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Teachers and Curriculum is an online peer-reviewed publication supported by Wilf Malcolm Institute of Educational Research (WMIER), Faculty of Education, The University of Waikato, Hamilton 3240, New Zealand. It is directed towards a professional audience and focuses on contemporary issues and research relating to curriculum pedagogy and assessment.

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Teachers and Curriculum provides an avenue for the publication of papers that

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- reports on research in the areas of curriculum, pedagogy and assessment;
- provides examples of informed curriculum, pedagogy and assessment; and
- review books and other resources that have a curriculum, pedagogy and assessment focus.

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Acknowledgement of Reviewers

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THINKPIECE: AN IDEA TO ENHANCE THE PRACTICE OF SELF-ASSESSMENT IN CLASSROOMS

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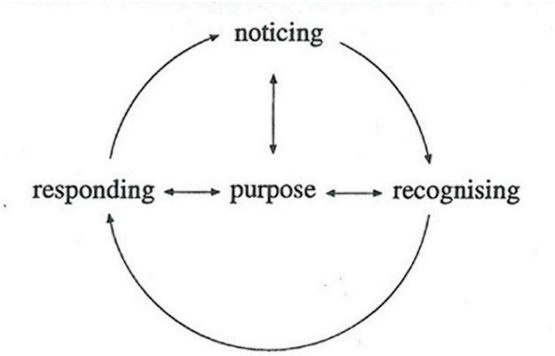
In this short piece, I propose self-assessment practice in classrooms can be enhanced by using the elements of Bell and Cowie's *Interactive Formative Assessment* (IFA) model (Bell & Cowie, 2001). Self-assessment activities are now commonplace in primary classrooms and have their foundation in assessment *for* learning (Black & Wiliam, 1998) and assessment *as* learning (Earl, 2003). Clarke (2005) listed self and peer assessment, along with questioning, sharing criteria with learners and feedback, as the four main assessment practices for formative purposes or assessment *for* learning. The concept of assessment *as* learning intentionally focuses teacher attention specifically on a learner's involvement in his or her own assessment within learning. It has become generally accepted that increasing student voice and participation in learning is important because it contributes to students developing as self-directed or lifelong learners (Ministry of Education, 2011). We might also admit that managing classroom learning is easier for teachers when students internalise standards, self-monitor and self-mark. To help design and evaluate classroom self-assessment practice I am proposing that teachers might adapt and adopt Bell and Cowie's (2001) model of IFA.

Figure 1: Model of interactive formative assessment
(Bell & Cowie, 2001, p. 86)



The model of interactive formative assessment

The IFA developed by Bell and Cowie was based on observations in New Zealand science classrooms in the late 1990s along with a recognition that student learning involves personal, social and subject based development. In this model interactive formative assessment is a process involving three aspects: teachers noticing, recognising and responding (see Figure 1).

Information from "noticing" of individual or group thinking and verbal, non-verbal actions, interaction and tone that is available to the teacher is in the moment and therefore not likely to be recorded. The second element of the interactive formative assessment process is when teachers recognise the *significance* of what they notice for the development of students' learning and as learners. A teacher's ability to recognise what he or she notices is influenced by content knowledge and teaching experience combined with knowledge of individual students and the context. Bell and Cowie (2001) have explained, "to recognise the significance of what is noticed, teachers must be able to interpret the information they have and to understand its implication in terms of what sense the students are making" (p. 88). The third aspect of the IFA model is to respond. Teachers respond to what they notice and recognise and this response is often spontaneous. With experience teachers make a deliberate choice of response from a wider range of alternatives.

Bell and Cowie's model was influential in the development of the concept of assessment *in* learning

by Earl and Giles (2011), who emphasised the significance of teachers noticing students and recognising meaning through "reading" students and then responding to what they have noticed. I consider that the IFA model is a relatively easy way to remember important teacher actions to be developed for productive teacher-student interaction within classroom assessment.

Application of the elements of IFA to student self-assessment

Just as Bell and Cowie's model is designed to inform teacher actions, students also need guidance in looking at and thinking about their work. Chappuis (2012) suggests that, as part of guided practice in self-assessment, students be asked to think about their work before their teacher assesses it. Chappuis argued that this "scratches up the soil in the brain so that feedback seeds have a place to settle in and grow" (p. 38). If students are thinking about their work using the IFA model, this would mean that the first element, noticing, would refer to "pausing to consider" instead of the "in moment" of the original model. Noticing in self-assessment would require students to develop skills, with teacher and peer support, to look for evidence against criteria for progress, or quality in their work.

The second element, recognising, would be demonstrated when students develop the ability to recognise aspects of their work that show progress, success or quality, gaps and uncertainties, and recognise the significance of what they noticed. This knowledge will help learners improve their understanding of the implications for their learning and the next steps that are needed. For examples of appropriate self-assessment activities to develop learners noticing and recognising see Gregory, Cameron, and Davies (2000). Noticing and recognition can also be prompted by feedback from peer and teacher assessment processes.

The responding element is when action is taken as a result of what was noticed and recognised, and potentially revisiting and also recording some of this. Self-assessment practice focused on student's learning work rather than an individual's characteristics would be applicable in diverse settings and with diverse groups of students. Given suitable teacher encouragement, students can develop the habit of checking their observations through further questioning, and seeking evidence of meeting criteria. Over time students will develop insight regarding how their work is evaluated. With the aim of developing learners' ability to notice, recognise and respond we can encourage students to evaluate their work constructively. I consider these actions are important for students to develop regarding their own learning progress and achievement.

Applying the elements of Bell and Cowie's model of interactive formative assessment to student self-assessment in the classroom can be compared with two of the three ways that Tan (2007) identified self-assessment as linked to lifelong learning. These three ways include students planning, evaluating and developing individual responsibility for their own learning. Tan's promotion of students evaluating their own learning would fit nicely with the "noticing" and "recognising" aspects of the IFA model. His identification of students' ability to plan and direct their own learning would be the "responding" element in the Bell and Cowie model through learners taking action and using feedback. These three stages of the Bell and Cowie model can be seen to contribute to the development of individual responsibility for learning, Tan's third link between self-assessment and lifelong learning.

Teachers in Bell and Cowie's 2001 project indicated that noticing was easier than responding. We might expect the same for our students in their practice of self-assessment. We might also expect that recognising is the element of the process that will have the most power for students in improving their learning and developing a sense of responsibility for learning and self-direction.

Concluding comments

Expectations of, and demands on, teachers' time and energy are increasing from every quarter. This busy-ness can divert teachers from considering more deeply the messages their students are getting about what is valued, and the longer-term implications of this valuing. As teachers we all need to remind ourselves often that learning is an interactive process and about the significance of student engagement with their learning experiences. Self-assessment practices in classrooms can demonstrate that value is placed on learner involvement in their own learning and assessment, and support development of students' ability to observe and think about learning and the outcomes of their learning.

Self-assessment practice in classrooms using the three elements of IFA would develop individual learner's skills at noticing and recognising and responding. With this aim self-assessment practice would encourage students to make use of assessment information to develop their learning. I propose that using the elements of Bell and Cowie's model to design and evaluate self-assessment in classrooms will support students identifying and refining their own individual short-term learning goals within an increasing understanding and confidence with longer-term lifelong learning goals (Ministry of Education, 2007). Then we could say with confidence that worthwhile self-assessment practice is being undertaken in our classrooms.

References

Bell, B., & Cowie, B. (2001). A model of formative assessment. In B. Bell & B. Cowie (Eds.), *Formative assessment and science education* (pp. 80–94). Dordrecht, The Netherlands: Kluwer.

Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment.* London, England: Kings College. Retrieved from http://www.pdkintl.org/kappan/kbla9810.htm

Chappuis, J. (2012). "How am I doing?" *Educational Leadership, 70*(1) 36–40.

Clarke, S. (2005). *Formative assessment in action: Weaving the elements together*. London, England: Hodder Murray.

Earl, L. (2003) *Assessment as learning.* Thousand Oaks, CA: Corwin Press.

Earl, K., & Giles, D. (2011) An-other look at assessment: Assessment in learning. *New Zealand Journal of Teacher's Work, 8*(1), 11–20.

Gregory, K., Cameron, C., & Davies, A. (2000). *Self-assessment and goal-setting: For use in middle and secondary school classrooms*. Courtenay, Canada: Connections.

Ministry of Education. (2007). *New Zealand curriculum*. Wellington, New Zealand: Learning Media.

Ministry of Education. (2011). *Ministry of Education Position Paper: Assessment (Schooling sector)*. Wellington, New Zealand: Learning Media. Retrieved from http://www.minedu.govt.nz/theMinistry/PublicationsAndResources/AssessmentPositionPaper.aspx]

Tan, K. (2007) Conceptions of self-assessment: What is needed for long-term learning? In D. Boud & N. Falchilcov (Eds.), *Rethinking assessment in higher education* (pp. 114–127). New York, NY: Routledge.