

# 'Summative' and 'Formative': Confused by the Assessment Terms?

New Zealand Journal of Teachers' Work, Volume 7, Issue 1, 53-63, 2010

# **BILL USSHER & KERRY EARL**

Faculty of Education, University of Waikato, Hamilton, New Zealand

# **ABSTRACT**

The terms 'formative' and 'summative' when linked to assessment can cause confusion. Should these terms be dropped? Should we move on from them? This paper argues that it is the common shortening of the full and meaningful terms, 'assessment for formative purposes' and 'assessment for summative purposes' that contributes to a confusion over assessments, information and methods, particularly for pre-service teachers and those with less teaching experience. By being well-informed about both purpose and assessment activity, teachers will have greater clarity in understanding, communication and practice regarding these important and useful concepts.

#### INTRODUCTION

We contend that the shortening of assessment terms to 'summative' and 'formative' has created some confusion in the minds of teachers. This paper highlights how the terms are being used in contemporary educational assessment literature and how changes have created some confusion and difficulties in understanding and communication, especially for less experienced teachers. We argue that it is time to either change the terminology completely or restore the original terms, assessment for summative purposes and assessment for formative purposes. The focus of this paper is on the two important but separate tasks of gathering information by way of assessment strategies, and the consequent use of that information for specific purposes.

Classifying assessment tasks as either formative or summative has been both useful and problematic. The identification, definition and consistent use of specific labels are useful for developing understanding and communicating with others. However, familiarity has lead to shortened 'colloquial' versions that can convey unintended meaning to those new to the use of these labels or terms. Starting before Paul Black and Dylan Wiliam's (1998) opening of the *Black Box*, the necessity for improved knowledge in educational assessment has grown in relation to contemporary knowledge development about learning and teaching. With this has come the need to use terms that give teachers, researchers and writers a clearer understanding and more precise vocabulary: the need for enhanced assessment literacy (Stiggins, 1991).

#### CLASSIFYING THE ASSESSMENT TASK

Teachers, researchers and writers need to address the issue that assessment tasks are classified as either formative or summative. From the early identification of these concepts through research, the terms used were assessment for summative purposes and assessment for formative purposes. However, in recent educational assessment literature there has been a tendency to reduce the term to summative assessment and formative assessment. Examples of this are readily available in writing by highly regarded researchers and experts. The popular book *Unlocking Formative Assessment*: Practical Strategies for Enhancing Pupils' Learning in the Primary Classroom (NZ version) (Clarke, Timperley, & Hattie, 2003) is the most obvious example where the shortened term is part of the title and used throughout the content. This shortened version is repeated throughout Shirley Clarke's more recent books (2005; 2008). The more recent works of Paul Black, Dylan Wiliam and the Assessment Reform Group members have reverted to using this shortened term also (Black, Harrison et al., 2003; 2010). Other writers of note such as Beverley Bell and Bronwen Cowie (1997; 2001) and Terry Crooks (2002a; 2002b; 2006) also use these abbreviated terms. In Michael Absolum's (2006) popular New Zealand text Clarity in the Classroom, he uses the shortened term in the title and throughout. It is not a challenge to find the term formative assessment used freely in current texts, articles and conversations, thus reinforcing learners to this term in everyday conversations as being correct.

Other writers of educational assessment texts commonly used in New Zealand clearly stay away from using these terms. Of note, Mary Hill (2008; Davies & Hill, 2009), Judy Parr and Helen Timperley (2008) write about assessment tasks, assessment information or evidence and the use that teachers will make of such information. The only exceptions to this are noted in their earlier works or when they refer to the work of other educational assessment writers.

#### **METHODOLOGY**

This small qualitative study utilises the comments and postings of a class of initial teacher education students enrolled in an undergraduate paper and some inservice teachers enrolled in a postgraduate paper at the University of Both papers were Internet-based and focused on educational Waikato. assessment. The enrolled students provided written informed consent for their lecturer to access and use their contributions. These students were not disadvantaged nor was their study impacted by their participation in this project. Evidence was gathered by surveying a range of online asynchronous group discussions to support the research question for this paper: Are assessment students confused by the prefixing of the purposes to tasks with the actual assessment terms?

# WHO IS CONFUSED?

First, we surveyed the way the terms were used by students studying assessment in a core paper of their undergraduate programme. Of the 48 students surveyed, about two-thirds used only the terms formative assessment or summative assessment when referring to assessment tasks, strategies, and practices in their discussions. The lack of clarity of purpose is reflected in the nature of their online postings as illustrated by the following comments:

I am using formative assessment tools ...

... are interesting bi-products of summative assessment.

... these are the outcomes of summative assessment.

The test was used as summative assessment ....

It is a summative tool.

... a form of formative assessment.

I administered a summative assessment of writing.

I used formative and summative assessments.

Although a relatively small sample, the majority of these students consistently used the terms formative assessment and summative assessment, indicating that the assessment tasks could be classified by their intended purpose.

On the other hand, six members of another discussion group in this same paper discussed assessment generally rather than for any specific purpose and their discussion appeared less confused. The initial post in this group referred to the task separate from the purpose and this was reflected throughout. We suggest that this lead post set the discourse for that discussion. Two examples of their comments were:

We should be creating tests as assessment tasks from which the evidence will be used for formative purposes.

If we assume that one of the purposes of assessment for summative purposes is to find out what has been learnt ...

Second, students in the post-graduate paper who were mainly experienced classroom teachers, demonstrated a clear distinction between assessment as a tool for gathering information to determine learning, as opposed to the purposes for which the gathered information would be used, either formatively or summatively. For example, Ange's posting highlights this distinction:

It is not about summative versus formative; it's how we use this data and the purpose behind the assessment. The assessment needs to be for educative purposes to ultimately benefit the child. Schools also need data to look at progress across the board etc. Summative data from assessments can be used to benefit student learning if used appropriately and it depends on teachers having the skills to use the data effectively in conjunction with other forms of assessment. I agree in the need not to over assess. It's all about purpose and whether it is benefitting student learning.

Ange, Deputy Principal (31/8/09)

Other students demonstrated ability to look at the type of assessment and consider the purpose separately rather than classifying an assessment type by a single purpose (e.g., tests are for summative purposes). In comparison, this small survey would indicate that the more experienced teachers are less confused or misguided in their use of the terms formative and summative than the student teachers.

We believe the evidence suggests that writers and students of assessment have become confused over aspects of assessment because of common use and shortening of terms in contemporary education networks. The use of the term summative assessment is not as common as formative We suggest that this is due to the rise in popularity of assessment. assessments for formative purposes during the last two decades and the consequent fall from grace of assessments used for summative purposes. However, recent moves by the current New Zealand Government and Ministry of Education regarding changes for National Standards and assessment in literacy and numeracy have put the spotlight back on the purposes of assessment, emphasising the importance of gathering and recording evidence of learning to enable teachers to make informed overall teacher judgments (OTJ) regarding progress and achievement. A potential for increased confusion among teachers is likely.

In the document Directions for Assessment in New Zealand: Developing Students' Assessment Capabilities, written 'to provide broad advice to the Ministry of Education' (p. 4), the writers (Absolum, Flockton et al., 2009) invite teachers and educators to move on from these terms, indicating that they have,

debated the use of the terms 'formative' and 'summative' to differentiate purposes of assessment. [They] acknowledge the useful role that these terms have played in broadening teachers' understanding of assessment, but are of the view that the time has come to move on.

Section 1.3

To continue to use specific labels or terms when they become constraining to effective communication and understanding rather than enabling would be a mistake. So should we, as suggested, move on? Let's examine the purposes of assessment in practice.

# CLASSIFYING THE USE OF THE DATA GATHERED

Assessment tasks are created to gather evidence of learning progress and The New Zealand Curriculum (Ministry of achievement, and teaching. Education, 2007) states clearly that schools will 'consider how they will gather, analyse and use assessment information' (p. 39), and then later how they will use the gathered and analysed information for 'the purpose of improving student learning' (p. 39). This document clearly states that assessment information should be used purposefully for policy decisions, teaching practices, reporting, comparing achievements and learning. However, there is no reference at all to specific purposes, such as summative or formative. Searching recent issues of The New Zealand Education Gazette (Ministry of

Education) failed to locate any reference to either formative or summative assessment, only to the term assessment as an inclusive concept.

Assessment tasks produce information that can be used to improve learning and teaching. It is clear that many assessment tasks are created with a primary purpose in mind; however, this does not restrict the use of that evidence to that purpose only. A teacher may choose to use assessment information for a variety of purposes. As Absolum, Flockton et al. (2009) explain:

The reality is that any assessment information gathered for the purpose of informing learning (formative assessment) could also be used to make a judgment about learning to date (summative assessment), and vice versa. For this reason, we make limited use of the two terms.

Section 1.3

Often, data gathered through assessment tasks in schools and classrooms are used only for one intended purpose. Teachers and student teachers frequently hold this perspective. We argue that this has come about through the increasing emphasis on assessment evidence being used mainly for formative purposes and the marginalizing of assessment tasks used solely for the perceived often-unpleasant, summative purposes of reporting, credentialing and accountability.

# Principles of good assessment

Putting aside informal practices for formative purposes for the moment (see Bell & Cowie, 2001) it may be argued that an assessment task created to gather information for one purpose will not hold up when the information is used for other purposes. All good formal assessment tasks must be as valid, reliable and manageable as possible (Sutton, 1992). Based on these three principles of good assessment, we suggest this argument of one data-set, one purpose does The validity of an assessment task will not be affected if the information is used for more than one purpose or the intended purpose only: the content will still match as intended; the fairness of the task will remain unchanged; the predictive validity will not have changed; and, the consequential decisions made regarding the use of the data may even be enhanced. Likewise, the reliability of the task will not be affected if the data are used for more than the one intended purpose: the marking schedule will remain intact; the testing environment will not be changed; and, the items themselves will not change in quality or difficulty. On the other hand, the manageability of the assessment will be affected if the data are used for more than just the intended purpose: more efficient use may be made of the time needed to gather the information; and, the gathered data will be utilised more effectively. As Stiggins (1991) suggests, decisions about the use of data 'can only be as sound as the data on which they are based' (p. 535).

# For more than one purpose

The fact that valuable information gathered through an assessment task can be used for more than one purpose was recognised and acknowledged by several postgraduate students. For example:

That is what I was meaning. If you can use data collection for more than one purpose it is totally useful as you may be able to use it both formatively and summatively. The maths PAT can be used for both. We also use our literacy sample for both – one gives me the overall assessment of where the whole school is at this one time. and it also gives the teacher and child the 'where the child is at' and 'next step development', i.e., both formative and summative.

Greg, Principal (31/8/09)

Students went on to rationalise the multiple uses of evidence gathered from one assessment task.

I do not think that we are looking at this from the right point of view. I do not think we should be arguing formative assessment v summative assessment. They obviously both have their place in students' learning ... all assessments should be used for summative and formative 'purposes'. So that we do not over assess our students and because teachers are always constrained by time. So the question is not, should we do a summative or formative assessment on this student. Rather what purpose do I want to use this assessment data for?

Demelza, third year teacher (31/8/09)

Undergraduate student Kerri is also clearly searching for some clarity about these concepts:

Although I am gaining some knowledge of summative assessments aren't all assessments used as formative? As a teacher if I identify in a summative test that there has been a lack of learning in one area I would revisit it in other ways, perhaps as a revision exercise. As a teacher I feel it is important not to just merely move on after a summative test if there is a large portion of learning that has been shown was not learnt. Tests cannot be the end of learning! I would consider them to be more of a snap shot of what students know at a particular point in time and show what still needs to be learnt. Yes it does signal the end of a particular topic but it can be used to report what the child still needs to learn, perhaps used to report to the next year's teacher where gaps of learning need to be visited. I don't think any test should have 'no impact on learning'.

Kerri, classroom teacher (20/7/09)

It is clear from these examples that data gathered through assessment tasks, perhaps created with one purpose in mind, is often utilised for other purposes. However, it would be wrong of us if we did not make it clear that not all assessment tasks will provide good summative information.

#### ARE THE TERMS HELPFUL?

It is clear that these terms have transformed over time, for example, from assessment for summative purposes through summative assessment to assessment of learning. Using the terms as prefixes, locates an assessment task with one intended purpose when correctly the task should not be restricted to gathering evidence for only one intended use of the information. We know that the evidence gathered through many assessment tasks can be used for multiple purposes so it is not the task that should be labelled but the intended use of the information we gather from that task: the learning decisions to be Other common examples of inaccurate use of language becoming common discourse in our society: referring to a disabled child rather than a child with a disability; commenting on a fast car rather than a car that is being driven fast; or, labelling a boy-racer car rather than a car being raced by a boy! Many of these terms are colloquial abbreviations that are not intended to misinform but there is the possibility that they do confuse the issue by moving the focus – to the disability, to the speeding car. We suggest this is particularly true for those new to learning about assessment practices such as beginning teachers where the use of the term summative assessment gives the impression that such a task is created with only one useful purpose for the data.

#### WHAT SHOULD HAPPEN?

We argue that the abbreviation of the terms has redrawn the focus toward the use of assessment leaving the actual assessment task detached from teacher consideration and evaluation. The result of this is a greater focus by teachers and student teachers on the use of the evidence rather than the creation of 'quality' assessment tasks that will gather quality evidence for a variety of purposes. In New Zealand schools, teachers use a variety of assessment tools, types and strategies for a variety of purposes:

- The tools used include teacher-made, nationally available, standardised, and commercially made assessments. This does not determine whether they are summative or formative;
- The *types* of assessments used include tests, tasks, performances, etc. This is not suggestive of any specific use of the information gathered rather the pedagogical knowledge of the teacher helps determine the most appropriate type; and
- Various *strategies* are used such as individual, group, class, cohort, and whole-school tasks. This does not define the intended use of the assessment information.

The information gathered through assessment tasks or activities can be used for a variety of purposes – for reporting achievements or progress, for improving learning, for improving teaching, to identify achievement, or for accountability to other interested parties. It is the information that is used for summative or formative purposes, rather than the assessment task.

Catherine Garrison and Michael Ehringhaus suggest, 'The terms formative and summative do not have to be difficult.' (n.d., p. 1), and this is supported by Wynne Harlen who suggests, 'There seems to be value in maintaining the distinction between formative and summative purposes of assessment while seeking synergy in relation to the process of assessment' (2005, p. 20). We support Absolum et al. (2009) in moving on from the terms summative assessment and formative assessment, and suggest that the terms should be rephrased to ensure that student teachers and teachers new to educational assessment are not confused. It is not the test or teacher-made resource or assessment task that is summative or formative, rather it is how you use the information gathered through such activities. Or, to put it another way, it is the meaning made from the results of the assessment and the consequences (decisions and actions) resulting from the meanings rather than the assessment task itself. Clearly, one task can be used for a variety of purposes. As Rick Stiggins suggested in 1991, the development of assessment literacy is the critical component for successful assessments.

The purposes of assessment are not discrete or opposed to one another in any way. Quality information gathered using valid and reliable assessment tools and types could be used both formatively and summatively. A teacher would be negligent if s/he noticed a 'gap' in a child's (or class's) learning from assessment information that was being gathered for summative purposes and s/he did not act on that information formatively. Assessment evidence is a snapshot in time. Teachers must distinguish the different purposes for the evidence gathered, not the different assessments. Teachers may set out to give children an assessment task such as a test, intending to use the evidence in their overall teacher judgment as a measure of progress and achievement for reporting purposes, but from the assessment evidence it may be clear that some of the evidence should be used formatively as well. When and how that happens is a professional decision for the teacher.

In conclusion, it is not the terms 'summative' and 'formative' that are the issue: it is the use of the labels summative assessment and formative assessment. One way to break free from this confusion would be to reinstate the original terms -assessment for formative purposes and assessment for summative purposes - or, as Michael Absolum and colleagues (2009) recommend, to use the phrases assessment for learning and assessment of learning (respectively). Whichever terms are used, experienced teachers, researchers and writers need to be explicit in their meaning and consistent in their use for the benefit of those new and less experienced in order for effective communication and developing understanding of assessment literacy. Overall, teachers must have the ability to create and evaluate assessment tools of quality to ensure they will be gathering high quality evidence about progress and achievement. They must also have the knowledge and understanding to ensure gathered evidence is fit for purpose, is used for all appropriate purposes. and is a sound basis for all decisions made about children's learning and teaching practice.

#### REFERENCES

- Absolum, M. (2006). Clarity in the classroom: Using formative assessment. Auckland: Pearson.
- Absolum, M., Flockton, L., Hattie, J., Hipkins, R., & Reid, L. (2009). Directions for assessment in New Zealand. Wellington: Ministry of Education.
- Bell, B., & Cowie, B. (1997). Formative assessment and science education: Research report of The Learning in Science Project (Assessment). Hamilton, N.Z.: Centre for Science Mathematics Technology Education Research, University of Waikato.
- Bell, B., & Cowie, B. (2001). Formative assessment and science education. Dordrecht; Boston: Kluwer Academic.
- Black, P., Harrison, C., Hodgen, J., Marshall, B., & Serret, N. (2010). Validity in teachers' summative assessments. Assessment in Education: Principles, Policy & Practice, 17(2), 215-232.
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2003). Assessment for learning: Putting it into practice. London: Open University Press.
- Black, P., & Wiliam, D. (1998). Inside the black box Raising standards through classroom assessment. Phi Delta Kappan, 80(2), 139-151.
- Clarke, S. (2005). Formative assessment in action: Weaving the elements together. London: Hodder Murray.
- Clarke, S. (2008). Active learning through formative assessment. London: Hodder Murray.
- Clarke, S., Timperley, H., & Hattie, J. (2003). Unlocking formative assessment: Practical strategies for enhancing students' learning in the primary and intermediate classroom (New Zealand version). Auckland: Hodder Moa Beckett.
- Crooks, T. (2002a). Assessment, accountability and achievement principles, possibilities and pitfalls. Paper presented as the Keynote address to the annual conference of the New Zealand Association for Research in Education, Palmerston North, NZ, 5-8 December, 2002.
- Educational assessment in New Zealand schools. Crooks, T. (2002b). Assessment in Education, 9(2), 217 & 237.
- Crooks, T. (2006). Some principles for guiding student learning effectively. Wellington: New Zealand Educational Institute (NZEI).
- Davies, A., & Hill, M. (2009). Classroom assessment practices. Wellington, NZ: NZCER.
- Garrison, C., & Ehringhaus, M. (n.d.). Formative and summative assessments in the classroom. [Electronic Version]. Retrieved on 16 July 2009 from URL www.measuredprogress.org
- Harlen, W. (2005). Teachers, summative practices and assessment for learning - tensions and synergies. The Curriculum Journal, 16(2), 207-223.

- Hill, M. (2008). Educational assessment. In C. McGee & D. Fraser (Eds.), The professional practice of teaching (3rd ed., pp. 117-145). Albany, North Shore: Cengage.
- Ministry of Education. (2007). The New Zealand Curriculum. Wellington: Ministry of Education.
- Parr, J., & Timperley, H. (2008). Teachers, schools and using evidence: Considerations of preparedness. Assessment in Education: Principles, Policy & Practice, 15(1), 57-71.
- Stiggins, R. (1991, March). Assessment literacy. Phi Delta Kapan, 72(7), 534-539.
- Sutton, R. (1992). Assessment: A framework for teachers. London: Routledge.

# **ABOUT THE AUTHORS**

**BILL USSHER & KERRY EARL** Faculty of Education, University of Waikato, Hamilton, New Zealand



Bill Ussher is a senior lecturer in the Faculty of Education, University of Waikato.

His research and teaching include educational assessment and teaching practice experiences in initial teacher education.

bussher@waikato.ac.nz



Kerry Earl is lecturer in the Faculty of Education, University of Waikato.

The focus of her research and teaching is innovation in education including the use of ICT and eEducation.

kearl@waikato.ac.nz

# Postal address

School of Education, University of Waikato, Private Bag 3105, Hamilton.