Evaluation of Cross-Cultural Higher Education Learning

Monsurat Olusola Mosaku[a], Mohamed Najib Abdul Ghafar

[a]Department of Educational Foundation, Faculty of Education
Universiti Teknologi Malaysia (UTM), 81310 Johor Bahru, Johor, MALAYSIA

Abstract: Changing roles of contemporary higher education has increased the challenges of assessing higher learning from the assessment point of view despite the plethora of available standardized instruments. Existing instruments require modifications in order to accommodate the context of the study as well as to suit the institutional objectives, philosophy and program structure hence adjudging that the best instrument are those most consistent with what the institution or program values. This paper elucidated the issues needed to be addressed before a valid and reliable measurement of learning quality is attained for a multicultural and developing nation.

Keywords: Internationalization of Higher Education; Cross-cultural Higher education; Higher education Learning, Validity; and Reliability.

1. Introduction

Historically, the Latin's literal meaning of education supports the Socratic view of education as a means of drawing out what was already within the student. However, the Sophists promulgated "impacting students with the necessary knowledge and skills to gain positions within the society". Peters (1967) affirms that education is more than learning facts or how to do things (training) but entails a wider understanding of the world; which Burton and Bartlett (2012) address as acquiring cognitive capabilities.

1.1 Purpose and Function of Higher Education

An imminent issue adding to the complexity of education is the distinction between purpose and function of higher education (HE). Yero (2002) attempted to clarify these two terms with the former being professionalization, research, and service (Tang and Chamberlain, 1997) while the latter are by-products or benefits derived from HE. Kaur et al. (2007) agree that "transmission, interpretation and preservation of knowledge" is the purpose of HE, while the transfer and application of knowledge to novel situations is her function (Bynner et al., 2004; Bynner et al., 2003; Bynner and Egerton, 2001); and establishment of a stable social society by maintaining social control and order (Burton and Bartlett, 2012; Ujang, 2009).

From the economic point of view, Jokthan (2010) and Fajonyomi and Njodi (2007) argue that if higher education (HE) is accepted as commodification of knowledge then, its inputs are educational policies and environment while the process will be curriculum delivery; research and development and the output (being the last facet of the commodification phenomenon) are the institutional intellectual property worth of institutions; community service (Hinton and Fischer, 2008; OECD, 2007) and most importantly, the quality of graduates comprising both cognitive outcomes and efficacy outcomes such as perspective-taking, identity, emotional competence, and resiliency (Hersh et al., 2009).

Both the economic and historical aim of higher education has witnessed a diversion to an infrastructural role in aiding economic development, social cohesion, and national identity (Brennan et al., 2004). These new roles warrants new intellectual demands from students and as such, a diversified and relevant curriculum comprising an amalgamation of connective interdisciplinary knowledge areas and a generic core of skills that are strongly promoted by educational stakeholders (Barrie, 2004; Bloxham and Boyd, 2007; CBI, 1993; Harvey, 2002; Knight, 2003) is paramount.

1.2 Diversification of Higher Education

The diversified curriculum has however not resulted in higher completion rates (Carey, 2004; Mosaku and Najib, 2010; Paulle, 2005). For example, in an ethnic minority research in United Kingdom, Richardson (2008) states that African Americans have one-third while Asians have half probabilities of obtaining a good degree. The case is no different in the

Netherlands as ethnic minority groups record 50% and 40% graduation rate within six years of enrollment compared to the majority group of 68% and 55% in colleges and universities respectively. Malaysia, according to Lee et al. (2010), is also grappling with unemployment rate of her HE students which can be traceable to the quality of these new graduates . Moreover, the paradigm shift to social constructivism (Piaget, 1971) with elements of rationalism, humanism, social and historical construction of knowledge (Raskin, 2002), has not been adequately implemented in the assessment practice as traditional assessment practice (summative assessment) is still very much operational (Knight et al., 2006; Knight and Yorke, 2003) though literature attests that "the truth about an educational system" may be discovered by examining its assessment procedures (Brown, 2004; Brown and Glasner, 1999; Falchikov, 2005; Knight and Yorke, 2003; Lee et al., 2010; Messick, 1998; Rowntree, 1987).

1.3   Assessment of Higher Learning

Traditional assessment of learning in HE for both student and school accountability has not been objective, cost effective, efficient nor does it have adequate reliability and validity (Astin, 1991; Knight and Yorke, 2003; Linn, 2000; Pellegrino et al., 2001). With respect to objectivity, professionalization comprising teaching and learning of specialized knowledge are to be delineated from the aims and objectives reflecting the mission and vision statements of the HEI. The general objectives (goals) consequently reflects the discipline's goal (long term aim) while specific learning objectives (attainable end with a short time frame) are delineated in order to achieve the general objectives. It is from the specific learning objectives that the instructional objectives for each course are derived.

1.4   Constructive Alignment between Objectives, Instruction and Assessment

The link between instructional learning objective; general objectives; teaching and learning process, and its assessment is not always aligned and leads to inappropriate surface learning (Biggs, 2003). This creates a disjointedness (Lee et al., 2010), in the pedagogy which is further aggravated when the assessment practice is based only on the learning objectives oblivious of the modular course content. Another form of disjointedness occurs when testing is based primarily on the teaching module; is without feedback and judgment is inferred from it and. In this case, the purpose for assessment such as certification does not truly represent the intended learning outcomes. Grace and Gravestock (2008) and Biggs (2003) calls for a constructive alignment of the three facets involved in the educational endeavor, which is learning objectives; teaching and instruction; and assessment.

He advocated a "backwash" where the assessment determines what and how students learn more than anything else. The assessment requirements will therefore mirror the curriculum. This backwash, he argues, can be used by educators to secure an effective educational system. The assessment practice, in this case, is determined before the actual pedagogical process (Bloxham and Boyd, 2007). This is because, for students, assessment defines what is important in the curriculum and they learn what they deduce will be assessed which Airasian (1988) called measurement driven instruction. From the student's perspective, it is preferable that the assessment practice should have unambiguous expectations, authentic tasks; flexibility and choice as it is asserted that assessment acts as a mechanism that controls students' learning process and can have greater impact than teaching materials (Boud and Falchikov, 2006; Grace and Gravestock, 2008; Knight et al., 2006; McInnis and Devlin, 2002; Segers et al., 2006). This implies that tests which measure low level thinking signals low level teaching strategies which, in turn, proclaim achievement of low level goals (Biggs, 2003).

1.5   Diversified Assessment Policy

The teaching styles and institutional learning environment should reflect the open access policy that resulted from the diversification of both the curriculum and the student body. Traditional teaching styles and learning climate may not be suitable for the diversified student body and as such lecturers must not only be conversant with various contemporary teaching styles but must be able to apply and diversify these skills in the classroom. As always, the assessment format should also be broadened to accommodate diversified students' culture and idiosyncrasies as Hinett and Knight (1996); and Burke and Greenglass (1995) claim that "traditional assessment systems can fail to foster high quality learning" because of its inappropriateness with the modern thinking about the relationship between HE systems and the quality of student learning.

Furthermore, as the dominant institutional academic culture and teaching in the university is still rather traditional, its assessment practice is also mostly summative, in which the degree of course modules students can recall and comprehend, is tested. Traditional grading system is still evident as assigned grades is still the norm instead of preferred descriptive benchmarks usage (such as rubric) to depict students' performance. This in turn gives little room for feedback as correction so students' can learn from their errors and misjudgment. The learning process also becomes more grade-driven with the

lecturers' and all what they stand for being accepted as the most important influence. All these initiate the students as dependent and passive learners (Lee, Azman and Koo, 2010).

Accountability, cost-efficiency and effectiveness has altered the teaching and learning process indirectly as policymakers allocate resources in accordance to key performance index and incentives in order to justify spending (Gonzalez et al., 2001; Kellaghan and Greaney, 2001; Raudenbush, 2005). Also, examinations' bodies wield much power over the assessment practice and policies as poor results bring about enquiries on their operational efficacy. This is evident in the United States of America's Spelling report of 2006. Accreditation bodies are hence set up by policymakers to hold HE institutions (HEI) accountable but unfortunately, it only acts as external accountability movements stressing institutional efficiency and the establishment of performance standards. Even as far back as 1996 had Hinett and (1996) noted that assessment data of student's learning is used (both in the United Knight Kingdom and in the United States of America) for "management and accountability purposes", and not for the benefit of learners. Dowd and Tong (2007), however advised that internal assessment movements aimed at improving the teaching and learning process that sums up to the learning experience should also be made a priority.

2. Stakes on Higher Education Students

Students are expected not only to be academically proficient but are also required to possess requisite generic skills and competencies. Sedlacek (2004) described student's involvement of Astin (1999); academic and social integration of Tinto (2006); and Milem and Berger (1997) study skills to mention a few; as concepts making up non-intellective skills which are related to academic attainment. Goldberg (2001) through factor analysis added personality traits to represent generic skills. These generic skills such as problem–solving skills, communication skills, and interpersonal skills are required in the workforce in order to be relevant in global decision making.

These non-intellective factors or predictors are gaining prominence as it aids students' successful learning experience. In addition, the twenty first century employability requires both academic qualification and attributes such as, team working, networking, self-confidence, coping with unexpected challenges to list a few. These farfetched attributes are mostly derived from these non-cognitive competencies and skills. The clamour is now on embedding these transferable or generic skills into the curriculum. Literature depicts lecturers finding it cumbersome to incorporate these skills into the pedagogical process. Even more worrisome is aligning the assessment practice to objectively measure and evaluate the intended learning objectives; these requisite generic skills; as well as those of workplace performances. This is to satisfy governmental anticipation in order to increase the global economic competitiveness

In comparison with the traditional cognitive measures used in the admission process (i.e., standardized test scores and high school academic performance) with respect to their ability to increase minority admissions; to predict academic problems and performance; and also reduce attrition of all students, the non-cognitive predictors alone resulted in higher "hit" rates meaning accurate predictions of academic or retention problems (Barch et al., 2009; Conard, 2006; Le Deist and Winterton, 2005; Oswald et al., 2004; Sedlacek, 2004).

As such, more attention should be given to non-cognitive factors research and most especially how to measure these latent variables that contribute to success. With disjointedness in curriculum alignment between the teaching, learning and assessment of cognitive knowledge in HE, more problematic is the assessment of non-intellective variables that both the government as well as the industry demand from graduates. The desired assessment practice must validly and reliably measure the expected learning objectives, hence ensuring that the assessment format is in tandem with the learning objectives and are met (objectivity) while simultaneously proffering a true measure of the students' progress and achievement (validity and reliability). It should also be built into the educational process and provide valuable information (usability) for both teachers and students as advocated Wiggins (1998), and be practical, focusing on the students' learning outcome perspective that treats assessment interpretations not as an end in itself (Sedlacek, 2004).

Additionally, the changing trends in HE and the prevailing assessment practiced coupled with the societal expectations from these students leads to students' psychological perception of self and the society changing in terms of self-esteem, self-efficacy, goal orientation to mention a few. It also influences the learning experience such as culture shock at one end to adjustment, adaptation, involvement, engagement and persistence at the other end. The stakes on students' actions and inactions, in addition to the issues associated with HE and its assessment practice are no small thrust on HE and particularly on the students as putting the students first (Barnett, 1992; Boston, 2010; Boston et al., 2011; Schroeder, 2003; Yorke, 2004) is important when investigating the learning quality of students in HE.

There are nonetheless a growing number of standardized, commercially-produced measures of students' cognitive and/ or non-cognitive behaviour, attitude, motivations and strategies or at the extreme, signals portraying attrition, though the subscales may vary in definition and concepts. Most of these assessment tools are available to be administered mostly as self-reported instruments, with some of them targeting entry points, that is, during orientation period upon admission or first few weeks of admissions while others are administered during the semester. College Student Inventory (CSI), The College Success Factors Index (CSFI) and Anticipated Student Adaptation to College Questionnaire (ASACQ) are examples of instruments for early detection and intervention.

The Learning and Study Strategies Inventory (LASSI); Motivated Strategies for Learning Questionnaire (MSLQ),United States' National Survey Of Student Engagement (NSSE) and Australian Course Experience Questionnaire (CEQ) are notable instruments summarily used to measure students learning habits, attitudes, motivation and engagement. These instruments are generally based on sound theoretical basis and have been rigorously tested for their psychometric properties. The organizations that offer these instruments usually provide benchmarks which help other institutions assess their relative position to peers thus making them modifiable to particular contexts. However, it will be noticed these instruments assesses different constructs and do not take a comprehensive investigation combining both cognitive and non-cognitive factors simultaneously. Furthermore, Classical Test Theory (CTT) is used to evaluate majority of these instruments. Rigorous psychometric analysis of the generated scores using modern psychometric theory (Item Response Theory) is eminent in order to assess item-level psychometric properties and evaluate rating scale scores.

The importance of understanding the effect of non-intellective psychological constructs on indicators of academic attainment in HE has both practical and theoretical importance. Currently, secondary school educational policies are generated to produce students that have high cognitive abilities with an overemphasis on test performance majorly for high-stakes decisions but as the twenty first HE expectation demands, more is expected as not just acquisition of knowledge but must go further towards creativity and innovation so that such nations can be globally relevant. Psychological constructs such as self-regulation instills self-directedness, problem solving skills, lifelong learning tendencies on the students therefore equipping them with requisite skills and competencies much needed in the knowledge based nations.

Theoretically, a better understanding of students' learning quality will be brought to the limelight and less emphasis will be given to traditional (sociological and intellectual) predictors such as secondary education examination results, HE CGPA, provision of facilities to list a few. A valid and reliable self-report or proxy measure that is accessible, relevant, contextually sensitive, geographically representative and evaluated using modern measurement theory is necessitated. In addition, the self-report measure will pinpoint appropriate strategies required to aid academic attainment. It would also aid the restructuring of the delivered course content thus making the students' path of setting achievable goals and enacting self-regulatory strategies more explicit.

The HE institutions will also have a better understanding comprehending the students' internal process of the learning experience. Sequel to this, the interaction with lecturers, administrative personnel, and the students will be enhanced as collaborative learning will be further appreciated. This is also in tandem with Chickering, Gamson and Poulsen (1987) declaration that both students and faculty are part of the solution to improving undergraduate education. For the academic staff, this understanding is expected to promote motivated mentoring and interactions that will yield positive impact upon students' decision. While on the part of HE students, appraising and acknowledging the import of these psychological factors will assist in developing strategies to counter challenges, creating positive learning experiences, and maximizing the potential to reach their learning goals. This collaboration between the institution and the students will ultimately foster institutional effectiveness in lowering attrition.

Conclusion

While assessment of cognitive learning outcome is commonplace as it has been the emphasis with HE policy makers using accountability as a tool, the 21st century expectations lends herself more to the acquisition of the non-intellective learning outcomes which is made up of affective/psychological competencies At the individual level, it refers to comprehensive learning entailing the need for an understanding of the social, cultural, political and economic implications of any knowledge or skill in its context, and how, through such a concept of education, an individual can learn both knowledge and skills expected, and the capacity to take initiatives, whatever their specific occupation or position.

Finally, the shift in HE learning expectations, its assessment practice and implication necessitates an investigation into developing a new self-report measure tapping into students learning experience composed of both non-intellective and academic predictors in a developing multicultural country.

References

[1]. Airasian, P. W. (1988). Measurement driven instruction: A closer look. Educational Measurement: Issues and Practice, 7(4), 6-11.

[2]. Astin, A. W. (1991). Assessment for excellence: the philosophy and practice of assessment and evaluation in higher education: Oryx Press.

[3]. Astin, A. W. (1999). Student involvement: A developmental theory for higher education.

[4]. Barch, D. M., Carter, C. S., Arnsten, A., Buchanan, R. W., Cohen, J. D., Geyer, M., Green, M. F., Krystal, J. H., Nuechterlein, K. and Robbins, T. (2009). Selecting paradigms from cognitive neuroscience for translation into use in clinical trials: proceedings of the third CNTRICS meeting. Schizophrenia bulletin, 35(1), 109-114.

[5]. Barnett, R. (1992). Improving Higher Education: Total Quality Care: ERIC.

[6]. Barrie, S. C. (2004). A research-based approach to generic graduate attributes policy. Higher Education Research & Development, 23(3), 261-275.

[7]. Bloxham, S. and Boyd, P. (2007). Developing assessment in higher education: A practical guide: McGraw-Hill International.

[8]. Boston, W. E. (2010). Measuring student retention at an online institution of higher education. Unpublished dissertation in Higher Education Management. University of Pennsylvania.

[9]. Boston, W. E., Ice, P. and Gibson, A. M. (2011). A review of paradigms for evaluating the quality of online education programs. Online Journal of Distance Learning Administration, 14(4).

[10]. Boud, D. and Falchikov, N. (2006). Aligning assessment with long-term learning. Assessment & Evaluation in Higher Education, 31(4), 399-413.

[11]. Brennan, J., King, R. and Lebeau, Y. (2004). The role of universities in the transformation of societies: Synthesis report. London

[12]. Brown, S. (2004). Assessment for learning. Learning and Teaching in Higher Education, 1(1), 81-89.

[13]. Brown, S. and Glasner, A. (1999). Assessment Matters in Higher Education: Choosing and Using Diverse Approaches: ERIC.

[14]. Burke, R. J. and Greenglass, E. (1995). A longitudinal study of psychological burnout in teachers. Human Relations, 48(2), 187-202.

[15]. Burton, D. and Bartlett, S. (2012). Introduction to education studies: Sage Publications Limited.

[16]. Bynner, J., Brassett-Grundy, A., C., H., Preston, J. and Schuller, T. (2004). The benefits of learning: The impact of education on health, family life and social capital. : . London: Taylor and Francis.

[17]. Bynner, J., Dolton, P., Feinstein, L., Makepeace, G., Malmberg, L. and Woods, L. (2003). Revisiting the benefits of higher education. London: Institute of Education, University of London.

[18]. Bynner, J. and Egerton, M. (2001). The wider benefits of higher education. London: Higher Education Funding Council for England.

[19]. Carey, K. (2004). A matter of degrees: Improving graduation rates at four-year colleges and universities.

[20]. CBI. (1993). Towards routes for success. London: Confederation of British Industry.

[21]. Conard, M. A. (2006). Aptitude is not enough: How personality and behavior predict academic performance. Journal of Research in Personality, 40(3), 339-346.

[22]. Dowd, A. C. and Tong, V. P. (2007). Accountability, assessment, and the scholarship of "best practice", Higher education: Handbook of theory and research (pp. 57-119).

[23]. Fajonyomi, A. and Njodi, I. (2007). Reforms in Higher Education in Nigeria: A Faculty of Education Book of Readings: Awemark, for Faculty of Education, University of Maiduguri.

[24]. Falchikov, N. (2005). Improving assessment through student involvement: Practical solutions for aiding learning in higher and further education: RoutledgeFalmer.

[25]. Goldberg. (2001). Analysis of Digman's child-personality data: Derivation of Big-Five factor scores from each of six samples. . Journal of Personality, 69, 709-743.

[26]. Gonzalez, E. J., O'Connor, K. M. and Miles, J. A. (2001). How well do Advanced Placement students perform on the TIMSS Advanced Mathematics and Physics Tests. Boston: International Study Center, Lynch School of Education, Boston College.

[27]. Grace, S. and Gravestock, P. (2008). Inclusion and diversity: meeting the needs of all students: Routledge.

[28]. Harvey, L. (2002). Evaluation for what? Teaching in Higher Education, 7(3), 245-263.

[29]. Hersh, R. H., Bundick, M., Keeling, R., Keyes, C., Kurpius, A., Shavelson, R., Silverman, D. and Swaner, L. (2009). A well-rounded education for a flat world. Educational Leadership, 67(1), 51-53.

[30]. Hinett, K. and Knight, P. (1996). Quality and assessment. Quality Assurance in Education, 4(3), 3-10.

[31]. Hinton, C. and Fischer, K. W. (2008). Research Schools: Grounding Research in Educational Practice. Mind, Brain, and Education, 2(4), 157-160.

[32]. Jokthan, E. T. (2010). Utlizing the Value of Educational Psychology for Millennium Development Goals in the Training of Teachers. The Voice of Teachers, 1(2).

[33]. Kaur, S., Sirat, M. and Azman, N. (2007). Globalisation and Internationalisation of Higher Education in

[34]. Malaysia. Penang: Penerbit Universiti Sains Malaysia.

[35]. Kellaghan, T. and Greaney, V. (2001). Using assessment to improve the quality of education: Unesco, International Institute for Educational Planning.

[36]. Knight, P. (2003). Learning, curriculum and employability in higher education: RoutledgeFalmer.

[37]. Knight, P., Tait, J. and Yorke, M. (2006). The professional learning of teachers in higher education. Studies in Higher Education, 31(03), 319-339.

[38]. Knight, P. and Yorke, M. (2003). Assessment, Learning and Employability: Open University Press.

[39]. Le Deist, F. D. and Winterton, J. (2005). What is competence? Human Resource Development International, 8(1), 27-46.

[40]. Lee, K. S., Azman, H. and Koo, Y. L. (2010). Investigating the undergraduate experience of assessment in higher education. GEMA: Online Journal of Language Studies, 10(1), 17-33.

[41]. Linn, R. L. (2000). Assessments and accountability. Educational researcher, 29(2), 4-16.

[42]. McInnis, R. and Devlin, M. (2002). Assessing learning in Australian universities. Centre for the Study of Higher Education, University of Melbourne.[29 Dec 2002, verified 23 Oct 2004] http://www. cshe. unimelb. edu. au/assessinglearning.

[43]. Messick, S. J. (1998). Assessment in Higher Education: issues of access, quality, student development and public policy: Lawrence Erlbaum.

[44]. Milem, J. F. and Berger, J. B. (1997). A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure. Journal of College Student Development, 38, 387-400.

[45]. Mosaku and Najib. (2010). Persistency in Malaysian Higher Education. Paper presented at the Edupress 2010.

[46]. OECD. (2007). Understanding the brain: The birth of a learning science. Paris.

[47]. Oswald, F. L., Schmitt, N., Kim, B. H., Ramsay, L. J. and Gillespie, M. A. (2004). Developing a Biodata Measure and Situational Judgment Inventory as Predictors of College Student Performance. Journal of Applied Psychology, 89(2), 187-207.

[48]. Paulle, B. (2005). Anxiety and Intimidation in the Bronx and the Biljmer: An ethnographic comparison of two schools. Amsterdam: Dutch University Press.

[49]. Pellegrino, J. W., Chudowsky, N. and Glaser, R. (2001). Knowing what Students Know: The Science and Design of Educational Assessment. Washington, DC: National Academy Press.

[50]. Peters, R. S. (1967). Ethics and education: Scott, Foresman Atlanta, GA.

[51]. Piaget, J. (1971). The theory of stages in cognitive development.

[52]. Raskin, J. D. (2002). Constructivism in psychology: Personal construct psychology, radical constructivism, and social constructionism. American Communication Journal, 5(3), 1-25.

[53]. Raudenbush, S. W. (2005). Learning from attempts to improve schooling: The contribution of methodological diversity. Educational Researcher, 34(5), 25-31.

[54]. Richardson, J. T. E. (2008). The attainment of ethnic minority students in UK higher education. Studies in Higher Education, 33(1), 33-48.

[55]. Rowntree, D. (1987). Assessing students: How shall we know them? : Nichols Publishing Company.

[56]. Schroeder, C. (2003). How Are We Doing at Engaging Students? Charles Schroeder Talks to George Kuh. About Campus, 8(1), 9-16.

[57]. Sedlacek, W. E. (2004). Beyond the Big Test: Noncognitive Assessment in Higher Education: ERIC.

[58]. Segers, M., Nijhuis, J. and Gijselaers, W. (2006). Redesigning a learning and assessment environment: The influence on students' perceptions of assessment demands and their learning strategies. Studies in Educational Evaluation, 32(3), 223-242.

[59]. Tang, T. L. P. and Chamberlain, M. (1997). Attitudes toward research and teaching: Differences between administrators and faculty members. Journal of Higher Education, 212-227.

[60]. Tinto, V. (2006). Research and practice of student retention: what next? Journal of College Student Retention: Research, Theory and Practice, 8(1), 1-19.

[61]. Ujang, Z. (2009). The Elevation of Higher Learning. Johor: Universiti Teknoloi Malaysia Penerbit.

[62]. Wiggins, G. (1998). Educative Assessment. Designing Assessments To Inform and Improve Student Performance: ERIC.

[63]. Yero, J. L. (2002). Teaching in mind: how teacher thinking shapes education.

[64]. Yorke, M. (2004). Retention, persistence and success in on-campus higher education, and their enhancement in open and distance learning. Open Learning: The Journal of Open, Distance and e-Learning, 19(1), 19-32.