Evidence-Based Teaching in Higher Education

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Abstract

This essay looks at Evidence-based teaching (EBT) as a concept teachers and researchers in education adopt to improve teaching and learning techniques in Higher Education. EBT concept compiles, analyzes and uses objective evidence to inform the design of a curriculum or guide instructional methodology. This could be from either a qualitative research data on students or the personal experience teachers acquired as a result of continuous study of profiles, attitudes, characteristics and academic potentials of students within the educational value chain. Some principles of learning which support EBT concept may include previous knowledge of the learner, motivation, regular feedback from both learner and teacher, emotional, social and intellectual climatic factors in the learning process. These provide some form of security and assurance to teachers who want to use this pedagogical concept in their teaching methodology because they have empirical record which demonstrates that this concept is an effective approach in enhancing students' learning.

1. Introduction

Evidence-based teaching (EBT) is a concept or approach teachers and researchers in education adopt to improve or modify teaching and learning techniques. This concept could be from either a qualitative research data on students or the personal experience teachers acquired as a result of continuous study of profiles, attitudes, characteristics and academic potentials of students within the educational sector.

EBT originated from medicine, nursing, psychology, and social work (Sackett, et al., 1996; The American Psychological Association, 2005; Kazdin, 2008). If defining EBT in higher education without losing the clinical and precise approach from medical, psychological and sociological perspectives, then we can define EBT as the meticulous, unambiguous, and judicious integration of best available research on teaching technique and expertise within the context of all educational stakeholders (student, teacher, department, college, university) and community characteristics. (Groccia, 2010)

2. Discussion

EBT is a concept used by educators to compile, analyze and use objective evidence to inform the design of a curriculum or guide instructional methodology. For example, teachers in higher educational institutions may over the years systematically collect and review data on students at various levels of their studies and this give empirical evidence as to which student risks dropping out or is struggling with the study as well as those who are performing exceptionally well. And also by looking at the data from the previous level in terms of absenteeism, disciplinary infractions and course failure rates, teachers can use this as evidence-based mechanism to diagnose problems earlier. This is sometimes described as 'early warning systems'. Evidence-based teaching makes teacher proactive than reactive.

Notwithstanding contemporary teaching approaches and processes, it is critically important and necessary that faculty adopts and adapts to a system of teaching that considers empirical evidence from systematic reviews, descriptive, qualitative and quantitative research. This provides some form of security and assurance to teachers in any choice they apply from these concepts because they have empirical record of effective approach in enhancing student learning. Ambrose and others (2010) description of the seven principles of learning can sum up teaching by evidence-based approach in high education: These are

- 1. Prior knowledge influences current and future learning.
- 2. How students organize knowledge influences how they learn and how they apply what they know.
- 3. Motivation determines, directs, and sustains learning.
- 4. Students develop learning mastery by acquiring component skills and practicing combining and integrating them.

- 5. Goal-directed practice coupled with targeted feedback facilitates learning.
- 6. Emotional, social, and intellectual climate factors influence learning.
- 7. Metacognitive monitoring of learning facilitates further learning.

3. Conclusion

In conclusion, it is important to appreciate the role of relevant previous knowledge (RPK) in teaching and learning; it forms the bases from which the student can connect the known to the unknown and the simple to the complex. RPK facilitates consistency and continuity in the learning process. It is therefore imperative for teachers to tap into the RPK of the student. Also, there are individual and cultural differences which students consciously or unconsciously bring into the classroom. Teacher's knowledge about the student's family background and culture could help to reduce these differences and promote good rapport between the teacher and students. Additionally, it is important that teachers adopt a teaching approach that will suit the learning style of the students. A number of studies discovered that students learn better when teaching is interactive and student-centered. This is an indication that teachers must adopt more interactive approaches to leaching.

Furthermore, feedback is very critical in teaching. Prompt feedback is a way for the teacher to evaluate the effectiveness of his method and also to assess the learning outcomes of his students. Also, the school and classroom environments play critical roles in making teaching and learning effective. Schools with well-equipped human and material resources act as a stimulus for effective teaching and learning. Motivation inspires and enhances the students' capacity to work harder. Teachers should motivate their students with positive comments.

Finally, it is important to note that these principles are not absolute but serve as a framework to guide the teacher. Hence the onus rests on the teacher to make teaching interesting, effective, and innovative.

References

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