

Asia-Europe Education Dialogue

ASSESSMENT AS LEARNING

**MAXIMISING OPPORTUNITIES FOR STUDENT
LEARNING AND ACHIEVEMENT**

Edited by Zi Yan and Lan Yang



Assessment as Learning

Based on a solid theoretical basis of assessment-as-learning and updated empirical evidences, this timely book significantly expands the existing scope of assessment-as-learning typically developed in Western contexts.

This edited volume updates theoretical and empirical advances in assessment-as-learning in complex learning processes, brought together by an international panel of authors. The contributors provide a wide range of practical ways to harness the power of assessment-as-learning to make it work more effectively not only in the classroom, but also across other achievement-related situations (e.g., examinations, learning processes before and after classes).

Assessment as Learning provides a deep contemporary insight into the field of formative assessment, and brings much-needed international perspectives to complement the current Western-focused research. This is a valuable contribution to the discussion and provides useful insight for researchers in Education.

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Series Editor's Note

Asia and Europe together represent the largest landmass, the largest population, and the largest concentration of economic resources along with a diversity of cultural traditions. The 21st Century is characterized as “the Asian century” and therefore its interactions with Europe are fundamental. In this new century, the Asia-Europe connection is of utmost importance. This is indicated by the existence of the Asia-Europe Foundation (supported by the EU and housed in Singapore), the Asia Europe Meeting (ASEM), that is the regular platform for dialogue between EU member states and the Association for South East Asian Nations (ASEAN) plus other Asian societies, by the flow of students from Asia to Europe and vice versa, and by the growing academic literature that highlights the benefits of two way cross cultural communication. Education is a fundamental policy tool in both regions as each seeks to move to take advantage of the knowledge economy. The European Union (EU) has recognized this with its policies in support of Asia-Europe mobility programmes and different countries in Asia constantly look to Europe not so much for support, as in the past, but as a source of investment. The success of Asian students in international large scale assessments is a constant reminder to European countries that there is much to learn from Asia.

This Series provides a forum for dialogue on key educational issues and challenges faced by Asian and European societies. Its distinctiveness is its broad focus on Education in Asia and Europe. In essence, addresses major issues in education reform, student learning, leadership, curriculum, higher education, multicultural education, and other major educational issues affecting Asia and Europe. Most often a comparative perspective is provided but there are also opportunities for focusing on distinctive issues in one or other regions.

Against this background the current volume, dealing with the way learning opportunities can be provided for students as part of assessment processes, makes a welcome addition to the *Asia Europe Education Dialogue Series*. It explores in a broad range of cultural and social contexts a role for assessment as a learning process. The purpose is both to engage students and contribute to improved learning outcomes. This is a welcome addition to the international literature.

Kerry J Kennedy
Series Editor
Asia Europe Education Dialogue Series

1 Assessment-as-learning in the global assessment reforms

Zi Yan and Lan Yang

Why focus on assessment-as-learning?

Assessment can contribute to learning, or it can hinder it depending on how the assessment is designed and implemented in a particular learning environment. Important decisions have to be made about what it should do and how it should do it. Making assessment act as leverage to facilitate student learning is not only a desirable practice in classrooms but also an important goal of global assessment reforms. This book argues that assessment-as-learning is a purpose that can be considered for all assessment designs because inspiring and promoting students' learning through the assessment activity should always be an important aspect of assessment design.

Assessment-as-learning is not a new concept. However, there is a lack of clear theorisation of it. The term “assessment-as-learning” has started to gain public awareness since the 1970s, largely due to Alverno College's (1994) work in the context of higher education where it was defined as “a process, integral to learning, that involve observation and judgment of each student's performance on the basis of explicit criteria, with resulting feedback to the student” (p. 3). Their framework emphasised using assessment feedback to support learning and acknowledges self-assessment as a crucial student experience for learning. Later, research on assessment-as-learning started to flourish in K-12 settings and obtained more attention in pedagogical applications. It has been regarded as a regulatory process in metacognition, and the student is expected to act as the critical connector between assessment and learning (Dann, 2002; Earl, 2006). However, the available attempts to conceptualise assessment-as-learning mainly focus on students' active role in the assessment process but do not speak to what happens to assessment *per se* (see [Chapter 2](#) for a more detailed account). There is no clear description in terms of what the unique features of assessment-as-learning activities are, and how to design meaningful assessment-as-learning tasks.

In this book, we advance assessment-as-learning as a learning strategy, rather than an assessment method, that requires students to learn from engagement with the assessment task itself as well as activities associated with it. An assessment-as-learning task has to generate learning opportunities for students

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beyond recalling and using their prior knowledge and foster the development of metacognition and self-regulation for students to monitor their performance and cater for their ongoing learning needs.

Due to its promise in developing longer-term learning capacities, assessment-as-learning has become a rising trend in educational reforms around the world. Despite the heterogeneity in the status and process of education reforms in different countries, self-regulated learning and life-long learning have become the common goals of educational systems in the European Union (Cankaya, Kutlu, & Cebeci, 2015; Delors et al., 1996) as well as educational systems in Asia, such as Mainland China (China Ministry of Education, 1998), Hong Kong (Hong Kong Education Commission, 2000), and Singapore (Shanmugaratnam, 2014). Embracing these educational goals requires assessment *inter alia* to be designed and used in a formative way to inform future learning and teaching (Black & Wiliam, 1998). In this sense, assessment-as-learning is situated well in the worldwide education reforms because, on the one hand, it reshapes the role of teachers and students in the assessment process to focus on new learning through deliberate assessment design and, on the other hand, it is compatible with developing learners' self-regulatory abilities to facilitate their life-long learning (Lee, Mak, & Yuan, 2019).

Since assessment-as-learning emphasises students' active role in the assessment process, the teacher becomes no longer the sole source of feedback and every individual student becomes a learning resource for themselves, and for one another. Thus, assessment-as-learning has the potential to overcome, at least relieve, the practical constraints encountered in the implementation of assessment reforms, such as big class size and heavy teaching workload (Yan & Brown, 2021). If assessment-for-learning is a big step in terms of conceptualising assessment as an integral part of learning, rather than just a summary of learning, then assessment-as-learning takes a further step in advocating the role of the assessment activity in maximising learning opportunities and student responsibility in the assessment process.

Fortunately, the assessment shift from teacher-directed to student-initiated is taking place in many education systems. For example, in a review of education reforms in eight systems in the Asia-Pacific region, Mok et al. (2003) found that the purpose of assessment is being changed from summative evaluation as the sole purpose to serving multiple purposes, including supporting learning; and student involvement in the assessment process is consistently highlighted. Accordingly, research and practice relevant to assessment-as-learning have developed substantially. A simple search on Google scholar with "assessment-as-learning" as the key term demonstrated that the increase of the research interest on assessment-as-learning has significantly increased in the middle 1990s and boomed since the start of the 21st century (see [Figure 1.1](#)).

However, the increasing trend demonstrated in [Figure 1.1](#) represents only the more frequent use of the term, but it does not necessarily imply an enhanced level of understanding of assessment-as-learning. Although assessment-as-learning practices (e.g., self- or peer-assessment that provide students with opportunities to reflect on their learning strengths and weaknesses) have gained increasing

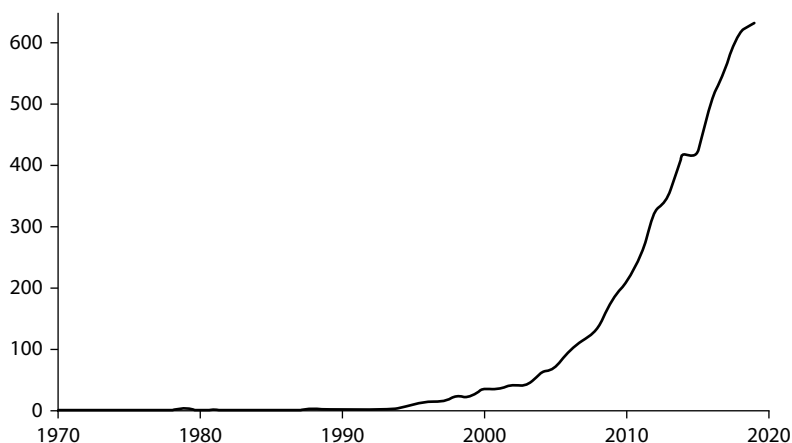


Figure 1.1 Annual occurrences of assessment-as-learning on Google scholar (1970–2020).

recognition and been widely seen in classrooms, a clear theorisation is still missing. The lack of consensus on the understanding of assessment-as-learning presents a challenge for its effective implementation as well as enacting its pedagogical merits in real classrooms. Furthermore, a number of issues related to assessment-as-learning remain unresolved or understudied. For instance, how to ensure that the educational values of both assessment-for-learning and assessment-as-learning can be maximised? What role can emerging digital technologies play in facilitating innovative assessment-as-learning activities? As assessment is a culture- and context-dependent event, what kinds of cultural, psychological, and contextual factors need to be considered when designing meaningful assessment-as-learning activities or programmes?

What approach does the book take?

This book offers new insight into assessment-as-learning in terms of conceptualisation and practice. Too much prior research on assessment-as-learning has taken its meaning for granted and failed to elaborate on what it is and how it is done. Without clarity about assessment design and implementation, it is hard to evaluate the quality and validity of the assessment.

In this book, we present current theoretical perspectives that conceptualise assessment-as-learning as a learning strategy and elaborate its role in the teaching, learning, and assessment nexus. Different from an exclusively psychometric viewpoint focusing on assessment reliability or accuracy, the perspective taken in this book focuses more on the role of assessment-as-learning in maximising opportunities for student learning and achievement and developing students' longer-term learning capacities.

As assessment is a complex process that is susceptible to the cultural context in which it is implemented, this book brings together a collection of innovative designs and implementations of assessment-as-learning across different

education sectors. These examples showcase how assessment-as-learning can be integrated into various assessment designs for different levels of students under diversified cultural and pedagogical contexts. We aim to bring more attention to the challenges of transferring assessment-as-learning ideas into practice and contribute to the pursuit of potential solutions.

Structure of this book

This book draws on research in both higher education and school education from nine countries/regions across the Asia-Pacific region and Europe. It provides a wide coverage of diversified perspectives and practices regarding assessment-as-learning. The work included in this book has involved 32 contributors, including leading international researchers as well as newly emerging scholars.

Following this chapter, there are two sections. The first is a theoretical section that revisits the concept of assessment-as-learning from different theoretical perspectives. Yan and Boud ([Chapter 2](#)) propose a new view of assessment-as-learning which draws from both traditions in higher education and school education. Their definition highlights the necessity of assessment tasks themselves providing learning opportunities for students as well as promoting students' active role in activities associated with them. Based on this defining feature, assessment-as-learning is contrasted with and distinguished from other assessment concepts, such as assessment-for-learning, self and peer assessment, sustainable assessment, and self-regulated learning. Boud ([Chapter 3](#)) explores how assessment-as-learning can be deployed to foster students' evaluative judgements. He compares features of assessment-as-learning with those of developing evaluative judgement and sets out criteria for examining how assessment-as-learning can have a longer-term benefit for students. Brown ([Chapter 4](#)) focuses on a fundamental question: Does assessment trigger self-regulatory responses? Based on research with Asian students who are learning in high-stakes examination contexts, he suggests that "compliance-driven" assessment-as-learning already takes place because of the meaning attached to assessments. Yang ([Chapter 5](#)) investigates the key role feedback orientation plays in assessment-as-learning to maximise students' learning opportunities. She proposes a theoretical framework of feedback orientation to illustrate detailed relationships between the self-processing strategies to covert external feedback to internal learning opportunities.

The second section presents innovative designs and implementations of assessment-as-learning and its impact on student development in different pedagogical contexts. This section embraces a wide variety of assessment-as-learning activities given that it can be integrated into various assessment designs as a fundamental purpose. The order of the chapters is based on the geographic regions where the empirical evidence comes from: [Chapters 6 and 7](#) are from Hong Kong, [Chapters 8 to 10](#) are from Mainland China, [Chapter 11](#) is from Singapore, [Chapters 12 and 13](#) are from the Philippines, and [Chapters 14 to 18](#) are from the UK, Spain, Finland, New Zealand, and Australia respectively. All the empirical chapters are consistent

in terms of emphasising the role of assessment-as-learning in providing learning opportunities and promoting students' active role in the assessment process.

Some chapters focus on the role of feedback in assessment-as-learning. Treating peer feedback as an assessment-as-learning activity, Yang, Yang, and Song (Chapter 6) employ a multi-dimensional concept of feedback orientation to examine how peer feedback gives Hong Kong undergraduates opportunities to develop self-evaluation and self-reflection skills. Frondozo and Yang (Chapter 13) investigate how university students' perceptions of feedback utility, feedback self-efficacy, and social awareness affect their responsibility for responding and using teacher feedback to promote learning. Assessment-as-learning is demonstrated when students actively engage with feedback. Tai, Contessotto, McBurnie, Nicola-Richmond, and Brown (Chapter 18) focus on the reciprocal nature of assessment-as-learning and feedback literacy observed in case studies from an Australian higher education context. They argue that while assessment-as-learning provides opportunities in developing students' feedback literacy skills, students' feedback literacy is a positive contributor to implementing assessment-as-learning.

Self-assessment is regarded as a typical assessment-as-learning activity. Guo, Huang, and Yan (Chapter 10) advance the concept of student self-assessment literacy and explore the self-assessment literacy of Chinese undergraduates through a case study. Using data from the Philippines, Mendoza and Yan (Chapter 12) examine the link between three types of teaching practices (i.e., involved, structured, and autonomy-supportive) and student's four self-assessment actions (i.e., seeking external feedback by monitoring, seeking external feedback by inquiry, seeking internal feedback, and self-reflection) in a secondary school. Remesal (Chapter 15) introduces the synchronous self-assessment, as a particular form or praxis of assessment-as-learning, designed for a teacher education programme in Spain. It takes place in parallel with the teacher-led classroom assessment and demonstrates pedagogical potentials. As a meaningful alternative to the traditional end exam in university mathematics courses, Häsä, Rämö, and Nieminen (Chapter 16) propose a digital self-assessment model that serves both formative and summative purposes in the Finnish higher education context.

Some chapters investigate assessment-as-learning from the perspective of metacognition or self-regulation. Wang and Xu (Chapter 7) depict the interactions between assessment-as-learning task design and metacognition. Drawing on data from multiple sources, they explore how two award-winning tertiary tutors designed nested tasks to stimulate students' metacognitive knowledge. Tan, Liem, and Pang (Chapter 11) examine assessment-as-learning through the lens of a self-regulated learning process. Specifically, the moderating role of competitive learning preference was studied in the relationships between other-approach or other-avoidance goals and Singaporean undergraduates' intentions to seek help for their academic problems. Viewing assessment-as-learning as a unitary process that builds student assessment capability, which in turns enables students to become self-regulated learners. Booth, Hill, and Dixon (Chapter 17) report an empirical study discovering how six primary school teachers in

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New Zealand created the conditions necessary for their students to become assessment-capable learners.

Taking a sociocultural viewpoint, Lao and Yan (Chapter 8) examine how assessment-as-learning fit in China's examination-oriented culture. Based on a case study conducted in a primary school, they identify the existing conflicts and offer suggestions for future development of assessment-as-learning in order to better fit itself in examination-oriented contexts. Xiao and Gu (Chapter 9) share their experiences in using assessment-as-learning activities (e.g., analysing exemplars, peer assessment, and self-reflection) to help Chinese undergraduates develop their capacity of making evaluative judgements in classrooms. Winstone and Winstone (Chapter 14) describe the use of "Dedicated Improvement and Reflection Time", or "DIRT", as a strategy for assessment-as-learning based on data from a survey of teachers and a small-scale implementation of DIRT in seven different subjects in a sixth form college in the UK.

In summary, this book highlights the pivotal role of assessment-as-learning in maximising students' learning opportunities and achievement. It incorporates new theoretical perspectives regarding the educational values of assessment-as-learning and re-positions it in relation to the current trend of education reform. Taking cultural and contextual factors into account, it also provides a collection of empirical studies that gives a comparable perspective on the uptake of assessment-as-learning in Asia-Pacific and European countries and regions. By revisiting the assessment-as-learning concept and emphasising its key features, we seek to bring more attention to assessment-as-learning in terms of its nature, design, merits, as well as challenges in order to inspire more research work on exploring how to maximise opportunities for student learning and achievement.

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Part I

Revisiting assessment-as-learning from new perspectives



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2 Conceptualising assessment-as-learning

Zi Yan and David Boud

Introduction

Despite the frequent use of the term assessment-as-learning in research and practice, there is a lack of consensus about its definition and unique characteristics that differentiate it from other assessment approaches. Such a vague conceptualisation is a constraint for communication and advancement of research in this field. This chapter first reviews the attempts to conceptualise assessment-as-learning in higher education and school education, and then proposes a new definition of assessment-as-learning, drawing insights from both sectors, as well as the associated implications. Then, the concept of assessment-as-learning is contrasted with and distinguished from other relevant concepts, such as assessment-for-learning, self and peer assessment, sustainable assessment, and self-regulated learning. Finally, the critique of assessment-as-learning as encouraging instrumentalism is analysed and discussed.

The evolution of the concept “assessment-as-learning”

Fundamentally, assessment is about making judgements about students’ learning on the basis of evidence. These judgements are made for different purposes, sometimes by different parties. The distinctions between assessment-of-learning (primarily judgements of what a student has finally achieved), assessment-for-learning (primarily judgements to aid students on their path towards meeting learning outcomes), and assessment-as-learning (primarily assessment that has value as a learning task in its own right) have been intensively discussed in the literature. The first of these, assessment-of-learning has been implemented and studied for over one thousand years (e.g., the Chinese imperial examinations, *Keju*). However, the latter two, especially assessment-as-learning, have a more recent history.

The distinction between assessment-of-learning and assessment-for-learning was boosted by the adoption of the terms summative and formative assessment, following the introduction of these terms by Michael Scriven (1967) in the original context of curriculum evaluation. These two terms have been well established in education for nearly half a century. The first widespread use of the term