



Assessment for learning-formative assessment

Manju Tomar

Assistant Professor, Tika Ram College of Education, Sonipat, Haryana, India

Abstract

This paper is focus on assessment for learning. Assessment for learning is an approach to teaching and learning that creates feedback which is then used to improve students performance. In assessment for learning includes-formative assessment and summative assessment. But we only study the formative assessment.

Keywords: assessment for learning, formative assessment

Introduction

Assessment is vital to the education process. In schools, the most visible assessments are summative. Summative assessments are used to measure what students have learnt at the end of a unit, to promote students, to ensure they have met required standards on the way to earning certification for school completion or to enter certain occupations, or as a method for selecting students for entry into further education. Ministries or departments of education may use summative assessments and evaluations as a way to hold publicly funded schools accountable for providing quality education. Increasingly, international summative assessments – such as OECD’s Programme for International Student Assessment (PISA) – have been important for comparing national education systems to developments in other countries. But assessment may also serve a formative function. In classrooms, formative assessment refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately. Teachers using formative assessment approaches and techniques are better prepared to meet diverse students’ needs – through differentiation and adaptation of teaching to raise levels of student achievement and to achieve a greater equity of student outcomes. But there are major barriers to wider practice, including perceived tensions between classroom-based formative assessments, and high visibility summative tests to hold schools accountable for student achievement, and a lack of connection between systemic, school and classroom approaches to assessment and evaluation.

The principles of formative assessment may be applied at the school and policy levels, to identify areas for improvement and to promote effective and constructive cultures of evaluation throughout education systems. More consistent use of formative assessment throughout education systems may help stakeholders address the very barriers to its wider practice in classrooms.

This overview shows how formative assessment promotes the goals of lifelong learning, including higher levels of student achievement, greater equity of student outcomes, and improved learning to learn skills.

Meeting goals for lifelong learning

Each of the national and regional governments participating in this study promotes formative assessment as a means to meeting the goals of lifelong learning. They are motivated by quantitative and qualitative evidence that teaching which incorporates formative assessment has helped to raise levels of student achievement, and has better enabled teachers to meet the needs of increasingly diverse student populations, helping to close gaps in equity of student outcomes. Teachers using formative assessment 2 approaches guide students toward development of their own “learning to learn” skills – skills that are increasingly necessary as knowledge is quickly outdated in the information society.

Promoting high-performance: raising levels of student achievement

Formative assessment methods have been important to raising overall levels of student achievement. Quantitative and qualitative research on formative assessment has shown that it is perhaps one of the most important interventions for promoting high-performance ever studied.

Promoting high-equity: Education for all

The “What Works” case studies support the idea that formative assessment methods may help create greater equity of student outcomes. Although Black and Wiliam note that research on the effectiveness of formative assessment is lacking in regard to underachieving students or students’ race, class, or gender, it is worth noting that several of the case study schools with large percentages of “disadvantaged” students had moved from “failing” to exemplary status over the past several years. Case study schools featuring programmes specifically targeted to the needs of underachieving students also yielded positive results.

Teachers in the case study schools used formative assessment to establish factors lying behind the variation in students' achievements in specific subjects, and to adapt teaching to address identified needs

Formative assessment builds students' "learning to learn" skills by:

- Placing emphasis on the process of teaching and learning, and actively involving students in that process.
- Building students' skills for peer- and self-assessment.
- Helping students understand their own learning, and develop appropriate strategies for "learning to learn".³

Students who are actively building their understanding of new concepts (rather than merely absorbing information), who have developed a variety of strategies that enable them to place new ideas into a larger context, and who are learning to judge the quality of their own and their peer's work against well-defined learning goals and criteria, are also developing skills that are invaluable for learning throughout their lives.

Addressing barriers to wider practice

The major barriers to wider practice of formative assessment that emerged from the case studies include:

The tension between classroom-based formative assessments of student learning, and high visibility summative tests – that is, large-scale national or regional assessments of student performance that are intended to hold schools accountable for meeting standards, and that may hold particular consequences for low or underperforming schools. Too often, highly visible summative tests used to hold schools accountable for student achievement drive what happens in classrooms.

A lack of connection between systemic, school and classroom approaches to assessment and evaluation. Too often, information gathered through national or regional monitoring systems, or even in school-based evaluations, is seen as irrelevant or unhelpful to the business of teaching. Too often, information gathered in classrooms is seen as irrelevant to the business of policy making.

Addressing the formative-summative tension

While teachers often express ambivalence or resistance to external summative tests, there is nothing inherent in summative assessment to prevent teachers from using formative methods. Indeed, summative results can be used formatively. Yet, in several countries, summative assessments have dominated political debate over education. Often, schools with poor results on public examinations face major consequences, such as threatened shut-downs, reconstitution, or firing of teachers.

In environments where summative tests have high visibility, teachers often feel compelled to "teach to the test", and students are encouraged to meet performance goals (to perform well on tests) at the expense of learning goals (that is, to understand and master new knowledge). Many – if not most – teachers perceive these external assessments as being in conflict with – or even inimical to – the practice of formative assessment. Poorly designed external tests, media league tables which use a narrow set of data to compare performance across schools, and lack of connection between tests and curriculum can also inhibit innovation.

Note that, for the purposes of this study, assessment refers to judgments of student performance, while evaluation refers to judgements of programme or organisational effectiveness. In all cases, the use of data to inform teacher planning of future classroom activities, or at the national level to inform and adapt policies, might be considered as secondary levels of formative assessment.

Strengthening cultures of evaluation

One of the particular interests for this study has been in examining how teachers and school leaders create or strengthen cultures of evaluation. In a culture of evaluation, teachers and school leaders use information on students to generate new knowledge on what works and why, share their knowledge with colleagues, and build their ability to address a greater range of their students' learning needs.

A culture of evaluation refers to the development of a shared language regarding the goals of learning and teaching, as well as a shared understanding of the purposes of evaluation in meeting these goals. Several countries support school-based evaluation as a key component, either as the primary or only form of school-level evaluation, or as a complement to external testing, inspections and programme evaluation. All education stakeholders are thus focused on developing strategies for school improvement. School-based evaluation helps school leaders and teachers to focus their attention on resources and organisational challenges, and to develop solutions appropriate to their circumstances.

The idea of school-based evaluation is quite appealing because it involves school staff directly, incorporates local knowledge, and potentially, directly shapes school improvement. However, school-based evaluation is not always well aligned with the work of schools. Evaluation tools may be more suited to the needs of policy officials than they are to schools and teachers.,

Some countries that do not now have external examinations and/or inspection systems are considering adopting such approaches to ensure greater school accountability. By contrast, a few countries that have promoted external examinations are paying greater attention to the potential for school-based evaluation to shape school improvement. Policy officials can learn much from the experiences of their counterparts. No matter which approach is chosen, assessment and evaluation are only really effective if the data gathered at different levels are taken into account throughout systems.

Ideally, information gathered in assessments and evaluations is used to shape strategies for improvement at each level of the education system. At the classroom level, teachers gather information on student understanding, and adjust teaching to meet identified learning needs. At the school level, school leaders use information to identify areas of strength and weakness across the school, and to develop strategies for improvement. At the policy level, officials use information gathered through national or regional tests, or through monitoring of school performance, to guide investments in training and support for schools and teachers, or to set broad priorities for education. In this way, summative information is used formatively at each level of the system,

Formative assessment – while not a “silver bullet” that can solve all educational challenges – offers a powerful means for meeting goals for high-performance, high-equity of student outcomes, and for providing students with knowledge and skills for lifelong learning. Systems that address tensions that prevent wider practice of formative assessment and that foster cultures of evaluation are likely to make much greater progress toward these goals.

The Elements of Formative Assessment: Case Study Findings and Supporting Research

The key elements that have emerged from the case studies and related research are:

1. Establishment of a classroom culture that encourages interaction and the use of assessment tools.
2. Establishment of learning goals, and tracking of individual student progress toward those goals.
3. Use of varied instruction methods to meet diverse student needs.
4. Use of varied approaches to assessing student understanding.
5. Feedback on student performance and adaptation of instruction to meet identified needs.
6. Active involvement of students in the learning a dynamic

Element 1: Establishment of a classroom culture that encourages interaction and the use of assessment tools

The concept of formative assessment was first introduced in 1971 by Bloom, Hastings and Maddaus. They formally introduced the idea that assessment need not be used solely to make summative evaluations of student performance, arguing that teachers should include episodes of formative assessment following phases of teaching. During these episodes teachers should provide students with feedback and correction as a way to remediate student work. Most experts now consider formative assessment as an ongoing part of the teaching and learning process. Formative assessment thus becomes a central element in teaching and learning. Teachers across the case study schools have integrated formative assessment into their teaching, establishing classroom cultures that encourage interaction and use of assessment tools. In each of the case studies, teachers noted the importance of helping students to feel safe to take risks and make mistakes in the classroom. This is, in part, simply practical: children who feel safe to take risks are more likely to reveal what they do and don't understand, an essential feature of the formative process. Research also highlights the importance of focusing students' attention on mastering tasks, rather than on competition with peers, and in developing emotional competencies. Emotional competencies, such as self-awareness, self-control, compassion, co-operation, flexibility, and the ability to make judgments on the value of information serve students well in school and throughout their lives, Emotions also affect the student's self-esteem, motivation and ability to regulate his or her own learning.

Element 2: Establishment of learning goals, and tracking of individual student progress toward those goals

Several countries have established general standards for student achievement, and monitor students' progress toward those standards. Teachers in several of the case study schools worked together to define the standards in more detail, developing and sharing criteria with colleagues and students, and developing new internal systems to track individual student progress. Teachers in the case study schools look to these objective standards to set out learning goals for students, sometimes scaffolding these goals for weaker students. The teachers have also moved away from traditional systems of marking – which tend to rely on “social comparison” of student performance toward methods that allowed them to track an individual student's progress toward the learning goals, as judged through established criteria. International research supports the idea that tracking a student's progress toward objective learning goals is more effective than is comparison with peers' progress. In situations of comparison, weaker students absorb the idea that they lack ability, and thus lose motivation and confidence. The establishment of learning goals and tracking of student progress toward those goals makes the learning process much more transparent; students do not need to guess what they need to do to perform well. Teachers also help students to track their own progress and to build confidence.

Element 3: Use of varied instruction methods to meet diverse student needs

Teachers in the case study schools adjust their teaching methods to meet the needs of a variety of students. In some cases, this means that they adjust teaching to recognise different emotional styles. Teachers note that more vulnerable students need help in developing greater emotional competency. These teachers are concerned with building students' confidence in their own skills and knowledge and in their ability to manage their own learning. Social and cognitive psychologists, anthropologists and other social scientists have increasingly recognised that the knowledge and experiences children bring to school shape their learning experiences. Such prior knowledge is shaped, in part, by learners' ethnicity, culture, socio-economic class, and/or gender. Teachers can help students learn new concepts and ideas in ways that connect to their prior understandings and ways of

looking at the world. Teachers who are attuned to variations in cultural communication patterns and sensitive to individual ways of communicating are more likely to draw out what children understand, and how they develop their understanding of new ideas. Research has found that parents can play an important role here, too, because they share their children's life experiences, are well acquainted with their abilities and interests, and can help their children make connections between ideas.

Element 4: Use of varied approaches to assessing student understanding

Teachers in the case study schools use varied approaches to assessing individual student progress over time, in realistic settings, and in a variety of contexts. Students who may not perform well in certain tasks have the opportunity to demonstrate their knowledge and skills in others. Such varied assessments also draw out information on students' ability to transfer learning to new situations – a skill emphasised as important to learning to learn – and on how student understanding might be corrected or deepened. These varied assessments may include tests and other summative forms of assessment, so long as the information on student performance gathered in the tests is used to inform further learning. Summative results, when embedded in the wider teaching and learning environment, are more likely to be used formatively. They also help to lower the stress of tests, which can have a negative impact on the self-esteem of lower achieving students.

Element 5: Feedback on student performance and adaptation of instruction to meet identified needs

Feedback is vital to formative assessment, but not all feedback is effective. Feedback needs to be timely and specific, and include suggestions for ways to improve future performance. Good feedback is also tied to explicit criteria regarding expectations for student performance, making the learning process more transparent, and modelling "learning to learn" skills for students.

Teachers also benefit from the feedback process. When providing feedback, teachers pay closer attention to what students do and do not understand well, and are better able to adjust teaching strategies to meet identified student needs.

Element 6: Active involvement of students in the learning process

Ultimately, the goal of formative assessment is to guide students toward the development of their own "learning to learn" skills (also sometimes referred to as "metacognitive" strategies). Students are thus equipped with their own language and tools for learning and are more likely to transfer and apply these skills for problem solving into daily life; they strengthen their ability to find answers or develop strategies for addressing problems with which they are not familiar. In other words, they develop strong "control" strategies for their own learning. "Metacognition" involves awareness of how one goes about learning and thinking about new subject matter and is sometimes referred to as "thinking about thinking". The student who has an awareness of how he or she learns is better able to set goals, develop a variety of learning strategies, and control and evaluate his or her own learning process. Thus, a key role for teachers is to help children build confidence, and develop a variety of learning strategies. Teachers in the case study schools model such learning behaviour, teach self-assessment skills and help students to analyse of how well different learning strategies have worked for them in the past. Such teaching approaches may be particularly important for children who do not have extra support for learning at home

Policy Implications

Policy principles of formative assessment to promote wider, deeper and more sustained practice are to:

1. Keep the focus on teaching and learning.
2. Align summative and formative assessment approaches.
3. Ensure that data gathered at classroom, school and system levels are linked and are used formatively.
4. Invest in training and support for formative assessment.
5. Encourage innovation.
6. Build stronger bridges between research, policy and practice.

References

1. Ames C. "Classrooms: Goals, Structures, and Student Motivation", *Journal of Educational Psychology*, 1992:84:261-271.
2. Beaton AE, *et al.* *Mathematics Achievement in the Middle School Years*, Boston College, Boston, MA, 1996.
3. Schunk DH. "Goal and Self-evaluative Influences during Children's Cognitive Skill Learning", *American Educational Research Journal*, 1996:33:359-382.
4. Simmons H. "School Self-evaluation in a Democracy", *School-Based Evaluation in D. Nevo (ed.), School-based Evaluation: An International Perspective*, JAI Press, Oxford, 2002, 17-34.