



The Effect of a Core Competencies Training Program on Faculty Members' Teaching Performance

Ismail Elmahdi¹, Omar Muammar², Abdulghani Al-Hattami³

¹University of Dammam, Dammam, Saudi Arabia

²University of Dammam, Dammam, Saudi Arabia

³University of Dammam, Dammam, Saudi Arabia

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Abstract: Education in general and higher education in particular is becoming an influential force behind economic and social development in an increasingly competitive world. Thus, the need for highly trained and competent graduates obliges nations across the world to adopt thoughtful educational plans in order to improve teaching quality in higher education; what Voorhees (2001) calls "Competency-Based Learning Models". This study was conducted to assess the impact of an intensive faculty training program which was performed at the University of Dammam in 2014 on improving teaching and learning knowledge, attitudes, and skills for male and female faculty members. Thirty-six faculty members formed the sample of this study (14 males and 22 females). The results of a paired sample t-test indicated significant positive difference between pre- and post-test performance. For the purpose of data triangulation, eight randomly selected participants in the training program have been interviewed. All of the interviewees indicated that the program is valuable. Furthermore, they recommended that the program should be provided to all faculty members at the University of Dammam, especially for newly joined faculty members.

Keywords: core competencies, teaching and learning, faculty, professional development.

Introduction

Around the globe countries are increasingly looking to higher education as a crucial contributor to national development. Individuals and nations incomes are improved by the type of education provided. Universities are considered the source for social change and a boost for economics and the prosperity of nations (Ramsden, 2003; Varghese, 2007). Issa and Siddiek (2012) emphasize this point by saying that "The destiny of any nation begins in its classroom[s] where young people are equipped with knowledge and skills to lead the nation" (p.146). Consequently, many countries have focused their attention to adopt what Voorhees (2001) calls "Competency-Based Learning Models" by developing thoughtful

educational plans to improve student learning outcomes. Little, Locke, Parker, & Richardson (2007) stated that "in pursuit of national strategy of excellence, we are convinced that the enhancement and promotion of learning and teaching must be a priority for all of higher education".

In its attempt to enhance the education system and to make it internationally competitive, the Government of Saudi Arabia has invested significant amount of money and resources to boost their education system. In the National Report of 2009, the Deputy Minister for Educational Affairs stated that "the Ministry of Higher Education endeavors to raise the level of excellence and fulfill its requirements in the various higher education institutions. It also



works to strengthen and invigorate the National Commission for Academic Accreditation and Assessment (NCAAA). The Ministry has taken up a number of serious initiatives designed to elevate the level of excellence in institutions of higher education...” (p.18)

The need for competency-based higher education systems led Voorhees (2001) to claim that humanity is in the early stages of a learning revolution. It is no longer true that traditional strategies in providing higher education lead to economic and social development. A new knowledge based paradigm in approaching higher education is redefining the roles of faculty, institutions, and accreditors (Voorhees, 2001). Al-Hattami, Muammar, and Elmahdi (2013), James (1990) and Winston (1999) have a similar argument that higher education is transforming rapidly in response to international competition. These changes have resulted in increases in student demographic diversity, a larger knowledge based economy and the introduction of advanced information communication technology in the teaching and learning process. Al-Hattami et al. (2013) indicated the great need for professional training programs to improve faculty members teaching skills that address the 21st century challenges. A greater number of international universities have implemented programs and established faculty training centers in order to provide faculty training to boost teaching efficiency. Although prestige through research publication is considered highly important, enhancing the quality of teaching should receive equal consideration.

Interest in creating competency-based educational systems is growing rapidly throughout the world. In order to meet the challenge of better competency-based learning curricula the United States has established the National Skill Standards Board, the United Kingdom established the Learning Skills Council, and Australia put forth the Competencies and skill standards (Voorhees 2001). To transform their educational systems to competency-based, many countries have established national qualification frameworks

to gauge teaching competencies in higher education. Accordingly, a growing number of universities require in-service training for all faculty members for the purpose of boosting their competency in teaching. In several detailed interviews, Gibbs and Coffey (2004) outlined a rationale for providing training programs for faculty. Their framework is founded on the following three components:

1. Improvement in teaching ability.
2. The increase of conceptual understanding of teaching and learning.
3. Resulting alterations in students' learning.

A brochure published by the University of Melbourne (2012) for a Graduate Certificate in University Teaching (GCUT) confidently claims that graduates of the GCUT have reported many positive career outcomes, including enhanced knowledge of effective teaching and learning, improved student evaluation scores, increased promotion opportunities, publication in academic journals and success in winning teaching awards and grants for educational research and development.

Throughout the past two decades higher education has experienced a noticeable transformation, what has been called a “paradigm shift”, from teaching to learning. The transformation is also described as a move from teacher-centric “input” to student-centric learning “outcome” approach. Barr and Tagg (1995) point out that “a paradigm shift is holding in American higher education. In its briefest form, the paradigm that governed our colleges is this: a college is an institute that exists to produce instructions. Subtly but profoundly we are shifting to a new paradigm...”

Teaching Competencies

The teaching competency of a college professor is a combination of skills and knowledge required to perform teaching tasks. These competencies include mastery of subject content, teaching skill and appropriate conduct in the classroom management. While mastery of subject matter content is an important component of teaching, on its own it is not sufficient as



a determinant of teacher competency. Non-academic knowledge such as administrative knowledge, social knowledge, and technical skills must also be considered. Kouwenhoven (2003) mentioned that knowledge, attitudes and skills are collectively establishing teaching competency. Hendriks, Luyten, Scheerens, Slegers, & Steen (2010) argued that learning strategies and learning to learn and reflecting on these learning strategies are as important as mastering the subject matter. Along the same lines, Bhargava and Pathy (2011) said:

mere possession of knowledge and certified qualification gives no assurance to meet the [teacher competency] objectives. For this, it is obligatory for a teacher to have appropriate comprehension of human nature, its needs, and developmental principles in light of urbanization, technology advancements and industrialization locally as well as globally.

Although the Saudi National Qualifications Framework (NQF) established good standards in order to guarantee educational programs of high quality, a clear path toward quality of teaching is ambiguous. Al-Ghamdi, Al-Gaied and Abu-Rasain (2012) concluded that “faculty performance is still not satisfactory because there are no standards or indicators against which to evaluate.” (p. 85)

In his Professional Lecture Series, Koh (2012) stated that the benchmark for educational success is no longer the improvement by national standards alone but the best-performing education systems internationally, which can be evaluated by Program for International Student Assessment (PISA), an important reference point for judging educational outcomes. Therefore, many countries developed teacher competency standards to improve their educational ratings in the light of PISA. For example, the Higher Education Academy in the United Kingdom developed the UK Professional Standards Framework for teaching and supporting learning in higher education, which identifies three areas that contribute to teaching competency. The framework includes: area of activities, core

knowledge and professional values. In a similar vein, The Australian Institute for Teaching (2011) developed a National Professional Standards for Teachers that focuses on professional knowledge, professional practices and professional engagement.

PISA ratings for the year 2009 listed Singapore fifth; having achieved strong student learning outcomes. Professional development for teachers is the main cause behind this success according to the National Institute of Education in Singapore (NIE) (2009). NIE reiterates this point by stating that

Students need to acquire new knowledge, skills and dispositions to ensure their survival and success as individuals, as members of the community and as citizens of our nation. To achieve this we must develop teachers who are able to undertake greater responsibilities as they are at the forefront of educating our youth. It is now universally accepted that the quality of the teaching force determines the quality of education.

In order to achieve higher student learning outcomes, NIE has created an innovative teacher education program that produces qualified teachers. This program obligates teachers to master subject content, pedagogical skills and core values. The purpose of the present study was to examine the effectiveness of a teacher training program implemented at the University of Dammam based on various faculty teaching competencies. The study sought to evaluate whether the teacher training program strengthens teaching competencies of the participating faculty members. The training programs adopted and adapted best practices in faculty training that have been implemented by higher educational systems in the United States of America, United Kingdom, Australia and Singapore. The programs were designed to promote 21st century teaching and learning skills which are based on the constructivist theoretical background. In that the training program applied a learner-centered approach which aims at promoting active and deep learning, increasing learners’ responsibility, accountability and



sense of autonomy while building mutual respect between faculty member and student and encouraging lifelong learning. This study attempted to answer the following research questions:

1. Are there significant differences between the pre- and post-tests in faculty members' performance before and after the implementing the training program?
2. Is it crucial to implement faculty training program on core competencies in teaching in higher education?

Methodology

This study used an experimental design to answer the stated research questions. It sought to explore whether the intervention program had an impact on the participants' teaching knowledge, attitudes and skills. The intervention program focused on five major areas; namely, learning theories, curriculum design, teaching strategies, using technology in teaching, and assessment.

Sampling

An invitation for participation in the faculty training program was sent to all faculty members from 22 colleges that constitute four clusters (Health, Engineering, Sciences and Management, and Arts and Education) at the University of Dammam. After receiving all the applications' requests, a convenient sample of 36 participants was selected. The selectees were full-time faculty members at the University of Dammam who were teaching in the Spring of 2014 and had an interest in joining the teacher training program. These participants were divided into two groups 14 male and 22 female faculty members. The program was executed separately for them.

Measurement

A questionnaire (for the males group) and an actual test (for the females group) were utilized in this study. The questionnaire was prepared and validated by experts in the field of faculty professional development. The participants were asked to rate their knowledge of a number of concepts and skills under each of the five categories from 1 to 10, with 10 representing

higher knowledge. The questionnaire and the actual test asked the participants different questions related to the five disciplines that the program is offering. A factor analysis was performed on the questionnaire to examine if the items are measuring the proposed constructs. Results indicated that the five-factor solution had a reasonably good fit to the data. The five-factor model explained 41% of the total variance. Bartlett's test of sphericity had a chi-squared value of 3619.32, $df = 595$ ($p < 0.001$), and the Kaiser-Meyer-Olkin (KMO) index was .893.

To triangulate the data collection and to capture participants' perceptions about the importance of the training program, eight participants were randomly chosen and interviewed. Their reflections were recorded for better analysis.

Procedures

The core competency intensive training program (more about this program is provided in the Appendix) was advertised through the University of Dammam's website and by email to all faculty members. To register for the program participants were given an on-line survey covering all the skills that would appear on the program (pre-assessment). The same set of questions was given at the end of the program as a post-assessment measure. For the female group a couple of multiple-choice questions were presented before every module for participants to answer using the Audience Response System technology (clickers). The whole same questions were given to the participants in the final day of the program. The data were saved into the clickers' software program and made ready for analysis. The core competency intensive training program was developed and delivered by qualified trainers and experts in faculty professional development in the University of Dammam. The program was provided over 4 days in a workshop format, from 8:30am to 3:00pm.

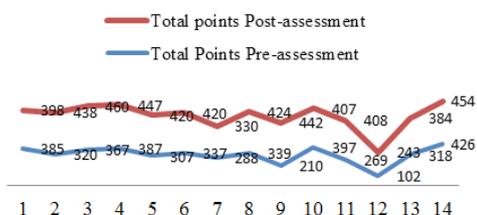
Results

Round 1 - Males

A paired sample t-test was performed to

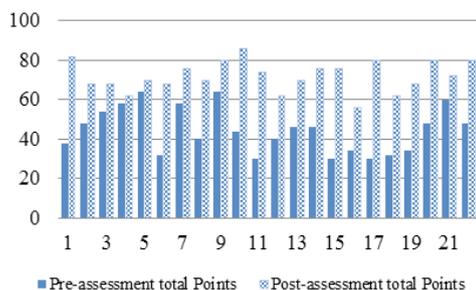


examine the effectiveness of the intensive faculty training program that lasted for four days provided by the Deanship of Academic Development. The findings showed that there was a significant difference between the pre-test (M = 318, SD = 84.17) and post-program test results (M = 405.36, SD = 57.40), $t(13) = 5.470$, $p\text{-value} < .05$.



Round2 - Females

A paired sample t-test was performed to examine the effectiveness of the intensive faculty training program that lasted for four days and was provided by the Deanship of Academic Development. The findings showed that there was a significant difference between the pre-test (M = 22.23, SD = 5.72) and post-test results (M = 36.05, SD = 3.84), $t(21) = 9.949$, $p\text{-value} < .05$.



Qualitative Results

To enrich the data collection and get a better idea of the usefulness of the intensive training program, the researcher interviewed eight of the participants in the program and recorded their reflections on the training program. While all of the interviewees mentioned that the program was valuable and important and would help faculty members in their teaching practices, they pointed out that the program should be conducted

on more than just four days. They have also recommended that the training program should be provided to all faculty members and be mandatory to new faculty members. One of the interviewees pointed out that “the program has a positive impact especially in course design”. Another interviewee said: “this intensive program aimed at achieving long term high quality outcomes”. A third interviewee stated that “the three important advantages of this program are: interactivity, providing informative information about available technology tools in the University of Dammam and it helped me write my learning outcomes”.

Conclusion

This experimental study provided strong evidence that the intensive training program that targets faculty core competencies can improve faculty members’ knowledge, attitudes, and skills towards teaching. Both the quantitative and qualitative data show the significance of this program. The effectiveness and need of such training program is well documented in literature (Al-Hattami et al., 2013). For example, Al-Zoubi and Abdel Rahman (2011) reported significant improvement in personal and professional competencies. Randall (2008) stated: “As a professor, I have benefited immensely from professional development opportunities offered here at Fullerton by the Faculty Development Center” (p. 18). Similar to what one of the participants in this program mentioned that the program helped him in three important areas; interactivity, providing informative information about technology tools used in teaching and learning and writing his learning outcomes.

This study provides the Deanship of Academic Development at the University of Dammam with helpful data and information to implement the Academy of Excellence’s programs in an appropriate manner. The Academy of Excellence is one of five new initiatives which were proposed by this deanship to advance the teaching and learning practices at the University of Dammam. The Academy is in charge of designing and implementing long-term training programs that promote excellence in teaching and learning by offering certificates



and diplomas in teaching in higher education. The results gained from this study will help the deanship to develop a good faculty competency framework and to continue offering the core competency intensive training program to faculty members.

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Appendix

Core Competency Intensive Training Program

The core competency intensive training program is a four-day program designed to equip faculty members, specially the new ones, with the teaching skills and styles necessary to be effective and competent in the teaching and learning processes. The program is expected to achieve the following two main objectives:

- to fulfill the Deanship of Academic Development's objectives in improving the teaching and learning processes in the University of Dammam, and
- to satisfy faculty members' professional development needs.

The intensive training program has been developed as a result of thorough research and study of similar programs in reputable international and national universities. The program development processes was based on teaching competencies that a college faculty member must have. The first step in the development process was benchmarking and considering best practices of faculty members' competencies in a number of respectable universities and educational institutions.

After classifying and grouping faculty competencies with consideration of the National Commission for Academic Accreditation and Assessment (NCAAA) guidance, eleven modules were identified to make up this program. These modules are:

1. General Introduction about Higher Education
2. Professional Development and Ethics
3. Learning Theories (how students learn)
4. Promoting Diversity in Higher Education
5. Curriculum Alignment
6. Teaching Strategies
7. Designing Learning Activities
8. Students Support
9. Learning Environment and Classroom Management
10. Using Technology in the Classroom
11. Assessment and Giving Constructive Feedback

Following that, the program's development team met several times and established guidelines for the development of these modules. The guidelines includes: (module title, outcomes, pre-assessment, method of teaching, activities, post assessment, resources, cognitive skills, alignment with NCAAA and duration).

Finally, skilled and competent trainers were assigned to develop the program's modules. Guided by the established guidelines, the trainers conducted comprehensive research and developed the program's identified modules. The team developed the modules descriptions and Power Point presentations. The trainers also provided resources that include documents as well as related links that support these modules. The program is now presented four times a semester, two in English language and two in Arabic, for a small group (about 20-25 participants) of faculty members.