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A REVIEW ON EFFECTIVE TEACHING AND LEARNING IN HIGHER EDUCATION

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Abstract

This paper provides a review of some approaches for developing teaching and learning in Higher Education institutions. The purpose of these approaches is to explore new techniques for integration and exploitation in order to preserve the good quality of our teaching and to enhance the quality of our students' learning experience.

Keywords: Quality Teaching, Effective Learning, Design and Evaluation, Assessment and feedback

Introduction

New challenges are facing *teaching* and *learning* in Higher Education (HE) nowadays and a new framework is established for the success of the student's learning experience.

With time passing, different theories have evolved like behaviourism, cognitivism, constructivism, and humanism. Behaviourist theories state "that language is a set of habits that can be acquired by means of conditioning". Cognitive theories consider "learning as an internal mental process" and the educator "structures content of learning activities to focus on building intelligence". The purpose of Constructivist theories in education is "to become creative and innovative through analysis and synthesis of prior experience to create new knowledge". The educator's role is "to mentor the learner". Humanist theories are "a paradigm that emerged in the 1960s which focus on the human freedom, dignity, and potential".

This paper aims to provide a review of new approaches that benefit the quality of our teaching and of our students' learning. Three major parts are developed. The first part covers mainly *teaching* and *supporting learning* in HE, the second part is about *design* and *evaluation* for teaching and learning in HE while the third part takes into consideration the *assessment* and *feedback strategy*.

Teaching and supporting Learning in Higher Education The teacher's Action Learning

The action learning notion, first introduced by Reg Revans in the late 1940s, represents a key stone of the teaching/learning process. In 1998, Johnson defined the action learning set as a "learning laboratory". The teachers must adapt their instruction to changing situations in the classroom (O'Donnell and O'Kelly, 1994). They need to include new methods like peer learning, group work ... They need to make students active and part of the teaching and learning process. This is how students will be prepared to be active citizens (Biggs and Tang, 2011) and this is how their personal development is supported.

Group work

Students appear to learn more effectively if they debate their learning with their peers (persons of the same age and concerns). This is how students gain awareness of self and

others. They are more inclined to listening and communicating (Johnson, 1998). However, group work is not the best issue for a better learning (Blumenfeld et al., 1996). Some may rely on the rest of the group and not contribute while others might dominate hence the importance of the teacher's role to make group work successful.

Unmissable lectures

The "one-way transmission" lectures make students passive and they will fail to engage with the subject. Keys to make a lecture "unmissable" (Revell and Wainwright, 2009) are:

- 1. A good organization of the lesson reflected on outcomes-based planning which gives a deeper approach to learning.
- 2. Teacher's charisma and enthusiasm.
- 3. Virtual learning environments for the digital-native students of today.
- 4. Effective and timely feedback: it's the teacher's responsibility to give effective and timely feedback to his students.
- 5. Establishment of credentials by the institution; this will certainly enhance teachers' personal practice.

Inclusive teaching

Recognizing and meeting the learning needs of all students, particularly the ones with special needs is inclusive teaching. Everyone will have equal opportunities to learn in HE institutions. However, structural, organisational, behavioural, and attitudinal barriers exist. For example, access to fieldwork may be impossible in the case of handicapped students and one needs to "understand fully the boundaries and nature of its impairment" (Farrar, 2006).

Designing and Evaluating for Teaching and Learning in Higher Education The theory of design

In HE, good design must accommodate the complexity of both HE purpose and the complexity of individual learners. The key issue is to ensure "constructive alignment", that is, "identifying clear learning outcomes", "designing appropriate assessment tasks", and "designing appropriate learning opportunities for the students" (Biggs, 1999). The design must first meet personal requirements of the teacher's experience and interest, second, departmental and institutional requirements like the university learning and teaching philosophy, and finally, external requirements like market needs. An intrinsic motivation must push the student to get an ownership of his [her] learning. This active process teaches him [her] to learn the skills of inquiry and become a *lifelong learner*.

Learning Outcomes

Learning Outcomes (LOs) are defined as follows: "A learning outcome sets out what a learner is expected to know, understand and be able to do as the result of a process of learning". According to Moon (2009), LOs need to be written clearly in a language that is comprehensible to students at that level in HE and by the need to "align learning outcomes with assessment and assessment criteria" (Gibbs and Simpson, 2004). However, the lecturer's role is to ensure that the "LOs do not stifle creativity and become too prescriptive" (Ecclestone, 1999). Flexibility is also essential for encouraging discussion and creating a flourishing environment for students. In Race's Ripple Model, some interesting factors are underpinning successful learning like "learning by doing, learning from feedback, wanting to learn, needing to learn, and making sense" (Race, 2010). Moreover, appropriate learning opportunities are designed for the students "to get them to successfully undertake the assessment tasks" (Biggs, 1999).

Evaluation techniques

Chelimsky (1997) identified many evaluation techniques for accountability, development, and knowledge. Each technique is specific for a certain purpose. One can clearly understand the importance of implementing evaluation techniques in order to carve our professional practice.

Moreover, in HE, evaluation methods offer the chance to feedback, "allowing teachers to refine their practice" (Huxham et al., 2008). These methods may range from institutional evaluation, through programme or module evaluation down to an individual session.

In the following part, I will appraise two evaluation techniques: the End of Module Questionnaire (EMQ) and the Peer Review of Teaching.

Regarding the EMQ, an online questionnaire is implemented and is filled in by each student at the end of each module. Students indicate their level of agreement or disagreement to a topic concerning the whole module, the method of teaching, the assessment exercises and individual tutors. Research showed that EMQ is sensitive to outliers since some students answer randomly the questions, without any effort of positive reflection. Furthermore, there might be a correlation between student evaluations of teaching and expected grades; this is how students reward professors with high evaluations in exchange of high grades. Moreover, in EMQ, no space is allocated for students' personal comments which can be their chance to express their opinion. This possible space can also help students think of themselves as "stakeholders" in their learning (Macdonald, 2006). However, it is worth noting here some pertinent reflection that one can ask himself: "Are students qualified to rate their instructors and the instruction?" (Mc Cullough and Radson, 2011). This is why, student end of module questionnaire is not used alone but along with a peer review of teaching.

Regarding the Peer Review of Teaching, a checklist is used by the peer while evaluating a faculty member's teaching. This method is a little delicate since not every teacher accepts the idea of peer review positively. However, it is very clearly stated that the purpose of this evaluation method is for teaching developmentnot judgment or criticism. This opposition to peer review may also be the "reluctance to be involved or to engage with the process" (Lomas and Nicholls, 2005). For a successful peer review process, the faculty must implement a clear and objective procedure:

- 1. Advance meeting: the reviewer discusses the purpose of the peer review with the reviewee.
- 2. Collect the evidence: the reviewer may search to what is recognized as good practice in the field.
- 3. The reflective dialogue: at the end of the meeting, both parties will exchange "gains" as areas for development and will produce an action plan.
- 4. Implications for your practice: peer's own development fostered through the ideas obtained from watching a colleague.

It is worth noting here that a proper training for the observers and a certain number of visits per semester, not only one observation, are required (Arreola, 2003). This is however time and potential consuming.

Assessment and feedback strategy

Assessment

According to the Merriam-Webster online dictionary the word *assessment* comes from the root word *assess* which can be defined as follows: to determine the rate or amount of or to determine the importance, size, or value of. Assessment in education is generally used to gauge student progress. In 1997, Brown, Bull, and Pendlebury described assessment as "any procedure used to estimate student learning for whatever purpose". The Educational and Student Policy of the University of Cambridge emphasizes key concepts in the assessment practices and expectations. "The key criterion for using a particular form of assessment should be its effectiveness in properly assessing the intended learning outcomes of the course". Moreover, assessment procedures and policies should be communicated clearly to students, their advisors, and examiners. A great deal of importance is given to assessment because research has showed that "what influenced students most was not the teaching but the assessment" (Gibbs and Simpson, 2004). Assessment is all what really matters to the student, it represents the "heart of his [her] experience" (Brown and Knight, 1994).

In the appropriate literature, we can find many types of assessment methods and strategies; open book or closed book examinations, multiple choice questions (MCQs), experimental lab work, oral exams, projects, reports etc. These methods can be divided into initial, formative, and summative, objective or subjective, informal or formal. Initial assessments are conducted prior to instruction to establish a baseline from which individual student growth can be measured. Formative assessment is used to aid learning. For example, a teacher giving personalized feedback to the student, not necessarily for grading purposes. Also, these "frequent opportunities to perform and receive suggestions" will help them improve (Gibbs and Simpson, 2004). This type of assessment is an informal method to help students enhance their knowledge of the subject. Summative assessments are generally carried out at the end of a course or project and are used to assign a course grade to students. They correspond to a formal method of assessment. Assessments have also been divided into objective and subjective. This is the time when the teacher and the student can ask himself/herself "what he [she] learned", "how well he [she] learned" and seek answers to these interrogations (Retrieved from http://www.aahe.org/Assessment/Assessmentplan.htm). However, it has been shown that "students are capable of taking different approaches to their learning" (Rust, 2002). A surface or a deep approach to learning can lead to short-term or lifelong learning respectively. If the schedule of the assessments is very tight, this may lead to a surface approach to learning as opposed to a deep approach.

Feedback strategy

In his keynote paper, Nicol (2007) gave the Ten Principles of Good Assessment and Feedback Practice. Some include: "help clarify what good performance is, encourage time and effort on challenging tasks, give high quality feedback information that helps learners self-correct, encourage positive motivational beliefs, encourage interaction and dialogue around learning...". "Students need appropriate feedback on performance to benefit from courses" (Nicol, 2007). But on the other hand, it was found from research that "students receive little useful feedback when the volume of written feedback is very high". In fact, feedback "must be timely and must be received by students while it still matters" (Gibbs and Simpson, 2004) so they can re-construct their own understanding, in order "to close the gap between current and desired performance" (Nicol and Macfarlane-Dick, 2006). This is how students have to engage with the feedback and with their learning, in order to set up good habits for a life-long learning process. It is however worth noting that some "students may ignore the written feedback and concentrate on grades" (Mutch, 2003).

All the above contribute to the term "constructive alignment" (Biggs, 1999) that we have already developed in "The theory of design". The clear learning outcomes and appropriate assessment tasks will assess whether each of the learning outcomes has been met and the learning opportunities will help students successfully undertake these assessment tasks.

Conclusion

Today, *teaching* aims to improve the way information is transmitted from the teacher to the student. One must be conscious of his *role* in the larger world we want to build. We need to develop skills, attitudes, and values to enable people *work together* towards a more just and sustainable world ...

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