THE IMPACT OF ASSESSMENT ON THE LEARNERS' IDENTITIES: A LITERATURE REVIEW

NHAN TRAN
IPhD student in Education and Communication
n.tran@ncl.ac.uk

Abstract

Through its course of development, assessment has exerted its powerful impact on the meritocratic selection in feudal societies and the promotion of learning in contemporary contexts (Messick, 1999). Though being known to exist as an extremely complex phenomenon, assessment has been mentioned to touch upon different but related facets of learners' identities such as learning approach, motivation, anxiety, and the sense of success and failure. The following literature review will highlight the consequences of assessment in relation to four roughly divided aspects of the learners' identities: the cognitive, affective, behavioural, and socio-cultural, which is roughly based on the understanding of the 'dialogical self' as including the rational and emotional inner part and its presentation in the societal environment (Hermans, 2001), as well as the inter-relation between assessment and learner identity in its entirety in a limited number of articles. As this field is rather under-researched, this review will incorporate studies conducted at various levels of the education system, yet more focus is placed on higher education contexts.

Key words: formative assessment, summative assessment, learning, anxiety, achievement, motivation, self-esteem, empowerment, assessment dialogue

The cognitive impact

There is ample literature featuring either the strong influence of assessment or the lack of it on the breadth and depth of student's learning, their approach to study, and retention. Amrein and Berliner (2003)'s archival time-series analysis using the data of 18 states on four well-respected student achievement measures: the SAT (Scholastic Aptitude Test), the ACT (American College Test), the AP (Advanced Placement) tests, and the NAEP (National Assessment of Educational Progress) asserted that high-stakes testing programmes negatively affect the breadth and depth of student learning by narrowing the curriculum and abusing drill activities tied to the state tests. The comparison of each state's data on each summative assessment tool against the national data yielded no measurable improvement in student learning, but a much stronger account that 'high-stakes testing policies hurt student learning instead of helping it' (ibid., p. 35).

On the contrary, Black and Wiliam (1998)'s extensive review of 250 published studies yielded a impactful conclusion that formative assessment does improve student learning with an impressive yet challenged effect side of 0.4. Moreover, many of the reviewed studies concluded that appropriately communicated formative assessment has positive impact on low achievers in particular, as 'it concentrates on specific problems with their work, and gives them both a clear understanding of what is wrong and achievable targets for putting it right' (Black and Wiliam, 2001, p. 6). Thus, formative assessment is envisaged to reduce the gap between high and low-achieving students while raising achievement overall.

From a more holistic perspective, Sambell *et al.* (1997) reported on a two and a half year longitudinal project on the consequential validity of both traditional and alternative assessment methods on student learning. The study hails a triumph of alternative assessment methods (open-book exams, projects, peer assessment, and

group assignments) over traditional ones (multiple choice testing and essay question exams) in long-term retention, educational worth, fairness, and channelling students' effort to achieve deep learning. The interviewed students voiced that more potential high-quality level of learning is associated with alternative assessment; however, this also implies that the assessment tasks can be more demanding and require much more motivation as well as time and effort investment to accomplish (Sambell *et al.*, 1997, p. 359). Alternative assessment is also addressed as meaningful and worthwhile with the potential to measure would-be-transferable qualities, skills and competences, and encourage and reward genuine learning achievements. The students' perceptions of poor learning, lack of control, arbitrary and irrelevant tasks in relation to traditional assessment contrast sharply with those of high quality learning, active participation, feedback opportunities and meaningful tasks in relation to alternative assessment (ibid., p. 365).

In a more focused study, Slater (1996) found that students like portfolio assessment. They enjoyed the time spent on creating portfolios and believed that it helped them learn. They further elaborated that portfolio could facilitate their retention better than other assessment formats on account of their internalization, in-depth thinking, and creative and extensive application of the concepts over the duration of the course. Educational impact on the students' professional development of 'the learning portfolio' was also investigated by Klenowski *et al.* (2006). The explicit emphasis on the learning processes enables the course participants to understand the learning process itself (the purposes and the effects of context, emotional, and social elements) and how others have made use of portfolio for learning (ibid., p. 278). As a consequence, the participants become more aware of their own learning, through a process of meta-

learning, they are able to support others' learning, which makes the learning portfolio an effective form of professional development (ibid.).

On the less bright side, Sadler (1989) observed that good quality teacher feedback does not necessarily result in student development. He noted:

> … the common but puzzling observation that even when teachers provide students with valid and reliable judgements about the quality of their work, improvement does not necessarily follow. Students often show little or no…development despite regular, accurate feedback. (Sadler, 1989, p. 119)

He further explained that autonomy is required for their improvement. The students must develop the capacity to monitor the quality of their own work, the appreciation of what high quality work is, the evaluative skill to objectively compare the quality of their work against the higher standard, and a store of tactics or moves for modification if necessary (ibid.).

Norton (2007)'s case study; however, showed positive signs that assessment using Psychology Applied Learning Scenarios (PALS) may discourage students from taking a strategic, mark-orientated approach and equip them with the power of knowledge to apply into authentic situations. The entire learning experience was designed upon the combination of a team presentation of a PALS case and a 3000-word essay exploring that PALS case in greater depth and using the assessment as learning criteria. Such assessment criteria as the use of up-to-date journals, the critical evaluation in terms of research methods, and the appropriateness of the selected PALS case were reinforced in the team presentation with resource sharing and further feedback from peers and the lecturer. This study is an exemplary case of how assessment can be blended into teaching and learning to create positive learning outcomes.

The affective impact

It is a common occurrence that assessment impact the learner's moods, their victorious moments as well as their haunted despair as the student makes an emotional investment in an assessment and expect some 'return' (Higgins *et al.*, 2001). Despite its discernible emotional attachment, this aspect of assessment consequence has hardly been elaborated in literature, evidenced by just 19 relevant studies in the review on the impact of summative assessment on motivation for learning conducted by Harlen and Deakin Crick (2003).

Though emotion is highly subjective, assessment is alleged to inherently induce stress and tension. Coutts et al. (2011)'s quantitative search (n=137) using the Intrinsic Motivation Inventory and the Brunel Mood Scale provided concrete evidence for the impact of assessment on mood and motivation in first-year students. Most significantly, they found a time coincidence between the major changes in mood and the greatest number of due assessment items per student in week seven. More specifically, the increasing amount of assessment was alleged to associate with an increase in negative moods such as tension, depression, anger, fatigue and confusion and a decrease in the positive mood of vigour and the intrinsic motivation variables of interest/enjoyment and perceived competence.

Their claim is supported by the participants in Drew (2001)'s study who viewed the pressure of coursework, the fear of failure, confusion, being overwhelmed and even 'bogged down' with too closed deadlines as the downsides of assessment on learners' emotion. They, however, viewed effective feedback as being critical to build their self-confidence, helping them with self-evaluation and being a powerful motivator, a major vehicle for learning. Yet, the extent of affective impact on mature students depends heavily on their self-esteem (Young, 2000). 'There is a tendency for students with low

self-esteem to take any comment as an indictment of themselves; high self-esteem students see the comments as bearing on their work only' (ibid., p. 414).

Most noticeably, the reciprocal relation between test and anxiety so called 'test anxiety' has been the theme of discussion by many assessment researchers in different levels of the education system (Wine, 1971; McDonald, 2001; Norton *et al.*, 2001). The review by McDonald (2001) yielded considerable evidence of the prevalence of the fear of tests and its detrimental effect on test performance of children in compulsory education. Pollard et al. (2000) argued that the anxiety that the pupils felt might be a consequence of being exposed to greater risk as performance was attributed with higher stakes by the teachers. Also on anxiety but in higher education, both Joughin (2007) and Huxham *et al.* (2010) reached the same conclusion that oral assessment might induce more anxiety than written assessment as the former is associated with a richer conception of the oral task, a deeper understanding and a need to explain to others. While Joughin (2007) attributed that anxiety to the relative lack of experience in oral assessment, many students thought that it is more useful than written assessment (Huxham *et al.*, 2010) .

On the bright side, if appropriately conducted, assessment is a sharp tool to empower the learners (Leach *et al.*, 2001). By using a version of criterion referencing for the learners to select the evidence they will present in portfolios, allowing them to choose and/or negotiate the criteria, and giving them the opportunity to assess their own work and contribute to their grade in a negotiated process, the research group was able to design an assessment regime that balances between the obligation to the society-at-large and the need to respect individual and cultural differences. In other words, their model strives to reach a balance between 'external fairness' and 'internal fairness' with the internal being a key ingredient in empowerment. Though the impact varied due to

the learners' varied perceptions of assessment and the power relation between them and the teachers, several plausible empowerment influences were observed such as their decision-making, their control over self-assessment, their judgement of issues, their challenge and resistance to hegemonic ideas, their establishment of criteria, and their affirmation of knowledge.

The behavioural impact

The 'carrot and stick' analogy is a clear indication of how reward and punishment may induce behaviour in education in particular. As mentioned in the cognitive impact, assessment exerts powerful influences on the learners' approach to learning, be it deep, surface or strategic (Marton and Saljo, 1976). Whether they become an active or passive learner is largely determined by assessment. While many traditional types of exams such as multiple choice questions encourage a surface and passive approach to learning (Scouller, 1998; Amrein and Berliner, 2002), alternative types such as assignment essays, problem-based tasks and e-portfolio are argued to activate student learning (Sluijsmans *et al.*, 2001; Savin-Baden, 2004; Klenowski *et al.*, 2006).

Sluijsmans *et al.* (2001)'s quantitative research indicated that peer assessment stimulates deep-level learning and critical thinking in a problem-based learning environment. The authentic character of the problem tasks was said to stimulate active participation in discussion and in working towards problem solving, requiring the students to activate their prior knowledge and connect it with other knowledge domains. However, the complex assessment mechanisms in problem-based learning may have disempowering impact on the students when their group work is undervalued or their learning is unrewarded (Savin-Baden, 2004).

In a substantially large-scale research on how well norm-referenced standardised tests (GRE, NTE, MCAT, and LSAT) capture what was actually occurring in student development, involving more than 24,000 learners, 20,000 faculty members at 217 baccalaureate-granting institutions, using data from the Cooperative Institutional Research Program (CIRP), Astin (1999) found that the amount of interaction between students and faculty and the frequency with which the student interacted with other students positively affected the behavioural outcome measures. Though the amount of 'time on task' showed no effect on test scores, it showed significant positive effects on all three behavioural outcomes (ibid., pp. 166-167).

Norton et al. (1996), on the other hand, pointed out that contrary to the designer's intention of creating a fair, reliable, consistent and just system, assessment in actuality can encourage strategic learning, competitiveness, and shift students' focus on those things that are assessed at the expense of those that are not. Their research on the rules of the game' indicated that some students adopt certain tactics, be it plagiarism and cheating, in their essay for the sake of getting higher marks (Norton *et al.*, 2001).

The socio-cultural impact

The socio-cultural impact of assessment can be implicitly or explicitly observed though literature touching on this theme is sparse. Since the early history, written assessment has been used for meritocratic selection to recruit government officials, and create a good society (Lee, 2000). The Chinese claim to be the first to use anonymous written examinations and an open assessment process to safeguard a certain degree of fairness in recruitment. In other countries, assessment has also been an effective and powerful tool for social stratification, placing school leavers and graduates in different positions in the world of work and life. The fact that their future career and earnings

potentials as well as health, status and self-esteem can all be affected by degree results has made assessment an influential extrinsic motivation for the learner especially in higher education. Various examples of using the test scores to select personnel for key positions, to send people to the armed forces, to judge ones' competencies or professionalism (Amrein and Berliner, 2003; Leathwood, 2005) have illustrated the fact that 'the issues of power are at stake when assessment takes place' (Torrance and Pryor, 2002, p. 67).

Assessment has unwittingly created social priorities for some and deprived others of opportunities to succeed. For example,

> In England, the policy rhetoric is concerned with raising educational standards for all children, but the introduction of market forces into education and the introduction of league tables of primary schools based on the results of national assessment has led, in many ways, to the marginalisation of the most disadvantaged children rather than to their inclusion (Osborn et al., 1997).

On readdressing the social role of assessment in a 'learning society', Broadfoot emphasised that

> Indeed, we need urgently to engage with its role as a 'social process' that affects intimately and often forever the quality of an individual's capacity to learn. We need too to recognise assessment as a social product, in which the values and the traditions of particular cultures and the interests of specific groups within them combine to produce particular definitions of quality and merit. [...], we need to recognise the potential for assessment to be a powerful positive force in supporting life-long learning provided its role as part of the process of teaching and learning is properly understood. (2000, p. xii)

While the pace of world changing is not just continuing but accelerating, life-long learning has been placed on the education policies of many countries as needed quality for international citizenship (Crick and Wilson, 2005). Whether education is able to produce confident, independent, and autonomous students to sustain that learning society depends largely on the assessment policy and practice of each and every nation as well as institution (Taras, 2002).

Assessment and identity

Research on assessment consequences has covered different aspects of the learners' identities as presented in the previous parts of this section. This part will cover a more limited number of research that either depicted this relation explicitly using the term 'identity', the equivalents such as 'functioning' (Astin, 1999), 'learning career' (Ecclestone and Pryor, 2003), or presenting a holistic view of the impact.

Though not using the term 'identity', Astin (1994) highlighted that students in higher education should be regarded as fully functioning organisms; the ideal purpose of education in general and assessment in particular, therefore, is to enhance the students' functioning or to develop their talents, which is explained in Bernstein (2000) as follows.

> Enhancement is not simply the right to be more personally, more intellectually, more socially, more materially, it is the right to the means of critical understanding and to new possibilities. I want to suggest that this right is the condition for confidence. Where that right is not met then neither students nor teachers will have confidence, and without confidence it is difficult to act. This right is a condition for confidence, and operates at an individual level. (ibid. p. xx)

In actuality, however, Reay and Wiliam (1999)'s qualitative research provided convincing evidence that the National Curriculum assessments had an undesirable impact on the identity of ten and eleven-year-old students, which was observable in their voices about the test anxiety and their own struggle to meet the requirements imposed by the school and the teachers irrespective of its consequence on the students' achievement in wider terms. The research also pinpointed how the pupils engaged in informal assessment of their peers' academic ability, their confrontational interaction with the teachers and their parents regarding how to gain 'intimate and secure' social relations or, inclusion and security. Test scores became a primary tool for the learners

to label themselves and their friends, a solid judgement of their intelligence or the lack of it.

In a study using narrative approach on the affective and academic impact of the IELTS examination on the students embarking on their postgraduate study in Britain, Rea-Dickins *et al.* (2007) highlighted its impact on the construction their linguistic identities in response to new learning challenges. From the resulting panorama of complex narratives and experiences emerged several significant messages related to identity. Firstly, the IELTS profile was found to be a significant identity factor for all the participants, their sub-test scores and their high and low achievement affects their engagement in learning: either perseverance or isolation. Secondly, there is a fairly consistent link between IELTS profiles and success in academic study amid many other factors. A general impression of success results from 'a period of adjustment characterised by a trial and error approach to completing academic tasks and by episodes of emotional self-doubt' (ibid., p. 55). Thirdly, the national identity exerts certain impact on their writing style, more specifically, 'the previous educational experience and expectations have led them to write in a way which they see as not meeting requirements for the current program'. That leads to a clash between their imagined and performed identities, between the safe and stable versus the new and uncertain self in their emerging identity. 'All students struggle – the reality of learning as achieving participation in new communities'(ibid., p. 57). This, as a consequence, affects their negotiation of community membership: either acceptance and welcome or rejection, loss of self-esteem and sense of disappointment.

In an attempt to evaluate whether the 'assessment career' has any marked impact on the young learners' 'learning career', Ecclestone and Pryor (2003) offered several insights into how practices produced by different assessment systems,

particularly formative assessment, affect learners' identities and dispositions for learning. They highlighted two typical strategies applied by low and high achievers: low-risk or 'play safe' and acting beyond their comfort zone. Their significant conclusion was that the GNVQ (General National Vocational Qualification) assessment regime 'continued to shape young people's perceptions of their own and their peers' identity developed in compulsory schooling, but it also shaped new ideas about desirable or acceptable involvement in formative assessment activities'(Ecclestone and Pryor, 2003, p. 481). They also suggested that the view of formative and summative assessment as emotional events where one's very sense of self might be invested for a possible risk of failure may empower the role of assessment in a learning career in relation with the formation of learning habitus or identity and consequently the development of cultural and social capital (ibid.).

In an extensive analysis of how college affects students, though not mentioning assessment, Pascarella and Terenzini (1991) elaborated various impact of colleges on aspects of personal development: cognitive (development of verbal, quantitative, and subject matter competence, cognitive skills and intellectual growth, and educational attainment); affective (identity, self-concept and self-esteem, attitudes and values, and moral development); socio-cultural (relating to others and the external world and career choice and development). Many of their analysis confirmed that the college years are a time of change on a broad front and the change extends far beyond the gains of factual knowledge and general skills to cover a broad array of value, attitudinal, psycho-social and moral dimensions. Beside cognitive development, students also gain more tolerance, independence, intellectual disposition, reflective judgment, and responsibility for their learning (cited in Heywood, 2000, p. 130).

In a more recent in-depth research in the context of a part-time Professional Doctorate in Education (EdD) programme, Crossouard and Pryor (2008) advocated a sociocultural conceptualisation of formative assessment and encouraged the postgraduate students to view their learning as entailing the development of new identities as researchers. In doing so, they created an instructional environment with online and face-to-face discussion forum and email feedback that allows spaces for students' legitimate peripheral participation their engagement with disciplinary norms against which their performances would be judged. This model facilitated learning and identity construction via a supportive research culture with critical peer and tutor networks, which diversified the feedback channels that the students might approach and created a platform for them to present their discourse identities. Despite its attractiveness, there remain certain downsides such as its time-consuming and demanding nature as well as the challenge to be inclusive in a heterogeneous postgraduate environment.

In summary, this section has briefed about the impact of assessment on four major aspects of learners' identities: cognition (learning, achievement, and retention); affection (tension, test anxiety, motivation, and empowerment); behaviour (active or passive learning, participation, cheating); and socio-cultural aspect (selection, social status, inclusion, learning society). It also reviewed a limited volume of research that discussed the impact of assessment on learners' identities (Reay and Wiliam, 1999; Rea-Dickins *et al.*, 2007; Crossouard and Pryor, 2008). The panoramic view can be daunting at times, however, there are still promising signs that appropriate assessment may guarantee motivation, empowerment, and positive identity development. For example, assessment dialogues are suggested to help students clarify 'the rules of the games', the assumptions known to the lecturers but less transparent to students (Carless,

2006, p. 230). A rich two-way 'assessment dialogue' could help to bridge the gaps between the expectations of teaching staff and students, thus accommodate students' responses and mitigate the burden of assessment on both the lecturers and the learners (Higgins *et al.*, 2001; Carless, 2006; Dowden *et al.*, 2011).

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Author biographical data: Nhan Tran is an IPhD candidate in Education and Communication at School of Education, Communication, and Language Sciences, Newcastle University, the United Kingdom. She works as a lecturer of English in the University of Foreign Languages and International Studies, Vietnam National University, Hanoi. Her research interests include assessment in higher education, thinking skills and learner and teacher identity.

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