



Intrinsic and Extrinsic Motivation to E-learning in Higher Education Institutions

Dr. Abdulkareem Al-Alwani
Yanbu University College, Yanbu, Saudi Arabia
aalalwani@yuc.edu.sa

ABSTRACT

There were many researches which were conducted about implementation of e learning in Higher Education Institutions, but few of them were focused on the motivation of e learning. Even though, there are many applications of e learning in Higher Education Institutions, it is very obvious that there is a resistance to e learning from many users in different fields. The researcher in this study tries to examine the knowledge of selected faculty members to know what their motivations are towards e learning. The research explores various intrinsic and extrinsic motivations such as physical resources, accessibility to internet, perception towards e learning, training, pedagogy and teaching strategies, confidence, comparison to face-to-face teachings, time factor, administrative support, lack of time for students, lack of monitoring, recognition, workload, relevancy to taught courses, in-adequate release time, age, and students' technical knowledge. Faculty from various countries responded 'strongly agree' that adequate and workable physical resources, and accessibility to internet have high percentage (>30%) that motivates them to utilize e learning. While a small percentage chose 'less agree' and 'disagree' to other responses that contribute to motivation towards e learning.

Indexing terms/Keywords

e learning, intrinsic motivation, extrinsic motivation, internet.

Academic Discipline And Sub-Disciplines

E-Learning;

SUBJECT CLASSIFICATION

E-Learning

TYPE (METHOD/APPROACH)

A survey with twenty items was sent by the researcher via email to 100 experts in HEIs. This methodology is chosen by the researcher to collect the data from faculty members from two countries (USA & KSA) having vast experiences working in HEIs. All faculty members were asked to classify the top 20 major incentives that motivate them towards e learning. About 32 faculty members responded to the researcher and sent their responses to the survey. Out of the 32, 24 are males and 8 are females. The survey questions are based on the literature review and readings of the researcher from the best practice references that describe motivations in e learning.

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INTRODUCTION

These days many faculty members assure numerous benefits of e learning to the students, for example consistency, accessibility, adaptability, flexibility, and controllability over their learning experience (Borstoff and Lowe 2007). E-learning can be synchronous (real-time) or asynchronous (flex-time). According to Romiszowski (2004), synchronous e-learning includes technology such as video conferencing and electronic white boards, requiring students to be present at the time of content delivery. Asynchronous applications include programmed instruction and tutorials that allow students to work through the screens at their own pace and at their own time. Most of the courses available on the Internet are based on this asynchronous model (Berge 1998). Students can be involved in e-learning from distributed locations, as in distance learning, or from the same place, such as using a group support system in a classroom to work on an assignment (Gunasekaran et al., 2002).

E-learning applications also differ in the levels of collaboration that they involve. Some courses are entirely independent and individual, while others incorporate some elements of group learning such as discussion forums or chat rooms. The manner of course delivery can be entirely electronic (with or without an instructor) or take a more blended approach integrating electronic and classroom delivery to varying extents. Many current e-learning offerings follow the latter approach, taking advantage of the benefits of various types of delivery (Jack and Curt, 2001).

E learning may not be a learning opportunity appropriate for everyone and thus it should not be considered as a learning mode that forever replaces the traditional classroom learning experience. It should rather be considered as an opportunity to complement traditional learning, to assist those students who require flexibility in learning. Many Higher Education Institutions (HEIs) have resorted to e learning as a mean to deal with an influx of students seeking tertiary education to enhance their skills for the ever-demanding job market. Subsequently, e learning has become an essential learning and business tool. Many institutions of Higher Education are resorting to e learning as a means of solving authentic learning and performance problems, while other institutions are hopping onto the bandwagon simply because they do not want to be left behind (Mapuva 2009).

As e learning in our societies rise to new heights, more and more faculty members are transplanted rather than shifted into the virtual classroom. Though e learning appears to have many benefits to all users, it does have some drawbacks. As a whole, how faculty members feel about using e learning will have a considerable impact on whether they integrate this technology into their teaching or not. Given the significant role of the faculty members, it is imperative to note the contributions the faculty members made in supporting or inhibiting e learning in the classroom. Although today's faculty members maybe more familiar with technology in general, they still may not be prepared or able to integrate e learning into their teachings. Olcott and Wright (1995) indicated that the responsibility for instructional quality and control, the improvement of learning and the aggregate effectiveness of online learning still rests with the faculty.

For faculty to be encouraged to utilize e learning as a viable way to teach, HEIs must listen to faculty concerns. So the top management people in HEIs can understand and react on the faculty motivation and hesitations towards using any e learning methodologies.

The primary focus addressed in this study is the following: to investigate some of the realities that frustrate faculty members' overall motivations towards adopting e learning system in HEIs. For the purpose of this study, various data have been identified as the underlying factors that degrade the faculties' motivation towards using e learning

BACKGROUND TO THE STUDY

Based on the experience of the researcher working with HEIs, it is very apparent that motivation plays a very important role to energize faculty members towards the integration of using technology into HEIs.

The researcher's observation is coincide with the findings made by Betts (1998). Betts mentioned that support by university administration is an important factor. HEIs should overcome any barrier in order to motivate faculty members to integrate technology in their teaching methods. Betts's (1998) results were very similar to the findings of a study conducted by (Rockwell, S. Kay, Jolene Schauer, Susan M. Fritz, and David B. Marx, 1999) which said that other familiar concerns included technology shortcomings. The faculty members in this research share the same concern with previous researchers that one of the problems would be to time consuming and that the major perceived obstacles was related to time requirements (Rockwell, S. Kay, Jolene Schauer, Susan M. Fritz, and David B. Marx, 1999).

O'Hearn (2000), Holley (2000), (Volery 2000) cited in Mapuva (2009: 221) observes that initially a "conducive environment" should be created to implement e-learning within HEIs. This is done in order to cater to the various roles of the stakeholders (teachers and students) whose full cooperation, support and mutual interaction between is the key prerequisite for the successful implementation of e-learning tools.

In accord with this, it is increasingly important for university administrators and researchers to investigate the sources of faculty motivation in order to create an environment that fosters participation in e learning. We begin this study with a definition of the general concept of motivation and a review of motivational theories.

Motivation has been a central and consistent focal point in the field of psychology particularly when investigating the reasons behind individual actions. It is therefore of prominent interest to leaders and administrators who are involved in encouraging, guiding or directing others to act; and it has also been analyzed to be an important variable in producing change (Ryan & Deci 2000).



Cahill (2008) cited the research made by Reeve (1997) that motivational theories are used to explain why people do what they do. These theories have imminent factors towards encouraging faculties to embark into using e learning. The study made by Cahill explained how motivation deals with the processes that give behavior its energy and direction. The process that energized and directed behavior radiates both from within individuals and from external forces in the environment. Internal motives may come from individual needs, knowledge and/or emotions, while external motives may be triggered by environmental conditions or incentives that attract or repel an individual to engage or not engage in a certain behavior.

One of the most well discussed theories in motivation is known as Maslow's Hierarchy of Needs. This theory proposes that there are basic needs any individual must meet in order to progress along a continuum of successive needs increasing by degrees. The basic physiological needs, such as food and water, the need for safety, the need to belong and have a sense of self-esteem, must be met first, before higher needs such as a sense of generativity and self-actualization can be realized. Cahill (2008) further elaborated that the more one is deprived of a need, the more it controls a person's behavior; the more a need is satisfied, the easier it is to proceed to the next higher need. One assumes that faculty members, by their autonomous nature and professional position, have their basic needs met. Faculty members who have concerns regarding the fundamentals of how to use technology, how students learn with technology or how to access stable technology, are not able to move beyond and create new learning experiences using technology.

Cahill cited McClelland's Acquired Needs Theory (2008) whereby the theory recognizes that everyone has distinct motivational profiles and prioritizes needs differently; therefore, understanding the individual is a primary factor. McClelland identified three specific needs: a need for achievement, a need for power and need for affiliation. McClelland linked each need with a distinct set of work preferences, and suggests that leaders can modify the work setting to meet the preferred work environment. He further elaborated that in order to create an environment that encouraged e learning university administrations should attend to an individual's motivational make up and ensure that the culture is supportive.

The solution that is developed must first and foremost understand that faculty members are complex individuals with many different needs and the solution must reflect the complexity and individuality of faculty members. A faculty member who has a high need for power may respond to a competition among departments on who can offer the most successful and well received flexible offerings. Or, faculty members with a need for affiliation may benefit from networks and learning teams where faculty members are learning together and from each other. In short, we can digest that no matter what the actual incentive might be, it is important to have multiple and varied options and so each method reaches the right faculty members.

O'Meara (2004) in her research stressed the importance of intrinsic and extrinsic motivations for faculty members to execute on e learning as a teaching delivery tool. Extrinsic factors focus on the environment and conditions under which work is done and include rewards system, workload, opportunity structures, and policies. Extrinsic rewards include incentive grants or release time, promotion and tenure criteria. Meanwhile, intrinsic factors involved how work is done and how it affects the faculty, the variety and degree of activities from beginning to end, autonomy and responsibility involved. She further stressed that intrinsic factor is more important than extrinsic factor.

Ryan & Deci (2000b: 54) argue that the distinction between intrinsic and extrinsic types of motivation could shed important light on both developmental and educational practices. From their point of view "... intrinsic motivation exists within individuals, in another sense intrinsic motivation exists in the relation between individuals and activities. People are intrinsically motivated for some activities and not others, and not everyone is intrinsically motivated for any particular task" (Ryan & Deci, 2000b: 54). However, Palliam, R. (2012: 47) puts a clear-cut distinction: "Intrinsic motivation is the completion of a task for the sense of mastery, competence and well-being connected to the work done The task motivates itself. Extrinsic motivation is the external reward after completion of the task."

Working within the framework of 'self-determination theory', which is virtually has extrinsic and intrinsic motivation and a set of basic psychological needs that underlies motivation at the core, Øystein S., H. Halvari, V. F. Gulli, and R. Kristiansen (2009) attempts to explore university teachers' motivation to continue use e-learning in technology. They propose "an extended information systems continuance theory in the context of teachers' utilization of e-learning technology in connection with on-site courses." (Øystein et al., 2009: 1177) The basic assumption that motivates this study is that whereas traditional learning methods have dominated the scene in higher education, universities are now putting substantial resources to promote e-learning technology. The nature of the e-learning technology is that it enables teachers and students with "possibilities", not with a "ready to use" resource. Jasperson, Carter, and Zmud (2005), cited in (Øystein et al., 2009: 1177) claim that exploitation of the potentials of e-learning is a key to implementation success, and in the continuation of using it will assert teachers' intrinsic motivation to make use e-learning potentialities in the long run which is "essential for realization of long-term benefits from investments in e-learning technology."

METHODOLOGY

A survey with twenty items was sent by the researcher via email to 100 experts in HEIs. This methodology is chosen by the researcher to collect the data from faculty members from two countries (USA & KSA) having vast experiences working in HEIs. All faculty members were asked to classify the top 20 major incentives that motivate them towards e learning. About 32 faculty members responded to the researcher and sent their responses to the survey. Out of the 32, 24 are males and 8 are females. The survey questions are based on the literature review and readings of the researcher from the best practice references that describe motivations in e learning.



DISCUSSION

The results of this study link up to the understanding of some of the key issues identified in the previous quantitative studies related to motivations for e learning.

The data showed that the strongest motivator for faculty members is addressing the accessibility to Internet at faculty members' office (56%). The next strongest factors that would motivate faculty members to participate in e learning is adequate training of pedagogical and teaching strategies relative to Web 2.0 generation, provide financial aid to purchase software and others, provide on-going incentives, establish professional development programs for faculty members utilizing e learning. These four motivations contributed the same frequency with 50% frequent answers from the faculty members. Also, it was mentioned in (Singh, Gurmak, and John O' Donoghue and Harvey Worton, 2003) the people who are motivated to use the Internet would have more significant correlation to the motivation to succeed academically.

Cahill (2008) cited the research made by Bonk, 2001; Herbert 2003; Schopieray, 2006 about support as a motivator. This is a crucial factor and also an important motivation for faculty participating in e learning. Quality technical and pedagogical training is important for faculty to learn how to teach effectively online. Also, with more complex applications, faculty may need extensive instructional and developmental support, and it is most essential for faculty who do not have advanced skills in this area (Bonk, 2001). It was found that a favorable environment to encourage e learning would include: ongoing workshops and seminars; follow-up support for ideas introduced; technical support for both students and faculty and recognition for the positive impact of new teaching.

The results of the top 20 Incentives are presented in table 1 below:

Table 1. Results of 20 Incentives According to Frequency (N= 32)

| Item | Responses | 1. Strongly Agree | 2. Agree | 3. Less agree | 4. Disagree |
|------|--|-------------------|----------|---------------|-------------|
| 1 | Adequate and workable physical resources | 10 | 18 | 2 | 2 |
| 2 | Accessibility to Internet at faculty members office | 18 | 10 | 2 | 2 |
| 3 | Institutional recognition to those who use e learning | 14 | 8 | 8 | 2 |
| 4 | Information advice and guidance to students and teachers | 12 | 18 | 2 | 0 |
| 5 | Adequate training of pedagogical and teaching strategies relative to Web 2.0 generation | 16 | 14 | 2 | 0 |
| 6 | Need for administration to assess the needs of faculty members who teach online | 10 | 16 | 6 | 0 |
| 7 | Provide financial aid to purchase software and others | 16 | 10 | 4 | 2 |
| 8 | Develop policies relative to course design and development | 8 | 20 | 2 | 2 |
| 9 | Provide on-going incentives | 16 | 14 | 2 | 0 |
| 10 | Rewards for teaching effectively online | 14 | 8 | 6 | 4 |
| 11 | Foster channels of social support such as online listservs, newsletters, blogs or learning communities | 6 | 10 | 16 | 0 |
| 12 | Participate in national and international seminars related to e learning | 10 | 10 | 12 | 0 |
| 13 | Provide trainings via webcasts, archived videos, blogs, wikis and reading list | 14 | 12 | 6 | 0 |
| 14 | Establish professional development programs for faculty members utilizing e learning | 16 | 14 | 2 | 0 |
| 15 | Fund projects related to technology enhanced courses | 14 | 8 | 8 | 2 |
| 16 | Provide self-actualization programs to boost confidence in using e learning strategies | 12 | 18 | 2 | 0 |



| | | | | | |
|----|--|----|----|----|---|
| 17 | Dedicated time allocated for designing and developing materials | 14 | 8 | 6 | 4 |
| 18 | Staff and faculty members should be well prepared to support students learning online | 14 | 12 | 6 | 0 |
| 19 | Workshops to raise students' awareness to be enlightened about the need to move from the traditional methods and attitudes to more exploratory and customized methods of teaching and support. | 16 | 6 | 10 | 0 |
| 20 | Students understanding both technical and learning requirements | 12 | 8 | 10 | 2 |

Table 2: Frequency and Percentage Showing 'Strongly Agree'

| Responses | Frequency | Percentage |
|--|-----------|------------|
| Accessibility to Internet at faculty members office | 18 | 56% |
| Adequate training of pedagogical and teaching strategies relative to Web 2.0 generation | 16 | 50% |
| Provide financial aid to purchase software and others | 16 | 50% |
| Provide on-going incentives | 16 | 50% |
| Establish professional development programs for faculty members utilizing e learning | 16 | 50% |
| Workshops to raise students' awareness to be enlightened about the need to move from the traditional methods and attitudes to more exploratory and customized methods of teaching and support. | 16 | 50% |
| Rewards for teaching effectively online | 14 | 44% |
| Provide trainings via webcasts, archived videos, blogs, wikis and reading list | 14 | 44% |
| Fund projects related to technology enhanced courses | 14 | 44% |
| Dedicated time allocated for designing and developing materials | 14 | 44% |
| Staff and faculty members should be well prepared to support students learning online | 14 | 44% |

In this research, it is found that the importance of providing the internet to the faculty members offices as one of the top properties to encourage the staff to utilize e learning into higher education. In addition, all the faculty members focus on the importance of training, staff development, financial aid as reward, and raise students' awareness as the top incentives to integrate technology into higher education. The findings reflect the importance of the administrative support. This finding is similar with (Singh, Gurmak, and John O' Donoghue and Harvey Worton, 2003) when they concluded on the findings of their research that Internet as a motivator correlates significantly with the understanding of the communication of the professors with other professors and students via the Internet. This finding also coincides with O'Meara (2004) finding that intrinsic and extrinsic factors are important to continuously motivate faculty to sustain using e learning.

This research has also shown some substantial findings. It is found that 50% percent (n=16) of respondents 'strongly agree' that adequate training pedagogical and teaching strategies relative to Web 2.0 generation is one of the top motivational factor. This finding is at a paramount importance where all faculties realize that they need to be trained to equip with the pedagogy and teaching strategies related to web 2.0. This falls within the category of "instructor readiness" as well, but it is addressed here, too, because without administrative support, the staffing needed for faculty members training does not exist.



It is also resulted within the same category “strongly agree”, 44% (N=14) respondents are rewards for teaching effectively online, provide trainings via webcasts, archived videos, blogs, wikis and reading list, fund projects related to technology enhanced courses, dedicated time allocated for designing and developing materials, staff and faculty members should be well prepared to support students learning online (table 2). In addition to that, one of the same results of this research “Provide trainings via webcasts, archived videos, blogs, wikis and reading list” coincides with the result found from the previous research which was done by (Singh, Gurmak, and John O' Donoghue and Harvey Worton, 2003) that online training will be considered as a motivator to the faculty members.

This particular finding has relation to the research and findings made by Cahill (2008). He quoted McClelland (1953), distinguished personality and social psychologist, theory called Acquired Needs. The theory recognizes that everyone has distinct motivational profiles and prioritizes needs differently; therefore, understanding the individual is primary. McClelland identified three specific needs: a need for achievement, a need for power and a need for affiliation. The findings in this research links each need with a distinct set of work preferences, and suggests that leaders can modify the work setting to meet the preferred work environment. It also further iterates that high achievers often seek personal responsibility for finding solutions to problems, want rapid feedback on their performances so that they can tell easily whether they are improving or not, set moderately challenging goals and perform best when they perceive their probability of success.

Table 3: Frequency and Percentage Showing ‘Agree’

| Responses | Frequency | Percentage |
|--|-----------|------------|
| Adequate and workable physical resources | 18 | 56% |
| Information advice and guidance to students and teachers | 18 | 56% |
| Provide self-actualization programs to boost confidence in using e learning strategies | 18 | 56% |

According to the results from this study, the respondents (56%; N= 18 also felt that they “agree” that ‘Adequate and workable physical resources, Information advice and guidance to students and teachers, and provide self-actualization programs to boost confidence’ in using e learning strategies are also important incentives out of the 20 that motivate them to utilize e learning into HEIs (table 3). Previous research by Cahill (2008) posits that support is an important motivation for faculty to participate in e learning. He further elaborates that quality technical and pedagogical training is important for faculty to learn how to teach effectively using the e learning way. A common environment to encourage e learning would include: ongoing workshops and seminars; follow-up support for ideas introduced; technical support for both students and faculty and recognition for the positive impact of teaching using online (Fullan 1991).

Cahill (2008) further elaborated in length about incentives or motivation. He explained that assessing a program for its effectiveness on a continuing basis is important. Wang (2006) listed the five pillars of the Sloan- C Quality Framework: (a) learning effectiveness, (b) access, (c) student satisfaction, (d) faculty satisfaction, and (e) cost effectiveness. To assess learning effectiveness, one could view the students’ grades and interview students.

Table 4: Frequency and Percentage Showing ‘Less Agree’

| Responses | Frequency | Percentage |
|--|-----------|------------|
| Foster channels of social support such as online listservs, newsletters, blogs or learning communities | 16 | 50% |

In the next response, the researcher finds another substantial data. 16 respondents (50%) responded to “less agree” to the item that ‘Foster channels of social support such as online listservs, newsletters, blogs or learning communities’ (table 4) motivates the faculty members to use e learning. This finding is the opposite of the findings found by Rogers (1995). He conceived that faculty members should be trained by their colleagues who have mastered a certain part in adopting innovations in e learning. This activity can be performed by expanding training programs about new innovations in order to make technology illiterate faculty to adopt technology. Rogers further explained that the HEIs administrators should begin to investigate with faculty to determine what is missing from the technology mix that is currently available. Then define what is needed and prioritize a plan to fund, deploy, support, and maintain the identified technologies. In connection to this study, faculty members must be trained to foster various social support such as onlinelistservs, newsletters, blogs or learning communities that could address them to be motivated to utilize e learning.

CONCLUSION

E-learning is a rapidly growing market with great potential in HEIs. In order to capitalize on this potential, e-learning implementations should undertake to satisfy the needs and concerns of all faculties as much as possible.

This study has found substantial findings on the successful motivational factors that encourage faculty to utilize e learning. Even though some faculties disgruntle with some of the motivational factors, the study has close similarities to many of the researches made by other researchers in the same field. As been presented in the discussion part, the primary motivations that encourage faculty to adapt their teaching strategies to deliver teaching on e learning center on intrinsic or



personal rewards. These include the findings that adequate and workable physical resources, accessibility to Internet at faculty office are identified as having the highest frequency. HEIs should collaborate and devise continuous extrinsic and intrinsic motivation schemes to ensure that all faculty to use e learning.

To this effect, when institutions undertake a substantial e-learning initiative they should struggle to involve a cross-functional team with representation from each relevant stakeholder group. This will ensure all obstacles are addressed during pre-launch of any e learning and help to facilitate buy-in during implementation. Successful implementation also requires a project champion, who will communicate the responsibilities and the importance of cooperation to each group. It is suggested that leadership from the highest level of the institution is needed to see the opportunities available and bring them to reality. Through the effective dissemination of rewards and incentives, those involved in e-learning can be made aware of how they fit into the complete picture, and the importance of their specific roles in e learning implementation success.

Finally, no one denies the important factor that e learning plays as an instruction tool and the development of that to our students day after day. The results of this study illuminate potential impact towards motivation factors in e learning and outlines possibilities for further research..

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