

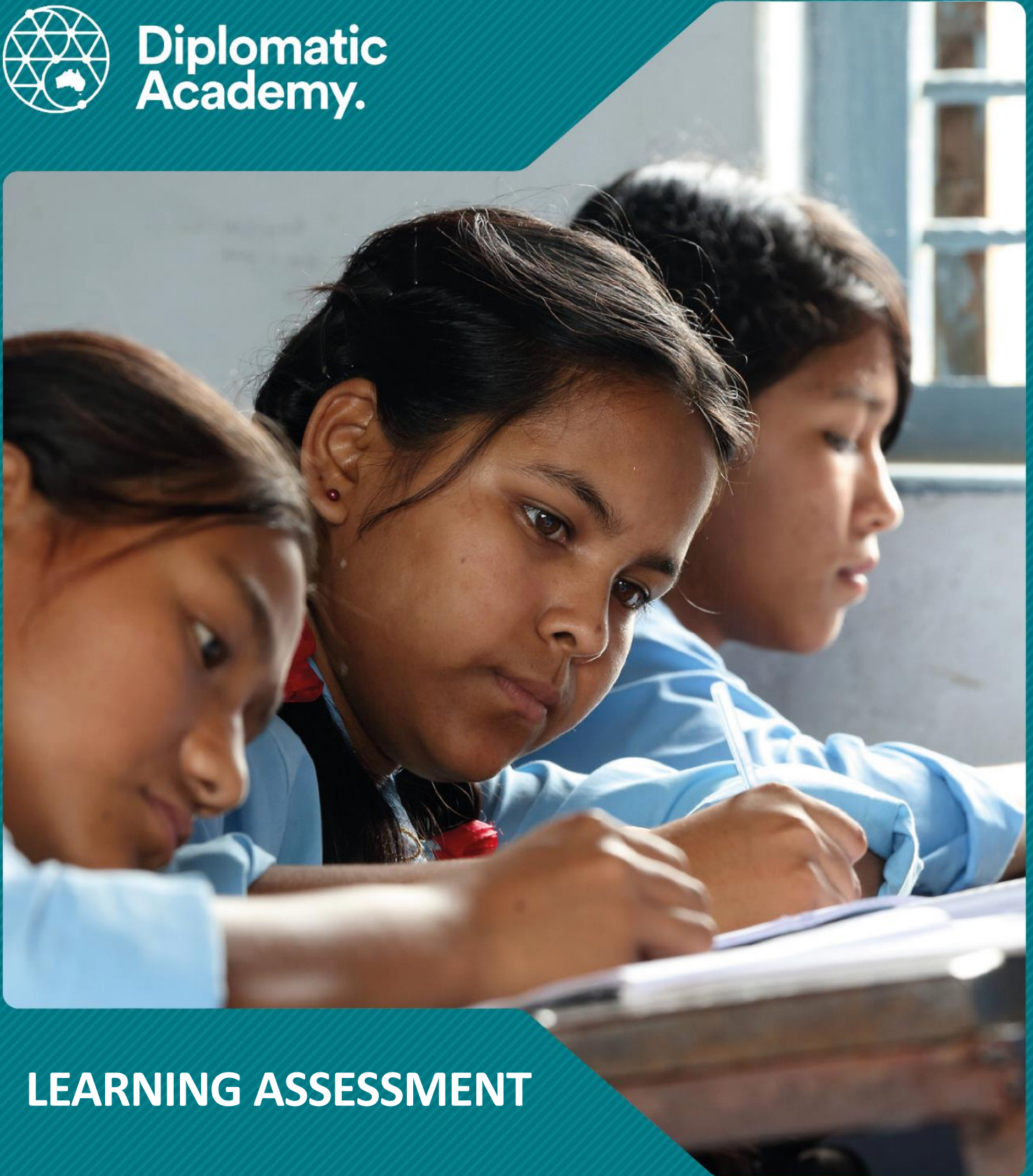


Australian Government
Department of Foreign Affairs and Trade

Education Learning and Development Module



**Diplomatic
Academy.**



LEARNING ASSESSMENT

Foundation Level
2018



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Source: Cover photo, DFAT Education Section.



ACRONYMS

ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
DFID	Department for International Development (United Kingdom)
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
EQAP	Educational Quality and Assessment Program
ESL	English as a second language
ICCS	The International Civic and Citizenship Education Study
ICILS	The International Computer and Information Literacy Study
ICT	Information and communication technology
IEA	International Association for the Evaluation of Educational Achievement
IELTS	International English Language Testing System
LLECE	Latin American Laboratory for Assessment of the Quality of Education
NAPLAN	National Assessment Program – Literacy and Numeracy
OECD	Organisation for Economic Co-operation and Development
PASEC	Program for the Analysis of Education Systems
PILNA	Pacific Islands Literacy and Numeracy Assessment
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SEA-PLM	Southeast Asia Primary Learning Metrics
TERCE	Third Regional Comparative and Explanatory Study
TIMSS	Trends in International Mathematics and Science Study
TOEFL	Test of English as a Foreign Language
UIS	UNESCO Institute of Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization



1 INTRODUCTION

The purpose of this module is to provide introductory information about learning assessments – what they are, their purpose, and how the results of learning assessments can influence education policy. It provides a foundation to engage in this topic and apply advice from staff with operational or expert levels of knowledge in education. On successful completion of this module you will gain the ability to apply practical knowledge of learning assessments in order to make valuable contributions to the field.

2 WHAT IS A LEARNING ASSESSMENT?

A learning assessment describes the measurement of student learning in specific curriculum areas (e.g. reading, science, mathematics) or in cross-curricular areas. Learning assessments are usually carried out:

- for a defined part of an education system (e.g. Grade 4 students or 15-year-old students)
- at the sub-national (e.g. state, province, district), national, regional or international level
- through using sample surveys or testing a specific population of students.

What are the aims of learning assessments?

Learning assessments aim to measure achievement outcomes. They usually collect information on the person's background (e.g. age, gender), and contextual factors that are associated with achievement (e.g. parents' highest level of education, number of books in the home, first and other languages spoken). This information is often collected through questionnaires (e.g. for students, teachers and principals). Learning assessments can be thought of as a 'health check' on the education system, and seek to address:

- where students are in their learning
- factors that are associated with achievement (e.g. the role of gender, family background, etc.).



An activity for you

What background or contextual factors may influence learning achievement?

Check your answer.

There are many factors that can influence learning achievement outcomes. These can include factors related to the individual context of the student, the student's home environment, the classroom and school, and the wider community. Contextual factors that may contribute to differences in learning achievement include school funding, teacher competence, education policies such as whether a student is taught in their first language, availability of quality learning resources and materials at the school, a student's enjoyment of reading or mathematics, a student's earlier experiences in the education system and their health.



3 WHY DO WE NEED LEARNING ASSESSMENTS?

Purposes of learning assessments

Learning assessments play a crucial role in education systems. Through gathering information on student achievement, this information can be used to make decisions about policies and practices with the aim of enhancing student outcomes. For example, information provided through learning assessments may be used to inform decisions on adjusting classroom practices, programs to support groups of learners, or larger structural changes such as curricular reform or approaches to teacher training.

Learning assessments can be for formative or summative purposes, with some assessments being used for both of these purposes.

Formative: assessing how a student is progressing 'mid-stream'

Formative assessment enables teachers to understand how their students are progressing with new content and new concepts. Formative assessment provides valuable information to the student, parents, teacher and the school about areas of strength, gaps and the next steps for learning. Examples include in-class quizzes or tests, classroom-based activities or worksheets, student assignments and teacher review of homework. Ideally, formative assessment is a regular and ongoing part of classroom practice and informs the next steps for teaching and learning. For example, if a classroom assessment shows that many students are struggling with a particular area (e.g. long division) the teacher can use this information to adjust their teaching (for example, they may decide to provide additional lessons on long division).



Summative: assessing how a student has progressed ‘at the end’

Summative assessments focus on understanding where a student is in their learning at the end of a certain stage, for example, they may come at the end of a term, a year, or a stage of education (e.g. at the end of primary or secondary schooling). There are different types of summative assessments that have different purposes. National assessments and international assessments are discussed in more detail in Sections 5 and 6. Summative assessments also include classroom-based assessments and examinations. The results from summative assessments in the classroom provide information to students, parents, teachers and the school about how a student has progressed, as well as formative information about the next steps in learning. Examinations provide information about how well students have learned a block of material and are often used as a way to inform future educational pathways for students. In some countries, the results from examinations are used to make comparisons across schools, districts and provinces.

Reliable and valid assessments

A well-designed formative or summative assessment must be reliable and valid

Reliability and validity

Reliability is the degree to which an assessment tool produces stable and consistent results. For example, if an assessment is provided on successive occasions over time (i.e. if you gave the test on a Tuesday or a Friday), or to different classes of the same ability, the average results should be similar.



Validity refers to how well a test measures what it is designed to measure. For example, a test on long division accurately measures long division skills; and an end of year mathematics exam should assess content from across the whole year, not just from the last two weeks of classes.



4 TYPES OF LEARNING ASSESSMENT MEASURES

Norm-referenced and criterion-based assessments

A traditional approach to learning assessment has focused on the differences between **norm-referenced** and **criterion-referenced** measures.

Norm-referenced assessments provide scores in relation to the performance of other students on the assessment. That is, in scoring, **students are compared with each other**. For example, examinations taken at a key transitional point (i.e. university entrance) are usually norm-referenced. This is what is sometimes called the 'Bell Curve', in which scores are distributed from low (e.g. fail) to average (e.g. pass/credit) to high (e.g. high distinction) based on an assessment of the overall group's performance.

In comparison, criterion-based learning assessments compare student performance with clearly stated criteria for learning outcomes, independently of other students. That is, **students are assessed against defined test criteria**. This means that it is possible for every student to get a low score, and just as possible (if unlikely) for every child to get a perfect score.

Examples of criterion-based learning assessments

Language tests

The International English Language Testing System (IELTS) and Test of English as a Foreign Language (TOEFL) are examples of criterion-based tests. These tests measure a candidate's proficiency of English as a second language (ESL). As a result, it is possible to identify what a student has achieved, and can do, regardless of the performance of other students. The results of these tests are often used as part of the eligibility requirements for non-native English speaking students to enrol in English speaking universities, colleges and schools (e.g. in Australia, New Zealand, Canada, the United Kingdom and the United States of America).

Driving tests

The goal of driving tests is to see whether the test taker is skilled enough to be granted a driver's licence, in relation to an agreed standard.

Citizenship tests

The goal is to see whether the test taker is sufficiently familiar with the new country's history and government, in order to be granted citizenship.





An activity for you

'High-stakes' testing has important consequences for the test taker because important decisions or consequences depend on the result (e.g. immigration tests, university entrance, primary to secondary school entrance).



Is the International English Language Testing System (IELTS) test an example of a high or low stakes test? Is the IELTS test norm-referenced or criterion-referenced?

Check your answer.

The IELTS is an example of a high-stakes criterion-referenced test.

5 NATIONAL ASSESSMENT PROGRAMS

National assessment programs are run by countries worldwide and often include a focus on the assessment of literacy and numeracy skills. A national assessment may assess a population or sample of students. The number of countries undertaking national assessments has been increasing, for example, in the Asia-Pacific region, the percentage of countries conducting learning assessments increased from 17 per cent to 69 per cent between 1990 and 2013.

Source: Benavot & Köseleci in Tobin, M et al 2015, Using large-scale assessments of students' learning to inform education policy: Insights from the Asia-Pacific region.

One of the goals of the [2030 Agenda for Sustainable Development](#) is to develop robust ways for all countries to report student learning outcomes. Work is currently underway to develop methods to measure and quantify learning progress in reading and mathematics and this will include the use of national, regional and international assessment data. For further information see, for example, the [Learning Progression Explorer](#).

Source: United Nations 2015; ACER-GEM & UNESCO UIS 2017

Purposes of national assessment programs

National assessment programs are different from 'high stakes' or end of year/cycle examinations. 'High stakes' examinations are often used to select or certify students, for example, for university entrance. In a national assessment, the primary policy interest is what the results tell us about the performance of the education system, and of course the performance of the students within that system. A national assessment can help determine if the education system is underserving particular groups of students. For example, a national assessment often looks at whether there are differences in student achievement by:

- gender
- location e.g. administrative division, urban, rural or remote
- ethnic or language group membership



- socioeconomic group e.g. low-income families
- school type e.g. public or private.

For a national assessment to provide this type of information, it is essential that relevant background data is collected, aggregated and analysed appropriately.

In order for a national assessment program to provide accurate and useful information, the assessment needs to be well designed. Some of the critical considerations when designing and conducting a national assessment include:

- **Test design** – what do we want to know about the diverse student body?
- **Test administration** – are all intended groups participating? Is the assessment administered in a consistent way?
- **Data collection** – is the test data coded accurately, in a timely manner, and in a database that is fit for purpose?
- **Data analysis** – what do the results tell us at the national level, and for key sub-groups?

Further considerations when designing a robust assessment are outlined in the overview [The 14 key areas of a robust assessment program](#).

Source: ACER 2017.

Examples of national assessments

NAPLAN in Australia

Australia has its own national assessment program called the National Assessment Program – Literacy and Numeracy (NAPLAN). Australia has been running the NAPLAN program since 2008. NAPLAN is an annual assessment of all students in Years 3, 5, 7 and 9 in Australian schools. The NAPLAN results provide information to governments, education authorities, schools and the community about the learning outcomes of Australian students. The results of these assessments are used for a number of purposes, including: for targeting programs and funding to improve student performance; for teachers to identify which students may need additional support; and to identify the performance of schools (see the [My School website](#)).



Sri Lanka's National Assessment

Sri Lanka's National Assessment of Achievement focuses on students in Grades 4, 8 and 10. It assesses achievement in a student's first language, mathematics and English. The results are analysed on a national and provincial level and analyses are done on the differences in achievement by factors including school type, location, gender, and level of teacher training. Sri Lanka's National Assessment of Achievement has had a number of positive effects, including on the education national sector strategy.

Sources: Australian Curriculum, Assessment and Reporting Authority (ACARA) 2017; Kellaghan, Greaney & Murray 2009, Using the results of a national assessment of educational achievement.



National assessments, development partners and policy impacts

The number of countries and regions participating in learning assessments have grown rapidly in recent years and many developing countries are now actively participating in them. Development partners have played a key role in supporting assessment programs, such as the World Bank in Vietnam and the United Kingdom's Department for International Development (DFID) in India. Research has shown, however, that there are a number of barriers to the utilisation of learning assessment results to enhance education systems. For example, there can sometimes be weak links between assessment bodies and education strategic planning in developing countries. This can represent a missed opportunity, as assessments of learning progress can usefully inform investment decisions in support of better quality education.

Source: Jahansson 2016, International large-scale assessments: what uses, what consequences?

Further information: For further discussion on considerations of using 'high-stakes' and national learning assessments in developing countries see the following links:

- ✂ [Smaller, quicker, cheaper: Improving learning assessments for developing countries](#)
- ✂ [Relying on high-stakes standardized tests to evaluate schools and teachers: a bad idea](#)
- ✂ [Learning champions: how 15 countries, cities, and provinces came together to rethink learning assessment](#)

Sources: Wagner 2011; Morgan 2016; Anderson & Muskin 2018.

6 INTERNATIONAL ASSESSMENT PROGRAMS

Major international assessment programs

International assessment programs provide important information at the national level, while allowing for cross-national comparison. Two types of information are usually collected:

1. student performance data
2. background information related to students, teachers and schools.

Table 1 below lists the main international assessment programs used around the world. Some of these are regional assessments and have a regional focus (e.g. Pacific countries). International and regional assessments are generally criterion-based tests.


Table 1 – Main regional and international assessment programs

Name	Skills Assessed	Age/Grade	Frequency	Participating countries
ICCS	Civics and citizenship	Grade 8	Second cycle in 2016 (first in 2009)	In 2016: 24 participating education systems
ICILS	Computer and information literacy	Grade 8	Second cycle in 2018 (first in 2013)	In 2013: 21 participating education systems
LLECE	Languages (Spanish, Portuguese), mathematics, reading, writing, and natural sciences in Grade 6	Grades 3 and 6	Every five years (2013, 2006, 1997)	In 2013: 15 countries in Latin America and the Caribbean
PASEC	French, mathematics, national language for each country, reading, writing, numeracy	Grades 2 and 5	Varies by country, but generally annually	In 2014: 10 countries in Francophone Africa
PILNA	Literacy and numeracy	Grades 4 and 6	Every three years (2012, 2015)	In 2015: 13 Pacific Island countries
PIRLS	Reading	Grade 4	Every five years (2001, 2006, 2011, 2016)	In PIRLS 2016: 47 mostly developed countries
PISA	Reading, mathematics, science, and other selected focus areas	Age 15	Every three years (2000, 2003, 2006, 2009, 2012, 2015, 2018)	In PISA 2015: 33 OECD countries, 38 other countries/economies
PrePIRLS Literacy	Reading	Grade 4	Every five years	Stepping stone for PIRLS, intended for developing countries
SACMEQ	Reading, mathematics	Grade 6	Varies, approximately every three to four years	In 2013: 15 countries in Southern and Eastern Africa
SEA-PLM	Reading, writing, numeracy	Grade 5	Every three to four years (first cycle will occur in 2018)	7 countries in Southeast Asia participating in the field trial
TIMSS	Mathematics, science	Grades 4, 8 and 12	Every four years (1995, 1999, 2003, 2007, 2011, 2015)	In TIMSS 2015: 49 countries/economies for Grade 4, 38 for Grade 8, 9 for Grade 12

Notes

ICCS	The International Civic and Citizenship Education Study
ICILS	The International Computer and Information Literacy Study
LLECE	Latin American Laboratory for Assessment of the Quality of Education
PASEC	Programme for the Analysis of Education Systems
PILNA	Pacific Islands Literacy and Numeracy Assessment
PIRLS	Progress in International Reading Literacy Study (PIRLS Literacy is a less difficult reading assessment)
PISA	Programme for International Student Assessment
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SEA-PLM	Southeast Asia Primary Learning Metrics
TIMSS	Trends in International Mathematics and Science Study

Sources: IEA 2013, PIRLS 2011; 2017a, ICCS. International Civic and Citizenship Education Study; 2017b, ICILS. International Computer and Information Literacy Study; 2017c, TIMSS & PIRLS: PIRLS 2016 international results in reading; Katten 2017, PASEC: Quality education for all: Measuring progress in Francophone Africa; NCES c.2015a, Trends in International Mathematics and Science Study (TIMSS): TIMSS participating countries; c.2015b, TIMSS advanced participating countries; OECD 2017, PISA: Programme for International Student Assessment: PISA 2015 participants; Pacific Community 2011, Educational Quality and Assessment Programme: Assessment/SPFSC*PILNA*EGRA; SACMEQ 2017, SACMEQ IV; SEA-PLM n.d., Countries; UNESCO n.d., IIEP learning portal, Brief 2, Learning assessments; UNESCO Office of Santiago 2017, Third Regional Comparative and Explanatory Study (TERCE).



Examples of international assessments

This section provides detailed information about the Early Grade Reading Assessment (EGRA), Early Grade Mathematics Assessment (EGMA), Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA). While PISA and TIMSS enable comparisons to be made between countries, EGRA and EGMA were not designed to make cross-country comparisons and are not always classified as international assessments.

Examples of international assessments

EGRA

The EGRA is a diagnostic tool that measures listening and reading skills in students' language of instruction. It is not a high-stakes testing tool, but designed to gain information on student literacy, to feed into policy, planning and to improve instructional approaches. EGRA has been used in many developing countries (e.g. Bangladesh, Lao PDR, Tonga, Vanuatu, Ghana, India and Mali to name a few).



EGMA

The EGMA is a diagnostic tool that measures students' acquisition of basic mathematics skills. Like EGRA, it is an oral assessment that is administered one-on-one in schools. EGMA has been used in many developing countries (e.g. Democratic Republic of Congo, Dominican Republic, Ghana, Iraq, Jordan, Kenya, Liberia, Malawi, Mali, Morocco, Nicaragua, Nigeria, Rwanda, and Zambia).

TIMSS and PISA

TIMSS and PISA are prominent international assessment programs. However, it is important to note a distinction between the two assessment programs. For the past 20 years, TIMSS has measured trends in mathematics and science achievement, and has adopted an approach closely linked to the curricula of participating countries. TIMSS is administered in Grades 4, 8, and 12.

In comparison, PISA measures students' competencies in reading, mathematics and science, focusing on their ability to apply their knowledge and skills to a variety of real-life contexts.

PISA measures student performance at age 15 (and students must be in Grade 7 or above for the assessment), the typical endpoint for compulsory schooling. However, in many developing countries the starting and finishing age for students can vary greatly, and a student's progress may not be neatly linear. This affects who is eligible for PISA. For example, a student who has repeated a couple of grades or who has commenced school later than the official starting age may be in Grade 5 at age 15, and they would therefore not be assessed in PISA. Many young people in developing countries may also leave the education system before they are 15 years of age.



PISA and gender

PISA information is disaggregated by sex, and information is provided on the differences and similarities in the results for girls and boys. PISA has consistently found that girls outperform boys in reading, but this gender gap narrowed between 2009 and 2015 as boys' performance improved. While gender differences in science performance tend to be small, the share of top performers in science was larger among boys than girls in 2015. While girls and boys reported equal expectations to work in a science-related occupation, they have different interests and ideas of what those careers might be. Boys are much more likely than girls to expect to work as engineers, scientists, architects or information and communication technology (ICT) professionals. Girls are almost three times as likely as boys to expect to work as health professionals (e.g. doctors, veterinarians, nurses). In terms of future choices of students, career preferences and motivation seem to be more important than achievement.

One policy implication is that achievement-focused policies will not necessarily change career choice and 'traditional' gender roles in labour markets. Therefore, school level policies aimed at attracting girls to work in the full range of science-related occupations need to be part of more general policies that challenge traditional views on the roles of women and men in the workforce.

OECD 2016, PISA 2015, Results (Volume 1): Excellence and equity in education.

7 HOW CAN LEARNING ASSESSMENT GUIDE EDUCATION POLICY?

Impact on education policy and practice

Learning assessments can have an impact on educational policy and practice in a number of ways. Assessments are used to ensure the quality of the education system, equity for different groups of students and for accountability reasons so that the education system improves student learning outcomes. For policymakers, assessment data can be used for agenda-setting, policy formulation, policy implementation and monitoring and policy evaluation.

Source: Tobin et al. 2015, Using large-scale assessments of students' learning to inform education policy: Insights from the Asia-Pacific region.

The following are selected examples of ways that learning assessment data has been used.

- **A general analysis of the education system**

The dissemination of poor assessment results has prompted countries to make changes to their education policies and priorities. For example, PISA results in Japan prompted changes to the curriculum and the establishment of an 'improvement cycle' system of using the results from PISA and its national assessment program to monitor its educational reforms over time.

- **Improved allocation of resources**



Increasing or reallocating resources to schools or areas that require further support has been a feature of many national assessments. For example, in Australia, national assessment data was used to provide targeted in-service professional development programs to schools, including providing literacy and numeracy coaches.

- **Monitoring a policy intervention**

Learning assessments can be a useful policy tool for monitoring and checking the results of a policy intervention in education. For example, Vietnam has used its national assessment to monitor particular policies implemented including the new curriculum and school standards and policies around teaching hours.

Further information:

- ✂ The impact of national and international assessment programs on educational policy, particularly policies regarding resource allocation and teaching and learning practices in developing countries
- ✂ System-level assessment and educational policy
- ✂ Assessing national achievement levels in education
- ✂ National assessments of educational achievement.

Sources: Best et al. 2013; Cresswell 2016; Greaney & Kellaghan 2008; Postlethwaite & Kellaghan 2008.

8 SOME ISSUES THAT HINDER EDUCATION POLICY IN DEVELOPING COUNTRIES

Policy actions based on the results of assessment programs

Low quality assessment programs, financial constraints, and weak links between assessment bodies and policy makers can all hinder policy actions based on the results of assessment programs.

Low technical capacity (coupled with a lack of experience in the interpretation and dissemination of results) can hinder the analysis and/or uptake of findings. This can be addressed by building local capacity or establishing a regional coordinating body – rather than relying exclusively upon capacity at the national level. For example, PILNA is a regional assessment program across Pacific Island countries which includes capacity building activities at the national level and support from the regional level. The Educational Quality and Assessment Programme (EQAP) manages and supervises PILNA overall. EQAP supports the administration of PILNA in the participating countries and the Australian Council for Educational Research (ACER) provides technical support along with EQAP.



Outsourcing the assessment program

Another option is to outsource the assessment program early in the process, with the aim of developing local capacity and staffing in later cycles. Outsourcing allows for the integration of local staff training and experience building. This is particularly helpful when developing tests, data analysis and sampling expertise – all skills that involve specialised statistical knowledge.

For further information:

- ✂ The impact of national and international assessment programs on educational policy, particularly policies regarding resource allocation and teaching and learning practices in developing countries
- ✂ Pacific Islands Literacy and Numeracy Assessment: Collaboration and innovation in reporting and dissemination.

Sources: Best et al. 2013; Belisle et al. 2016.

An activity for you

Consider this scenario.

Imagine you are posted to a developing country where educational standards seem very low. You suggest to the Minister of Education that the Australian aid program might help, technically and financially, if the country took part in learning assessments. The Minister dismisses the idea, claiming that teachers would only teach to the test, and the finer aspects of the curriculum would be lost.

How would you respond?



Note: For further information regarding the arguments posed for and against learning assessments, see [Assessing national achievement levels in education](#) module. More information is available in the *Practitioner level* of the module *Learning Assessment*.

Source: Greaney & Kellaghan 2008.



9 TEST YOUR KNOWLEDGE



Assessment questions

Answer the following questions by ticking 'True' or 'False'. Once you have selected your answers to all the questions, turn the page to 'The correct answers are...' to check the accuracy of your answers.

Question 1

Assessment programs often aim to look at the relationships between achievement and contextual factors (e.g. the relationship between achievement and socioeconomic status).

Is this statement true or false?

☐ True☐ False

Question 2

The Programme for International Student Assessment (PISA) aims to measure how students apply their learning.

Is this statement true or false?

☐ True☐ False

Question 3

Australia's National Achievement Program – Literacy and Numeracy (NAPLAN) is an example of a sample-based assessment.

Is this statement true or false?

☐ True☐ False

Question 4

A valid assessment produces stable and consistent results over time.

Is this statement true or false?

☐ True☐ False



Question 5

University entrance exams usually use norm-referenced measures.

Is this statement true or false?

☐ True

☐ False

Question 6

Data from international assessment programs is often used for cross-country comparisons.

Is this statement true or false?

☐ True

☐ False

Question 7

TIMSS is an example of a high-stakes assessment for students.

Is this statement true or false?

☐ True

☐ False

Question 8

Regional coordinating bodies such as the Educational Quality and Assessment Programme (EQAP) can help to build local capacity for assessment programs.

Is this statement true or false?

☐ True

☐ False



The correct answers are...



Question 1

Assessment programs often aim to look at the relationships between achievement and contextual factors (e.g. the relationship between achievement and socioeconomic status).

This statement is true. Learning assessments are useful when they collect information on achievement outcomes and on contextual factors (e.g. socioeconomic status, number of books in the home, first and other languages spoken). This information is often collected through questionnaires (e.g. for students, teachers and principals). This can provide valuable information about some of the factors that are associated with achievement.

Question 2

The Programme for International Student Assessment (PISA) aims to measure how students apply their learning.

This statement is true. Rather than being curricula-based, PISA measures the capacity of students to apply their learning in maths, science and reading. PISA is not grade-based, but is conducted with 15 year olds.

Question 3

Australia's National Achievement Program – Literacy and Numeracy (NAPLAN) is an example of a sample-based assessment.

This statement is false. NAPLAN is an annual assessment for all students in Years 3, 5, 7 and 9 in Australian schools. NAPLAN is therefore a population-based rather than sample-based assessment.

Question 4

A valid assessment produces stable and consistent results over time.

This statement is false. A valid test is one that measures what it is designed to measure (e.g. a reading test accurately measures reading skills). A reliable test is one that produces stable and consistent results over time. Ideally, learning assessments should be both valid and reliable.



Question 5

University entrance exams usually use norm-referenced measures.

This statement is true. A norm-referenced test generates scores in relation to what other students have achieved – that is, in scoring, students are compared with each other. This is what is sometimes called the ‘Bell Curve’, in which scores are distributed from low (e.g. fail) to average (e.g. pass/credit) to high (e.g. high distinction) based on an assessment of the overall group’s performance. This is in contrast to a criterion-referenced test that measures learning independently of other students. Standardised tests like TIMSS and PISA are criterion-referenced tests.

Question 6

Data from international assessment programs is often used for cross-country comparisons.

This statement is true. TIMSS and PISA are prime examples of programs that use cross-national data.

Question 7

TIMSS is an example of a high-stakes assessment for students.

This statement is false. TIMSS is not a high-stakes testing tool, but designed to gain information on mathematics and science achievement that can feed into policy and planning. TIMSS is a sample-based assessment and students do not receive their results from the assessment.

High-stakes testing on the other hand has important consequences for the test taker because important decisions or consequences depend on the result (e.g. university entrance examinations).

Question 8

Regional coordinating bodies such as the Educational Quality and Assessment Programme (EQAP) can help to build local capacity for assessment programs.

This statement is true. This is particularly the case when low technical capacity (and lack of experience) in the design, and implementation of valid and reliable assessment at the country level can be supported by regional level coordination and expertise. In the case of the Pacific Islands Literacy and Numeracy Assessment (PILNA), EQAP plays an important role in capacity building.



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