

Exhibit 23: Main Preparation Routes and Current Requirements for Eighth Grade Teachers

Reported by National Research Coordinators

Country	Main Teacher Preparation Route	Current Requirements				Description of Policy Changes Within Past 10 Years
		Supervised Practicum During Teacher Education Program	Passing a Qualifying Examination	Completion of Probationary Teaching Period	Completion of Mentoring or Induction Program	
Armenia	Teachers must have a university diploma.	Yes (1 month)	Yes	Yes (30 months)	No	No change in policy
Australia	Most teachers receive a 4-year university degree in education, or complete a 2-year postgraduate qualification program following a 3- or 4-year non-education degree.	Yes (varies according to course)	No	Yes (varies by state, usually around 1 year)	No	In 2011, the decision was made to align teacher registration processes across states so that they become nationally consistent in terms of the broad requirements.
Bahrain	Teachers are required to hold a bachelor's degree in their respective subject, along with a postgraduate diploma in education, and attend in-service training.	Yes	No	No	No	No change in policy
Botswana	Teachers graduate with college diplomas that qualify them to teach in primary schools. Prospective teachers are required to learn all school subjects in their first 2 years and then specialize in 2 subjects during their last year.	Yes (3–4 months)	Yes	Yes (6 months)	No	No change in policy
Canada	In all Canadian provinces, the majority of teachers receive their education through a university degree program. This varies across the country and in some provinces there are greater requirements than in others.	Yes	No	Yes (varies by province)	No	No change in policy
Chile	Teachers receive their education through a university or professional institute (tertiary education) degree program.	Yes (varies by program)	Yes	No	No	The new National Teaching Policy under consideration by Parliament in 2015 changes salaries, the definition of income requirements, the induction of new teachers, teacher evaluation and career advancement, and incentives for teachers.
Chinese Taipei	Most teachers attend teacher programs at universities. Some teachers attend a teacher program while they are in graduate institutes.	Yes (1 semester)	Yes	No	Yes	No change in policy
Egypt	–	–	–	–	–	–
England	Teachers in Local Authority maintained schools must have a degree to obtain Qualified Teacher status and meet threshold General Certification of Secondary Education (GCSE) standards in English, mathematics, and science. Teachers in academy schools (state funded but independent of the Local Authority) do not need to be qualified.	Yes (24 weeks)	Yes	Yes (1 full-time school year or equivalent)	Yes	Prior to 2011, all state funded schools had to employ teachers with qualified teacher status. This was not a requirement for independent schools (Local Authority maintained and academies).
Georgia	Most teachers receive their education through a university degree program.	No	Yes	No	Yes	Since 2014, every teacher at the general educational institution must pass a certification exam.
Hong Kong SAR	Teachers receive their education either through a teacher college program or, more commonly, through a university degree program. It is the government's long-term policy to require all new teachers to receive professional training and hold a degree.	Yes	Yes	No	No	No change in policy

A dash (–) indicates data not provided.

SOURCE: IEA's Trends in International Mathematics and Science Study – TIMSS 2015

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Hungary	Teachers receive their education through a master's degree program. Before the Bologna process was established, a 4-year college program was required. Teachers in Grades 5–8 are trained in their specific subjects.	Yes (8–10 weeks)	Yes	No	No	The Bologna process was introduced in 2006. This change was not applicable for the TIMSS 2015 students' teachers.
Iran, Islamic Rep. of	Most teachers receive their education through teacher education programs or through universities with majors in primary education. Most eighth grade teachers major in the subject they will teach, such as mathematics, physics, chemistry, biology, or mathematics education.	No	No	No	No	No change in policy
Ireland	Qualification to be a teacher of the eighth grade is usually achieved through a consecutive model, which first involves gaining a primary degree from a recognized third-level institution by completing a full time course of at least three years duration (ISCED level 6). This degree must include at least one subject from the post-primary schools' curriculum for the Leaving Certificate Programme. The primary degree is followed by a postgraduate qualification in education such as the Professional Masters of Education, which is two years in duration. Another path to qualification as a teacher of the eighth grade is through gaining a degree awarded by a recognized third-level institution on the basis of a concurrent course of academic study and teacher training.	Yes (varies by program)	Yes	Yes (300 hours)	Yes	The change from a 1-year Higher Diploma in Education to a 2-year Professional Master of Education program and the probation and induction requirements have been introduced. There is a National Induction Programme for teachers, which provides a structured mentoring and training program for newly qualified teachers. It is the Teaching Council's responsibility to ensure that newly qualified teachers participate in this program and teachers have 3 years to complete the program. These changes occurred in 2014.
Israel	Most teachers receive a Bachelor of Education teaching qualification through 4-year teachers' college of education programs. Some receive their education through a university degree followed by 1 year of study toward a teaching license (3 years towards B.A./B.Sc. and an additional 1–2 year program towards a teaching certificate).	Yes	No	Yes (1 year)	Yes	A mandatory year of probationary teaching was initiated 8 years ago.
Italy	Preprimary and primary teachers must complete a 5-year university degree program in education (Laurea Magistrale in Scienze della Formazione Primaria) to be certified to teach. Students are required to attend a period of supervised practicum throughout years 2–5 of the course and to write a final report. The period of supervised practicum includes class observation activities, tutored teaching practice, and self-directed teaching activities.	Yes (600 hours)	Yes	Yes (1 year)	No	Before 2013 a specific training course (Tirocinio Formativo Attivo) was mandatory, but a university degree was not required. Since 2013, a university degree is compulsory and sufficient to become a fully certified teacher.
Japan	Grade 8 teachers must hold a secondary school teacher certificate and pass a teacher appointment examination offered by the local board of education.	Yes (4 weeks)	Yes	Yes (1 year)	Yes	No change in policy

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Jordan	Teachers receive their education through a university degree program.	No	No	No	No	No change in policy
Kazakhstan	Most teachers receive their education through a pedagogical higher education institution or pedagogical college.	Yes (30 hours)	Yes	Yes (3 months)	Yes	In 2011, policy changes were enacted to incorporate continuous professional development into the teacher education system, including establishing communities of practice among Kazakhstani teachers.
Korea, Rep. of	Middle school teachers graduating from Teachers' College major in their specific subject or general studies with a teacher certificate. There is also a graduate school of education for the people who want to be a teacher after graduating from a non-education college or University.	Yes (4 weeks)	Yes	No	Yes	No change in policy
Kuwait	Primary education teachers must hold a university degree from the Department of Education at the University of Kuwait College of Basic Education, or any equivalent university degree from another institution.	Yes (3 months)	No	Yes	Yes	No change in policy
Lebanon	Teachers are graduates from the faculty of education with a specialization in mathematics.	Yes	Yes	No	No	No change in policy
Lithuania	Most primary school teachers receive their education in pedagogical universities through a university degree program. There are also primary teacher college programs. Studies last for 4 years at a university (bachelor's degree) and 3 or 4 years at a college (professional bachelor's degree).	Yes (3 months)	No	No	No	In 2014, a new description for qualification requirements for teachers was approved by the Minister of Education and Science. One of the main changes was that pedagogical university students cannot be primary school teachers until they finish their studies.
Malaysia	Most teachers complete a tertiary education level in teaching or education. Some complete a postgraduate diploma in education.	Yes (2 semesters)	Yes	Yes (1–3 years)	Yes	Teacher Education Institutions are more stringent in candidate selection. Candidates are now required to have better grades on the Grade 11 national exam and to sit for an aptitude test and interview.
Malta	Most teachers receive their education through a 4-year university program (Bachelor in Education (Hons) specializing in one or two subjects). Others may follow a 1-year postgraduate course (Post-Graduate Certificate in Education) after obtaining an undergraduate degree. As of October 2016, the University of Malta will introduce a Masters in Teaching and Learning (MTL), which will eventually be the minimum requirement for eighth grade teachers.	Yes (three 6-week blocks)	No	Yes (1 year)	Yes	Mentoring was introduced in January 2012.
Morocco	Teachers must hold a bachelor's degree, pass an entrance exam to gain admission to a training center (CRMEF), and graduate from the training center.	Yes (3 months)	Yes	Yes (1 year)	Yes	To be accepted into a teacher training center before 2012, the candidate had to have a DEUG (a diploma awarded after finishing two years of study at university), 1 training year, and pass the final exams at the training center.
New Zealand	Teachers either obtain a university degree in a subject and then a 1-year graduate diploma, or participate in a conjoint degree program (e.g. Bachelor of Science/Bachelor of Teaching).	Yes (minimum 14 weeks)	No	Yes (at least 2 years)	No	No change in policy

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Norway	Most teachers attend a specific teacher college program to teach Grades 1–7 or Grades 5–10.	Yes (100 days)	Yes	No	No	Previously there was one program for Grades 1–10. In 2010, the program was separated into a program for Grades 1–7 and another program for Grades 5–10.
Oman	Teachers must hold a Bachelor of Education degree, with a specialization in mathematics and science (physics, biology, or chemistry).	No	No	No	No	No change in policy
Qatar	Teachers must have a bachelor's degree of mathematics or science. Primary school teachers have to finish 48 hours of training in an entry level teacher education program and another 48 hours in an advanced level teacher education program.	No	Yes	No	No	New teachers must have four years of supervised student teaching experience at the primary level and pass a qualifying examination before they can be officially employed as a teacher. They also must complete a series of training programs to strengthen their abilities in teaching and delivering information.
Russian Federation	Most teachers receive their education through a 4–5 year university program.	Yes	Yes	No	No	No change in policy
Saudi Arabia	Most teachers receive their education through a university degree program. Some receive their education through a teacher college program, but this is becoming less common.	Yes (1 year)	Yes	No	No	No change in policy
Singapore	All prospective secondary school teachers are required to undergo one of the following three pre-service teacher education programs conducted by the National Institute of Education, Nanyang Technological University. They can obtain either a 4-year Bachelor of Arts/Science (Education), or a 1- or 2-year Postgraduate Diploma in Education.	Yes (at least 10 weeks)	Yes	Yes (1 year)	Yes	No change in policy
Slovenia	All teachers receive their education through a university degree program (5 years) and earn a teacher certificate. Teachers who finished their education before 1980 can finish teacher college programs while they continue to teach.	Yes (a few weeks, depending on the university program)	Yes	Yes (9 months)	Yes	No change in policy
South Africa	Most teachers receive their education through a university degree or diploma program.	Yes (9 weeks per academic year)	No	Yes (6 months)	No	The revised Minimum Requirements of Teacher Education Qualifications Policy (2015) provides guidelines for initial teacher education with two training options. Teachers may complete a 4-year Bachelor of Education (B.Ed.) degree, or complete an appropriate first degree, followed by a 1-year Advanced Diploma in Education, and register with the South African Council for Educators. This policy replaces the MRTEQP of 2011 and aligns qualifications for teacher education with the Higher Education Qualifications Sub-Framework (2013).
Sweden	Teachers receive their education through a university teacher program.	Yes (20 weeks)	Yes	No	No	Since 2011 teachers must apply for a certificate from the Swedish National Agency for Education, which is necessary to obtain permanent employment and to grade students.

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Thailand	Teachers are required to have a degree in education from a university or teacher college and a teaching license which must be renewed every five years.	Yes (1 year)	No	No	No	Teachers must apply for a teaching license after completion of a bachelor's degree in education since 2003.
Turkey	Teachers receive their education through a university program.	Yes (1 school day per week)	Yes	Yes (1 year)	Yes	Beginning in 2015, if novice teachers successfully pass a probationary teaching period, they must pass an additional examination to become a full teacher.
United Arab Emirates	The main preparation for teachers is through colleges of education.	No	No	Yes (2 years)	No	A minimum score of 6 on the International English Language Testing System (IELTS) academic examination became a prerequisite for teaching English at Grade 8.
United States	Most teachers receive their education through a university degree program in education; candidates with degrees in other areas may become certified to teach through an alternative teacher certification program. Typically, state licensing boards grant credentials to teachers, with recertification after a set period of time. The probationary period varies among states. Many require a 2-year probationary period, with a 3rd year at the discretion of the tenure-awarding body. For licensure in most states middle school teachers are expected to pass three exams on basic skills, the subject taught, and teaching methods.	Yes (varies by state)	Yes	Yes (varies by state)	Yes	No change in policy

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Buenos Aires, Argentina	Most teachers receive their education through a tertiary degree program.	Yes (28 weeks)	No	No	No	In 2009, the length of teacher preparation programs was extended from 3 to 4 years.
Ontario, Canada	The main preparation route is through an undergraduate university degree from an accredited post-secondary institution, followed by the completion of a 1-year program offered by a Faculty of Education leading to a Bachelor of Education degree. Some post-secondary institutions offer a concurrent degree program. The government is implementing a two-year initial teacher education program starting in fall 2015/2016.	Yes (40 days. In 2015/2016 2-year program will be 80 days)	No	No	Yes	Upon completion of the B.Ed. degree, prospective teachers join and obtain their Certificate of Qualification from the Ontario College of Teachers (OCT). Grade 8 qualified for Junior/Intermediate (4–10) or Intermediate/Senior (Grade 7–12).
Quebec, Canada	Eighth grade teachers receive their education through a 4-year university program, usually specializing in 1–2 subjects.	Yes (4 practicums, with the 4th practicum lasting 3 months)	No	No	No	Most of the school boards offer accompanying measures to facilitate the integration of young teachers into the world of work.
Abu Dhabi, UAE	All teachers must have a teaching license from their home country. The main preparation for teachers in the UAE is to go through colleges of education.	Yes (1 year)	No	Yes (6 months)	No	No change in policy
Dubai, UAE	Teachers must have a university degree.	No	No	Yes (2 years)	No	Preparation now has a more rigorous approach.
Florida, US	There are two main preparation routes for Grade 8 teachers in Florida. The first route is to receive a bachelor's or higher degree with a major in a subject area or education. The second route is to receive a bachelor's or higher degree with 18 semester hours in science/English/social sciences, depending on the area of teaching.	Yes (at least 10 weeks)	Yes	Yes (2 years)	Yes	No change in policy

Benchmarking Participants—Responses Pertain to Benchmarking Provinces/Emirates/States

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