

Integration of Professional Certification in Higher Education Programs in Bahrain

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Abstract – HEIs has been facing tremendous challenges to update the curriculum with practical skills that comply with the market needs, ICT skills are dynamic which makes the challenge more acute. In this regard, integrating Professional certifications with HEI academic program assists graduates to be more competent, committed & skillful in their workplace, being a professional certified and graduate of any academic program at the same time will kill two birds with one stone besides helping employers to evaluate potential new hires & analyze job performance as well as support HEIs to be regularly updated with the dynamic market needs. Since computer becomes an indispensable tool in any career, so using it is mandatory to achieve any giving task. Obtaining any professional certification with an academic program will definitely enhance graduate resume and make them ready for any occupation or tasks.

Keywords – E-learning, HEI, Professional certifications, ICDL.

I. INTRODUCTION

Information technology (IT) is growing at a rapid pace with advancements in the technology taking place fairly frequently. Aided by the advent of internet and modern gadgets, the technology has made inroads into every sector of industry and every walk of life of an individual. Life styles of individuals, the way organizations conduct business and the way services are being rendered have undergone metamorphic change and are beyond recognition. Recent advances that have taken place include the introduction of cloud computing in the field of IT, mobile computing, tablets, data repositories, and laptops with sophisticated functionalities and play stations with advance features (Ally & Samaka, 2013; Norris & Soloway, 2015). Such advances have driven both service providers and users of those services to struggle to keep up with the pace at which the technology is advancing. For instance present day dealings with the government offices have steadily moved towards e-government technology. Citizens are slowly but steadily trying to learn, understand and use e-government facilities. Similarly, if one looks at the banking industry, it can be seen that customers are able to transact round the clock and get services from those banks with minimum manual intervention using electronic banking. Gone are those days when customers had to wait in long queues to get banking services.

In the same vein it can be mentioned that with the advent of e-learning slowly many higher education institutions (HEIs) in the tertiary education sector are able to offer programmes

leading to students earning qualifications that normally require those students to attend classes on campus. With growing penetration of internet, now people have the facility to book online airline tickets, buy products and services and transact business with organizations using e-commerce. In addition, the extent to which social media has developed and grown enabling closer interaction between individuals, communities and organizations has completely changed the way human beings define relationships. All these examples indicate how rapid changes in information technology has played a significant role in changing the life styles of people as well as the way the businesses and their customers are conducting business and how people need to adjust to changes from traditional methods to electronic methods and cope up with those changes.

With advancements come the complexities of using, implementing and understanding the technology. Frequent changes in technology bring with them difficulties such as obsolescence of technology in quick succession and necessity to update knowledge about the new technology (Sivalogathan, 2014). These difficulties need to be continuously dealt with by individuals, organizations and service providers. In order to deal with those difficulties it is essential that people learn about those advancing technologies and gain knowledge and skills through appropriate training. There are different ways by which people can get trained to gain knowledge and skills in technologies that are pertinent to them. For instance at the beginning of the 21st century, people across the globe were learning about Microsoft Office Package and were getting certified in various skills by Microsoft. Microsoft Office package has become almost essential to conduct office business and individual business with regard to creating documents and editing those documents using Microsoft Word, Microsoft Excel and Microsoft Power Point software packages. When Microsoft changed its version a few years later, then people had to again update their knowledge and skill to deal with the new versions of the Microsoft Office packages. In order to gain this knowledge and skill individuals went to private training institutions that offered vocation programmes in enhancing the knowledge and skills of those individuals. Similar happenings could be witnessed with regard to other IT software skills including internet browsers, computer networking, mobile computing, electronic database and other software and hardware based knowledge and skills. Thus started an era wherein the vocational training institutions started churning out trainees with certified skills in IT who became knowledgeable in individual IT skills but many took it as a serious support for embarking on IT careers skills. Many trainees became IT professionals in organizations and started to earn high salaries as their demand grew in their job market.

The vocational institutions that provided those training programmes ensured that they offer authenticated training programmes that used authorized course material from vendors directly, certified instructors and laboratories equipped with authorized software in specific vendor based software packages. In fact this training activity has assumed the shape of an industry in the

vocational training sector and other industries that implemented IT in their organizations actively sought to recruit those applicants who had certification in specific IT skills.

This research contributes in this area to the extent that it has tested the student satisfaction with regard to an integration of International Computer Driving License (ICDL) programme content into an academic course namely Introduction to Computer & IT. Three factors competency, learning experience and user interface design were identified as independent variables influencing the dependent variable student satisfaction. The research was conducted in Ahlia University a private higher education institution (HEI) comprising five colleges that offer the course Introduction to Computer & IT. Sample of students were drawn from the five colleges. Explanatory research design was used. Results showed that there is positive relationship between the dependent and independent variables.

II. DEVELOPED PROFESSIONAL CERTIFICATION INTEGRATION (PCI) FRAMEWORK

Professional Certification Integration (PCI) Framework was conducted at Ahlia University, the framework included a detailed verification at multi-levels to assure students progression throughout the course, the framework included verification of (1) Verification of Teaching and learning methods and resources (2) Verification and Moderation of level of supplementary assessment (3) Assurance of Major ILOs achievement for the course (Fig. 1)

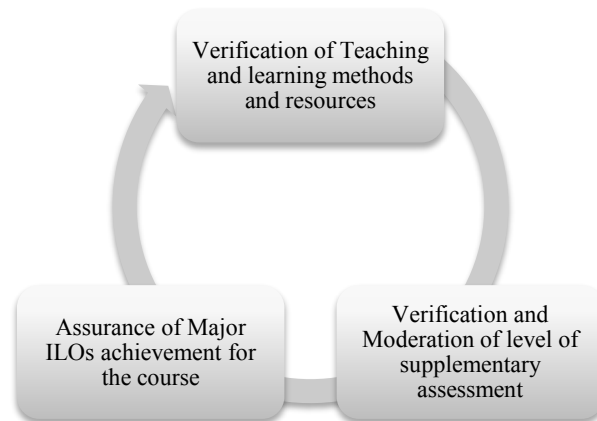


Fig. 1 PCI Framework

At the beginning of each semester, a detailed verification process is conducted to assure that the delivered materials support the progression for students throughout the course.

Throughout the verification process the assessment methods are also verified in terms of alignment and assessing the required expected learning outcomes from the students. In some cases the assessment is also checked in terms progression pathways from an Intended Learning Outcome (ILOs) to other for instance having the Knowledge gained then assessed through

Practical application which is more advanced in ICDL professional certification, taking in account the nature of the certificate.

The assessment are moderated and the score is evaluated regularly throughout the course, at the end of the semester ILOs are assessed in term of achievement/attainment by students. For the ICDL course the major ILOs were set in relation to knowledge and practical application, which almost 78% percentage of the student attain from the first attempt of setting the final exam.

III. CHALLENGES FACED IN IMPLEMENTING THE ICDL PROGRAM

The first challenge started at Pennsylvania Development Youth Center is one of the most weighty focuses in the Cumulated States, which highlights the execution of the permit of the International Computer Driving through the Internet and that are turning out to be more every day in classrooms over the Cumulated States and can be for edifiers and under studies now exploit the universe of computerized substance from the educational program of preparing materials for the media program conventional media and gregarious studies have demonstrated that taches can help under study accomplishment and enhance under study accomplishment and aptitudes (Aesaert, 2013) (Jonassen, 2013). Loysville youth focus Development and regulated by the Ministry of Pennsylvania is situated in Perry County 30100 miles northwest of Harrisburg for childish wrongdoers and the normal length of stay between 6-18 months inside the office, which offers a mixed bag of facilities, for example, teaching, treatment and other (Kinshuk, 2013). What's more, immature individuals are being orchestrated the engenderment of good after their surrender through their preparation for the International Computer Driving permit to give them the abilities and capabilities expected to be capable and revise discernment in the field of correspondence and techs to set them up forever and work which will benefit them professionally and actually by making them additionally enamoring to bosses and augmentation their capacity to impart and access data and housing in the group in the execution International Computer Driving License program 2012. The investigation of a class of supervisors and staff and the outcomes were according to following as one of the instructional meetings of their most loved and the program's thriving in the classroom and the longing of immature individuals to sustain their advancement outside study hours.

IV. CHALLENGES IN HEI IN BAHRAIN

At the beginning of the incorporation, a situation was found where students from the universities who studied formal IT courses found themselves competing with those with non-IT based qualifications but having vocational certification (Brandt, 2015). HEIs had to think of ways to overcome a problem where the graduates they produced could not find jobs as they lacked skills in technology and were not ready for the job market. Situation became alarming. In fact recent trends indicated that HEIs offering programmes in the field of information

technology at the bachelor's degree level are under pressure to integrate skill based contents such as those found in vendor based training resources in order to ensure that the students they produce are having skills required in the job market (Barrett et al. 2014). The concerns of the industry which eventually employ the students graduating from the higher education institutions with regard to lack of adequate knowledge and practical skills required on the part of students to deliver jobs had to be addressed (Bergeron, 2013). Researchers had to develop concepts and models that could be used by HEIs to ensure integration of vendor based programme content into the academic curriculum that is satisfactory and useful to students to get jobs (Daugherty et al. 2015).

The mechanism adapted by Ahlia University to assure that students with admitted with deficiency in computer and English skills will be able to progress in the course. A pilot study was implanted in one of the semester to be able to do an investigation by using qualitative and quantitative research. Personal interview and internal surveys were to check the level of the students and their acceptance and satisfaction of such certification to be part of their studies.

V. THE IMPACT OF INCORPORATING AN ELEARNING ON HIGHER EDUCATION

Restructuring of higher education in the changed in the present compared to the past decade of this change is due to introduce the technology initiatives and supports this view Institutional contemporary structure is less powerful than the past. The structure of today's universities must be 'changeable' in order to integrate distance learning courses, and those institutions that will not or cannot change their structure to incorporate this technology may be bypassed by other educational providers, such as virtual universities and independent educational services. It might well be the case that corporate universities which hitherto only offered training to its employees will be in competition with the higher education sector.

Argues that such a wide acceptance of E-Learning methods in higher scholastic institutions will engender broader repercussions regarding organizational structure. This point is illustrated by Shaba (2000) who suggests that universities are currently callow concerning the acceptance and incorporation of E-Learning and other technological changes in their organizational structures. (Shaba, (2000) considers that this lack of experience will initiate the following reactions within universities. Firstly, ambiguity towards future technology strategy and how to incorporate incipient technological advancements into organizational structure and secondly, how to cope with the diverse range of edifying courses and learning programs perpetual within the university comprising of full time and part time students.

VI. GLOBALIZATION AND THE HIGHER EDUCATION

Globalization and internationalization have indeed a drastic transformative effect on the core purposes of organizations and institutions of higher education. ICDL certificate is an

international recognized certification which is well known worldwide so obtaining such a certification within the bachelor degree certificate would add a great value to all alumni to make them more in demand in the Bahraini labor market or in any countries

Now days, higher educational institutions are developing vocational, entrepreneurial & industrial approaches which converts education into an exchangeable and transferable product in an open market.

VII. CONCLUSION

Undoubtedly academic degrees are very important and essential in every person's life however integrating vocational and professional certifications within academic program would add a great valuable status in every graduate resume which is certainly one of the fulfillment of the market needs demands.

If every technical program contains two or three professional certification especially in the Information Technology and Information systems fields will definitely enhance students' performance and capability in the labor market.

VIII. FUTURE AREA OF RESEARCH

1. To apply the PCI framework on other specializations
2. To evaluate the extent of effectiveness of the framework on a full cohort of graduates
3. To measure the impact of professional certification on pass rate of other IT related courses.

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