Learning Progressions in ACER’s Work

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Introduction

Learning progressions have garnered a lot of attention in recent times, both within Australia and internationally. ACER has begun developing learning progressions, and mapped out a program of work not only to continue with their development, but also to use them in a range of our activities and processes.

This program of work spans many parts of the organisation. It presents an opportunity for ACER to contribute to research and debate in an area of education policy that is of great interest. It also presents an opportunity for ACER to strengthen existing activities and broaden organisational expertise.

This document has been developed to provide background to ACER’s learning progressions; to explain the terminology that is being used in this work; and to describe how learning progressions are being incorporated into various aspects of ACER’s work.

ACER’s approach to assessment

ACER’s approach to assessment is distinctive of, if not unique to, the organisation’s work. It is predicated on the belief that assessment can support all learners to make good progress in their learning. It applies across all forms and levels of educational assessment. It applies equally to classroom assessments, externally developed tests and examinations, assessments made in interactive learning environments and national and international surveys.

At the heart of ACER’s approach is the intention to gain a substantive understanding of where learners are in an area of learning at a particular point in time. This usually means establishing what they know, understand and can do. Regardless of whether an assessment focusses on the performances of individual learners or groups of learners, its fundamental purpose – understanding where learners are in their learning – is the same.

Within ACER’s approach, assessments can establish where learners are in their learning to differing levels of diagnostic detail. They can establish levels of attainment in a broad area of learning such as a school subject, or levels of attainment in a particular sub-area of learning. They can also drill down further, to reveal learners’ specific misunderstandings, or difficulties they are experiencing. Again, in all cases, the fundamental purpose is to establish and understand where learners are in their learning.

ACER’s approach aims to yield quality information about learning levels that can be used in different ways, including to identify starting points for further teaching and learning, to monitor progress and trends over time, and to evaluate the effectiveness of strategies, policies and interventions. The intended use of an assessment does not usually influence how it is made – constructs are not assessed differently depending on whether the results will be used to evaluate past performance or to plan future improvement.

ACER’s approach can facilitate a range of different interpretations of where learners are in their learning. One possible interpretation is in terms of past performance: Have learners improved and by how much? A second possible interpretation is with reference to other learners: How does a particular learner’s attainment compare with those of other learners in the same year of school? A third possible interpretation is a more detailed substantive one: Given a learner’s current learning attainment, what are they likely to know, understand and be able to do? A fourth
possible interpretation is with reference to school or societal expectations: Has this learner reached the learning level required for a particular purpose, or the learning level expected by this stage of schooling?

What is a learning progression?

A learning progression describes what it typically looks like for learners to move from early knowledge, skills and understandings to more advanced knowledge, skills and understandings within a domain.

Learning progressions conceptualise, organise and describe learning domains with reference to core concepts/practices that are present in basic forms in early learners, and become increasingly abstract, generative or sophisticated as learning progresses. They have a **horizontal structure** that identifies different aspects of the learning domain, and a **vertical structure** that describes and illustrates what progress looks like for the domain.

Learning progressions are developed from empirical evidence of typical sequences of learning progress, and also from theoretical understandings of the nature of progress (eg, logical prerequisites for learning). They also are influenced by curriculum conventions and intentions (eg, sequences in which material is commonly introduced), and informed by the experiences, observations and practices of teachers.

Why are learning progressions central to ACER’s approach to assessment?

Learning progressions are emblematic of ACER’s approach to assessment for three reasons. First, by describing learning in substantive terms, they encourage understandings of learning levels and learner progress that numerical scores alone cannot convey. Second, by describing learning in terms of the development of core concepts/practices rather than the acquisition of atomised and discrete facts and skills, they encourage understandings of learning levels and learner progress in these terms, which in turn promotes awareness of the deeper learning possible in learning domains. Third, by eschewing an age- or grade-level frame of reference, learning progressions encourage understandings of learning attainment and learning progress that are aligned with ACER’s commitment to using assessment to support all learners, regardless of their starting points, to make good progress in their learning.

Key features of ACER learning progressions

ACER learning progressions have a number of key features. The fundamental structural features are the **levels**, **strands**, **level descriptors** and **progression elements**. They are represented in Figure 1 below.

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<th>Levels</th>
<th>Strands</th>
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<td>Levels are arbitrary but convenient divisions of developing knowledge, skills and understandings.</td>
<td>Strands are skill-based, concept-based or content-based divisions of domain.</td>
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<td>Progression elements highlight changes in concepts, contexts, behaviours and understandings across levels to reveal progress in learning within the domain.</td>
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<td>Level descriptors are descriptions of knowledge, skills and understandings at each level (overviews or strand-based)</td>
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Figure 1: Fundamental structure of ACER LPs
In addition to these fundamental structural features, ACER learning progressions are considered to have four different layers. The conceptualisation of layers is intended to convey the sense that ACER learning progressions describe learning in different degrees of detail. A summary of the different layers is given in Figure 2 above.

The layers have been created in recognition of the fact that different users of ACER learning progressions require different degrees of detail in the descriptions of learning. For example, teachers may be most interested in the fine-grained descriptions that feature in layer 3 of the progressions, whereas policymakers, curriculum developers and groups involved in setting performance expectations may be most interested in the big-picture statements in layer 1 and the overview of progress offered by layer 2.

The different levels of an ACER learning progression provide qualitative descriptions of learning progress. The quantitative representation of learning progress is provided by an underpinning interval scale derived from analysis of learner performance data from a range of sources.

ACER’s work on developing and using learning progressions

Since learning progressions are central to ACER’s approach to assessment, the organisation has committed to expanding its work on developing them and taking steps to ensure they are embedded in its activities and practices. It has also committed to exploring the implications of learning progressions for education generally.

The program of work has been divided into eleven work areas.

**WORK AREA 1 Developing learning progressions**

Work in this area will refine and validate the ACER reading and mathematics learning progressions, and develop learning progressions for other key learning domains.

It will also seek to ensure that work on developing the first wave of learning progressions is well documented, so that subsequent development activities draw on existing knowledge and expertise.

**WORK AREA 2 Establishing the research foundation for learning progressions**

Work in this area will seek to understand the broader research context in which ACER learning progressions sit, and ensure that the methods for developing and validating ACER learning progressions are rigorous and fully documented.

**WORK AREA 3 Using learning progressions in test development**

Work in this area will collect and prepare resources, and deliver a program of professional development in order to support test developers to use learning progressions when writing assessment items.
WORK AREA 4 Using learning progressions for reporting assessment results
Work in this area will develop reporting styles and automated reporting mechanisms that ensure ACER approaches to reporting are consistent with the principles of learning progressions.

WORK AREA 5 Developing the Learning Progression Explorer (LPE) software application
Work in this area will develop a software application that:
- enables ACER staff to draft, review and edit learning progressions in line with established rules and conventions;
- enables ACER staff to compile and export learning progression content;
- enables ACER staff and external users to explore learning progressions;
- stores content for ACER’s learning progressions; and
- outputs assessment results against ACER’s learning progressions.

WORK AREA 6 Embedding learning progressions in Progressive Achievement activities and resources
Work in this area will support Progressive Achievement staff and external consultants in developing resources and delivering training underpinned by learning progressions and aligned with ACER’s approach to assessment.

WORK AREA 7 Embedding learning progressions in ACER Institute activities and resources
Work in this area will support ACER Institute staff and external consultants in developing resources and delivering courses underpinned by learning progressions and aligned with ACER’s approach to assessment.

WORK AREA 8 Embedding learning progressions in ACER Academy activities and resources
Work in this area will support ACER Academy staff and external consultants in developing resources and delivering courses underpinned by learning progressions and aligned with ACER’s approach to assessment.

WORK AREA 9 Using and advocating for learning progressions in an international context
Work in this area will seek to capitalise on existing international opportunities for using the ACER learning progressions, and advocate for learning progressions generally in an international context.

WORK AREA 10 Using and advocating for learning progressions in Australia
Work in this area will seek to capitalise on existing national opportunities for using ACER learning progressions, and advocate for learning progressions generally in a national context.

WORK AREA 11 Considering implications of learning progressions for education generally
Work in this area will seek to explore how learning progressions have the potential to reframe thinking about educational concepts other than assessment, including, for example, curriculum, instruction, performance expectations, equity in education, student motivation and teacher professional development. The aim of this work will be to support action and further thinking in the work areas described above, and to develop ACER’s expertise and knowledge base in additional areas.