, retained the USS placement examination, and enrolled students with low or failing scores on the entrance examination in vocational schools.

Closed private tutoring academies. Government policy is that private tutoring academies should register as private schools or face stiff fines.

Added new elective courses to LSS curriculum and added hours to the weekly timetable.

WHAT DO WE KNOW NOW?

K-12 reforms are conceived, prepared, and implemented within each country's unique context; therefore, particular policies or practices may not thrive if transplanted elsewhere. But, there are underlying principles that may be common to many of these countries, even though the programs and practices may differ. While each case is unique, there are lessons to be gleaned, drawing on the experiences of the five cases and the deliberations held when the cases were shared at the Regional Forum on K-12 Innovative Strategies for Supporting a Transition to a 12-Year Education System.³ These include the following:

Developed economies and high-performing school education systems have embraced K-12 by adopting a long-term and phased approach to stay on course until fully implemented to realize anticipated benefits.

³ Regional Forum on K-12 Innovative Strategies for Supporting a Transition to a 12-Year Education System. Baku 25-26 May, 2015. The forum was organized jointly by the Government of Azerbaijan and the Asian Development Bank.

- (i) **K-12 is only one of a bundle of education reforms, and, while restructuring is the most visible, it is the integrity of and synergy among all the reform elements that enable success.** Preparation requires close collaboration among agencies responsible for curriculum, infrastructure, teachers, finance, administration, and governance.
- (ii) **K-12 may need to be reached in stages, depending on context.** Four case jurisdictions restructured their education system more than once.
- (iii) **Maintain focus on improving student competences.** It is easy to lose focus on student learning in the pressure to prepare and implement a highly visible, multidimensional, and financially demanding K-12 reform. However, education programs are judged first by how well all students learn content and skills. If a reform does not deliver on the first criterion, it cannot deliver other results.
- (iv) **Focus on the 90%.** Investing in highly competitive model or elite schools has not proven an effective means for improving the overall performance of a national education system. Jurisdictions that have opted out of elite schools and focused instead on improving core subject skills and competences for all students, including weaker students and students in vocational tracks, are well known for improving and sustaining overall system performance improvements.
- (v) **School education cycle to age 18** helps ensure that students are cognitively and emotionally mature enough to perform well in postsecondary studies, become more self-directed and lifelong learners, and can successfully transition to the world of work.
- (vi) **21st century programs.** Preparing new programs entails a thorough revision of the school education program including its purposes, processes, resources, contents, and competences. Typically, 21st century programs add

Teacher professional development is essential. Continued teacher training reform is necessary so that teachers can develop students with higher order cognitive skills.

subjects and skills to an already full curriculum; therefore, spreading the program over 12 years helps resolve the “curriculum overload” evidenced in many developing countries.

- (vii) **Be clear about the core problem that K-12 is proposed to solve.** Core problems translate into foundational policies such as “improving national competitiveness” or “inclusive growth.” Restating macropolicies as educational outcomes aligns education reforms with macrolevel development priorities.
- (viii) **Teacher professional development is essential.** Continued teacher training reform is necessary so that teachers can develop students with higher order cognitive skills. The first phase of teacher training to transition from teacher-centered to student-centered education is currently in progress in all the case study jurisdictions. Continued support for teacher development is required to achieve the first phase reform objectives. The second phase of teacher training has to move to developing self-directed and lifelong learning capacities at the secondary levels.
- (ix) **Organize the curriculum around progressive difficulty of cognitive tasks.** Use low-stakes assessments with nuanced analytics for lower and higher order skills. Adapt teaching to enable students to develop higher order skills.

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