



Assessment: the road to quality learning

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Abstract

Purpose – The purpose of this paper is to explore the various approaches and tools of assessment used in both schools and tertiary education in New Zealand and their impact on the improvement of the quality of teaching and learning. The objective is to answer the research question: “Does one size fit all?”

Design/methodology/approach – The paper comprises an analysis of the existing assessment tools (i.e. traditional and new modes of assessments) being practised in New Zealand, relating them to real cases from the author’s practical experience in the field, i.e. drawing on both primary and secondary data.

Findings – Assessment is found to be an integral part of providing a quality teaching and learning experience for the adult learners, their long life learning process and their participation in the community and the national economy. The study indicated that one size does not fit all if we are aiming at serving our students the best way.

Originality/value – The paper proposes criteria required for an effective quality learning experience, for both educators and earners. It further emphasizes the importance of “assessment for learning” techniques rather than “assessment of learning”.

Keywords New Zealand, Schools, Tertiary education, Adult learning, Assessment practices, Quality teaching and learning, Programme planning

Paper type Research paper

Introduction

Researchers in the field of language literacy and numeracy (LLN) have agreed that there has been a paucity of research conducted on assessment for literacy, numeracy and language learning in the tertiary sector in New Zealand. Accordingly, the NZ Ministry of Education has focused in the recent years on identifying the needs for the foundation learning by funding research initiatives and putting policies and strategies in place e.g. Adult Literacy Achievement Framework; draft Adult Literacy Quality Mark; learning for living work programme to name some. The aim of those initiatives is to enhance the area of teaching, learning and assessment of adult foundation learning literacy, numeracy and language in New Zealand.

Assessment is an integral part of this initiative and interrelated to providing a quality teaching experience for the adult learners, their long life learning process and their participation in the community and the national economy. Askov *et al.* (1997) posits that adult students’ literacy skills are particularly important because adults come to adult basic education with large gaps in their mastery of skills. Furthermore, assessment should satisfy all the affected stakeholders of the various programmes, e.g. community-based adult literacy programmes, workplace literacy programmes, and administrators and funding agencies.

Assessment is a means of finding out through feedback how both the assessed and assessee are doing in terms of learning and performance. Furthermore, it is used as an indicator of learners’ acquisition of knowledge and of the teachers’ quality of teaching. Therefore, it is essential to have well-designed assessment tools to evaluate learner’s



progress, teaching effectiveness, and programme and materials suitability to the needs of diverse learners in our society. To meet those initiatives, assessment practices has to be incorporated into programme planning to be able to contribute to better learning outcomes for adult LLN/foundation learners and other learning programmes either vocational or academic, e.g. business management programmes. There are various approaches and tools of assessment that are used in both schools and tertiary education in New Zealand.

This paper discusses the various types of assessments used in adult education and learning, their functions, benefits and drawbacks. The aim of this discussion is to explore their effects on both students learning and the direct/indirect impact on the improvement of the quality of teaching. While exploring the various types of assessment and how they might contribute to better learning outcomes for adult LLN/foundation learners, the research attempts to answer the question: does one size fit all? Finally the paper proposes criteria for quality assessment as a means of providing a quality teaching experience for the adult learners.

Types of assessments, their goals and impact on learning

Assessment is one of the central themes of higher education as it supports the process of learning, makes judgements on students' achievements in course requirements and helps maintain standards of the teaching profession. Gordon Joughin (2009) posited that assessment can be used to promote learning through its design (i.e. the type of assessment chosen), promoting feedback and through development of students' capacity to evaluate the quality of their own work while they are undertaking assessment tasks.

In order to choose the suitable type of assessment, several researchers eluded to the importance of considering the diversity of learners and the impact of their past experiences on their confidence and motivation (Benseman, 2001; Boud *et al.*, 1993; Brookfield, 1991; Merriam and Caffarella, 1991). More specifically the research conducted by Falchikov and Boud (2007) on teachers of master's degree in adult education confirmed that there are both positive and negative correlation between their emotions and previous assessment experiences which had an impact on their learning and self-esteem. Furthermore, Askov *et al.* (1997) suggested that the assessee/ educator should consider the following questions when thinking about choosing assessments:

- (1) What are the purposes of assessment?
- (2) What are the assessment information needs of each stakeholder?
- (3) What are the strengths and limitations of the various assessment instruments for meeting each of these needs? (p. 65)

This section attempts to discuss three of the most well-known assessment approaches namely: diagnostic assessment; formative assessment; and summative assessment. Discussing those approaches will show how they can be different and at the same time overlap in their purpose depending on the educator's intentions and how those tools are being utilised to improve the quality of learning and teaching.

Diagnostic assessment

This approach or type of assessment is mainly to identify student's strengths and weaknesses. It may be general or specific and can take place during any stage of the

programme. New Zealand Council for Educational Research (NZCER) (2006) referred to this assessment as “initial assessment” if it takes place at the beginning of a programme with the aim of identifying the learners’ needs to designing a learning plan for each individual student. While Askov *et al.* (1997) named it “screening or placement testing” where the learners get interviewed to determine their reasons for enrolling, goals, interests and talents, and educational history.

Looney (2007) posited that diagnostic assessments in the shape of programme entrance tests and informal interviews – which could be standardised – assist both learners and educators. For learners, it helps identify their capabilities to place them in the right and suitable level of education (i.e. class) and it could help identify learners’ disabilities or difficulties. While for educators it assists them in linking the learning objectives with the learners’ motivations, interests and goals.

This assessment instruments (e.g. IELTS or TOEFL) is of importance to the tertiary education sector as it is the initial identification and placement in levels of the English language proficiency which is of importance since the media of communication and teaching in New Zealand is English.

From an educator perspective the author believe that this initial assessment besides being used on a national and institutional level, should also be used by the teacher/educator in the beginning of any programme as it could familiarise the teacher with each individual student, their needs and requirements to assist in planning for their progress and motivation in their learning journey. For example, in one of the management classes, the author utilised this technique to assess informally the level of students’ writing skills at the beginning of the semester. Such diagnostic assessment helped the author in preparing the right tasks for assisting the students in improving their academic literacy and academic writing skills. Moreover, it helped improve the quality of teaching through the development of adequate teaching strategies relevant to this specific course and for future improvements in other courses by catering for students’ needs.

Formative assessment

This approach of assessment is an ongoing assessment of learners through and during the life of the whole programme with the intention of giving feedback on progress to both the learner and educator; hence, adapts teaching to meet the needs of the learner (NZCER, 2006). Derrick and Ecclestone (2008) named it “assessment for learning”. Benseman and Sutton (2007) posited the following about formative assessment:

There is an increasing emphasis internationally on the role of formative assessment in improving the quality of teaching and related learner gain in Adult LLN, including skills such as questioning and giving feedback to learner. Formative assessment focuses specifically on the interactions between teachers and learners and has the potential to enhance both general teaching and subject specific skills in LLN (p. 34).

Accordingly, effective formative assessment builds positive relationships between educators and students and students and their learning process through constructive feedback that motivates students (Looney, 2007). This has been further reiterated by Dochy (2009) who mentioned that there is strong support for representing assessment as a tool for learning where students participate in the development of the criteria and the standards for evaluating their performance, i.e. both the process and product are being assessed. A good illustrative example for this point would be the use of reflective journals or portfolios by students where they keep track of their academic or vocational growth over time which assists in clarifying their goals.

The author used the reflective journal as an assessment tool in two of her business management classes and found out from students' feedback that they have gained a lot from this learning experience. Furthermore besides enhancing, students' academic growth, it also assisted the author in her teaching through students feedback that was incorporated in the course which enhanced the quality of teaching further.

Dochy (2009) gives further examples to what he called "new assessment modes" to fit with the current assessment culture: observations, text- and curriculum-embedded questions, interviews, overall tests, simulations, performance assessments, writing samples, exhibitions, portfolio assessment, product assessment and modes of peer-and co-assessment. Previously Askov *et al.* (1997) presented the following as "informal assessment" or formative assessment: observations, self-assessments (e.g. informal reading inventories, retell exercises, writing samples, logs and checklists) and portfolio assessment. Those assessment techniques can actually be used for both formative and summative assessment depending on the purpose and course objective.

From the author's personal experience as an educator, choosing the suitable formative assessment mainly depends on the student cohort, their level of knowledge and their capability to apply this knowledge in the course and solve real-life problems that are presented to them in the shape of case studies, i.e. relating and applying theory to practice. Moreover, the choice of formative assessment also depends on the main goals and objectives and required learning outcomes of the course and how all the tasks could be linked together. Some of those mentioned techniques of formative assessment tend to be used automatically by experienced and well-trained teachers in the classroom as they become second nature to their teaching. For example most if not all teachers observe their students as they work in class to look for effective use of skills or areas that require additional work and improvement.

In relation to self-assessments, the author tends to use few of the forms mentioned by Askov *et al.* (1997) with the students depending on their skill level and learning requirements, e.g. informal reading inventories, retell exercises and writing samples. In relation to portfolio assessment the author tends to use it with students in association with their current learning in the classroom. That technique (i.e. self-assessment) was inclusive by giving the opportunity to the students to construct part of a summative assessment which made them more engaged and motivated to go through with it.

Deciding on the best fitting and effective formative assessment technique depends on the programme objectives, student cohort and their learning capabilities. This has been reinforced by Clarke *et al.* (2003) who stressed on the importance of the following elements:

- learning intentions clarified at the planning stage;
- learning intentions shared with students;
- students self-evaluating against the learning intentions;
- students receiving feedback about their progress specifically related to the learning outcomes; and
- students supported to see their own learning goals (NZCER, 2006).

Hattie *et al.* (2007) developed those elements further by stressing that teachers and providers need to focus more on the quality of information that comes from assessments and the decisions about "where to next" (in Sutton and Denny, 2008,

p. 200). The author believes that they meant utilising feedback either formal or informal from students and the course outcomes to enhance future deliveries by being more capable of dealing with assessment challenges.

Looney (2007) further supports the notion of the value of formative assessment that it creates an opportunity for real learning not just preparation for tests to obtain certification which is one of the characteristics of summative assessment.

Summative assessment

As illustrated earlier, formative assessment's main goal is to assess the level of the students to be able to build on it and assist in future learning. On the other hand, summative assessment (e.g. competencies or pathways for progression) is mainly concentrating to assess for the sake of marking in accordance with a marking guide to be able to put marks for certain reasons i.e. to earn certification, obtain governmental or institutional funds for a programme. This type of assessment is best described by Derrick and Ecclestone (2008) as "assessment of learning". Looney (2007) alerted to the misshape in this case of teaching to the test which could lead to the adult LLN learner's anxiety. Furthermore, research evidence show that the use of summative tests squeezes out assessment for learning and has a negative impact on motivation for learning for both students and teachers (Dochy, 2009). Some techniques used for the assessment is standardised tests, teacher-developed paper and pen exercises, and computer managed tests.

Askov *et al.* (1997) attracted the attention to some value in standardised testing in the way they yield comparable results regardless of location or programme type; hence, they are reliable to funding agents and policy makers from an accountability perspective. They also show students' progress towards meeting specified criteria or competencies.

Nevertheless, Sutton and Denny (2008) argued that point by reporting on various researches conducted in New Zealand which illustrated that standardised test were not popular for the following reasons:

- (1) Foundation learning teachers are sceptical about the value of standardised testing due to the lack of validity in measuring adults' LLN skills.
- (2) Testing engenders fear and embarrassment for most LLN learners which leads to low reliability in any screening tests.
- (3) Reliability of test scores improves after several weeks of teaching due to learners becoming more confident not because of changes in literacy levels.
- (4) Standardised test are difficult for ESOL learners who may not understand the questions for cultural reasons not for lack of skills.
- (5) Standardised test development is very specialised and expensive and the lack of a local, adult-specific resource has limited their introduction in New Zealand.

Another criticism against standardised tests is "test anxiety" experienced by most adult learners due to their past experiences. In order to overcome such anxiety the following approaches has been recommended to be used before, during and after testing by Askov *et al.* (1997):

- avoid the word test; explain the purpose of the test in clear and simple language;
- ask whether students have any anxieties or worries and discuss it with them;
- provide relaxation and positive visualisation exercises;

- let students ask questions before they begin;
- allow students to write in the test booklets;
- watch learners while they are taking the test and whoever is frustrated assist them and reassure them; and
- allow students to review tests after they are analysed.

The author used most of those approaches with students. In addition, the students were involved in the assessment process by drafting questions for the final exam at the end of the semester to remove that anxiety and to make them concentrate on their learning process.

Another new assessment tool that shifted away from the traditional system of marking and percentages is the unit standards. It has been developed mainly for industry training and relies on competence-based approach where student work is assessed as either “complete” or “incomplete”. Although unit standards became popular among private training providers (Zepke, 2003) to be used with foundation learners who are adults having literacy, language and numeracy needs, there has been a lot of opposition to the new system because it does not assist learners to address the boarder competencies that might be lacking (Barrer, 2007).

The author would like to reinforce some of the issues around this new assessment from personal experience as a practitioner in the field of tertiary education. The author wrote the curriculum with a specific industry in mind to help the learners in having a certain required competencies in their workforce. The objective was to provide the learners with a transparent view of what is going to be assessed. Nevertheless, the author was confronted with challenges (mainly time constraints) to bring the students up to the required competency level. Moreover, some students were not competent from their first submission and they had to re-submit three to four times to reach that level which was tedious and time consuming for both parties. This raises the issue brought up by Barrer (2007) if the students really understand what they are doing or are they simply doing the assessment tasks by rote. If that is the case then this is defying the purpose of learning for life and presuming then that one size fits all which is not really the case.

Criteria for quality assessment

Various researches in the field of assessment investigated the issue of validity and reliability of the assessment (e.g. NZCER, 2006; Dochy, 2009; Sutton and Denny, 2008). For an assessment to be valid it requires to measure what it claims to measure and what it measures has to be significant for the issue being investigated. For an assessment to be reliable it should consistently achieve the same results with the same or similar cohort of students (Sutton and Denny, 2008). Filip Dochy (2009) added further criteria to validity and reliability to evaluate the quality of assessment mainly: transparency, fairness, cognitive complexity, authenticity of tasks and directness of assessment.

Transparency: it is related to the scoring used in an assessment in which students can judge themselves and others in a reliable manner as a trained assessor would do; hence rendering the scoring reliable.

Fairness: it is related to an assessment free from bias by giving the students a fair chance of demonstrating their ability. This can be achieved when the required task is

congruent with the received instruction/education and by making sure that students understand the assessment criteria. Hence, communicating these criteria to students enhances their learning and can develop clear goals to strive for in learning.

Cognitive complexity: it refers to the new assessment modes which are used to measure problem solving, critical thinking and reasoning. In this criterion it is important to take into account students' familiarity with the problems and the ways in which students can solve them.

Authenticity and directness of tasks: this means that the content and the level of tasks need to be an adequate representation of the real problems that occur within the construct/competence domain that is being measured. This criterion corresponds to what Messick (1994) calls substantial validity (in Dochy, 2009, p. 101).

This research demonstrates that both traditional and new modes of assessment are both evaluating the quality of assessment through analysis of its validity and reliability. Nevertheless, the new modes of assessment tend to use a different approach in their interpretation of validity and reliability as Dochy (2009) explained. The main point that we need to take from this discussion is to make sure the chosen type of assessment can measure the characteristics that it is intended to assess and that the assessment is adequate to serve its main purpose.

Discussion and conclusion

This research paper highlighted how assessment is an integral part of providing a quality teaching experience for the adult learners, their long life learning process, and their participation in the community and the national economy. It investigated the various types of assessment available in the LLN field and how it developed in such a short period through the addition of new assessment culture to enhance the new modes and tools of assessment as a means of combating the challenges it is confronting. That showed that one size does not fit all if we are aiming at serving our students the best way. This has been illustrated by presenting the various criteria for a quality assessment. This notion has been reinforced by Derrick's (2005) ten principles towards a new assessment paradigm as a means of resolving some of the complexity issues with the current system and at the same time raising its value. Other research echoed those points, e.g. the requirement of using multiple and varied assessment methods and using moderation and triangulation between assessment methods. As a result, the author is presenting Figure 1 as an illustration of the required criteria for effective quality learning experience for all parties concerned (educators and learners).

As presented earlier, assessment in the LLN field is still in its early stages of development. Nevertheless, it has progressed in such a short period through the good work done by educators and researchers in the field with the aim of adding new assessment culture to enhance the new modes and tools of assessment.

There is an implied message from this research to give priority to the students and their learning needs to prepare them for a lifelong learning experience and their lifelong learning journey and the wider community. Accordingly, there is a tendency in favour of "assessment for learning" rather than "assessment of learning" which concentrates more on accountability and funding issues rather than the students learning process.

In conclusion, different methods of assessment exhibit different advantages and disadvantages in measuring various aspects of the student ability and achievement. Hence, no one method of assessment can evaluate all aspects successfully i.e. one size

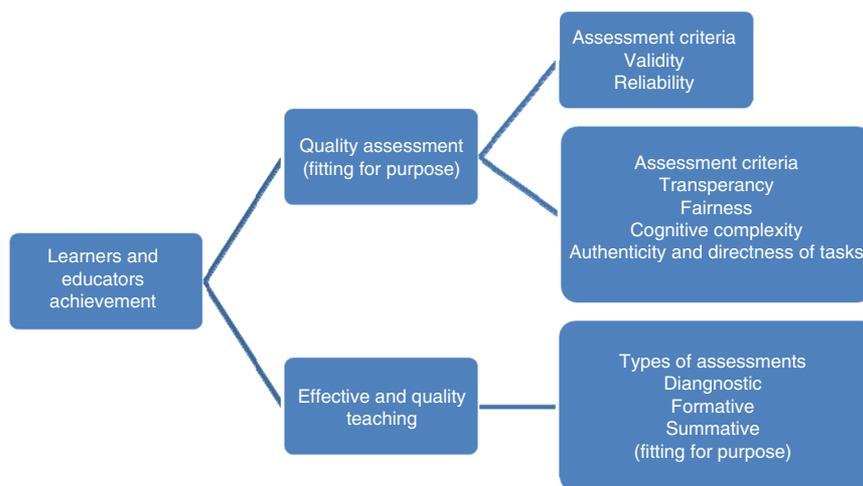


Figure 1.
Criteria for effective
quality learning

Source: Developed by Siham EL-Kafafi

does not fit all. As a result, a selection of the described assessment approaches is required to provide a fair portfolio of overall student ability.

References

- Askov, E.N., Van Horn, B.L. and Carman, P.S. (1997), "Assessment in adult basic education programs", *New Directions for Adult and Continuing Education*, Vol. 75 (Fall), pp. 65-74.
- Barrer, A. (2007), "Unit standards: diamond necklace or dog collar", *New Zealand Journal of Adult Learning*, Vol. 35 No. 1, pp. 37-52.
- Benseman, J. (2001), *Making Learning Happen: A Study of Effective Teaching in Training Opportunities*, Tertiary Education Commission (TEC), Wellington.
- Benseman, J. and Sutton, A. (2007), "OECD/CERI formative assessment project background report", OECD/CERI, Wellington.
- Boud, D., Cohen, R. and Walker, D. (1993), *Using Experience for Learning*, The Society for Research into Higher Education and The Open University Press, Buckingham.
- Brookfield, D. (1991), *Understanding and Facilitating Adult Learning*, Jossey-Bass, San Francisco, CA.
- Clarke, S., Timperley, H. and Hattie, J. (2003), *Unlocking Formative Assessment: Practical Strategies for Enhancing Students' Learning in the Primary and Intermediate Classroom*, Hodder Moa Beckett, Auckland.
- Derrick, J. (2005), "Imagining new paradigms for assessment", *Fine Print*, Vol. 21 No. 1, pp. 26-9.
- Derrick, J. and Ecclestone, K. (2008), "English language literature review", *Teaching, Learning and Assessment for Adults: Improving Foundation Skills*, ISBN-978-92-64-03990-2, OECD Publishing, London, pp. 1-126.
- Dochy, F. (2009), "The edumetric quality of new modes of assessment: some issues and prospects", in Joughin, G. (Ed.) *Assessment, Learning and Judgement in Higher Education*, Springer Science + Business Media, Belgium, pp. 85-114.
- Falchikov, N. and Boud, D. (2007), "Assessment and emotion: the impact of being assessed", in Boud, D. and Falchikov, N. (Eds), *Rethinking Assessment for Higher Education: Learning for the Longer Term*, Routledge, London, pp. 144-55.

- Joughin, G. (Ed.) (2009), *Assessment, Learning and Judgement in Higher Education*, Springer Science + Business Media, Belgium.
- Looney, J. (2007), "Formative assessment in adult language, literacy and numeracy", *Assessment in Education*, Vol. 14 No. 3, pp. 373-86.
- Merriam, S. and Caffarella, R. (1991), *Learning in Adulthood*, Jossey-Bass, San Francisco, CA.
- New Zealand Council for Educational Research (NZCER) (2006), *Assessment for Foundation Learning: The Importance of Purposeful Assessment in Adult Literacy, Numeracy and Language Courses*, NZCER, Wellington.
- Sutton, A. and Denny, G. (Eds) (2008), *Facing the Challenge: Foundation Learning for Adults in Aotearoa New Zealand*, Dunmore Pub, Wellington.
- Zepke, N. (2003), "Teaching and learning in the global village", in Zepke, N., Leach, L. and Leach, L. (Eds), *Reflection on Transformation. A Self-Help Book for Teachers*, Dunmore Press, Palmerston North, pp. 196-212.

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Siham El-Kafafi currently holds the position of Senior Lecturer in the Faculty of Business, Manukau Institute of Technology. Her research focus is integrating business disciplines in a collaborative and cross-disciplinary context through entrepreneurial spirit and innovation. She is a solid researcher with numerous publication in high-quality academic journals, book chapters, conference proceedings, international and national roles as journal editor/reviewer and referee on academic journals (e.g. *World Journal of Science, Technology and Sustainable Development*, the *World Journal of Entrepreneurship, Management and Sustainable Development* (www.worldsustainable.org), the *Intermodal Transportation Research Journal*, *Inderscience Publisher*) and on several award committees and board nationally and internationally, e.g. Board of Examiners for the Asia-Pacific Business Excellence Standard (APBEST) Award and Member of the Award Committee for the International Society of Management Science and Engineering Management (ISMSEM) Advancement Prize for Management Science and Engineering Management (MSEM)]. She has vast industry and consultancy experience besides over 15 years teaching experience, playing a leadership role in the creation of high quality student experience in a wide range of business courses, e.g. operations business management, quality management, leadership, project management, organizational behaviour, quality assurance, business ethics, and industry training in the areas of quality management systems, leadership, teamwork and business excellence. Her research interests include: service quality, customer service either in manufacturing or service industry, sustainability from various perspectives, leadership, business excellence and corporate governance, corporate social responsibility, organizational culture and business ethics, and adult education pedagogy. Siham El-Kafafi can be contacted at: siham.elkafafi@manukau.ac.nz