Abstract: King Saud University (KSU) launched the SharePoint Server in September 2007. A website was created for each faculty and all faculty had to upload their publications, conference presentations and course materials. Since SharePoint is also a Learning Management System (LMS) with tools such as forums, blogs, wikis, a calendar, announcements, RSS feed, surveys, the present study aims to find out the percentage of KSU faculty utilizing those SharePoint LMS tools and the factors affecting their utilization. It was found that the KSU faculty have utilized the SharePoint’s course tool to upload their course materials, exams, students’ projects, Internet websites related to their courses. However utilization of the SharePoint LMS tools such as wikis, forums or blogs for instructional purposes is almost lacking. No training is provided in the SharePoint LMS tool utilization as they are considered of secondary importance.

Keywords: SharePoint LMS, SharePoint Wiki, SharePoint Forum, SharePoint blog, King Saud University, faculty usage.

I. INTRODUCTION

The Microsoft Office SharePoint Server 2007 is an integrated suite of server functionalities that provides comprehensive content management and facilitates information sharing. It provides a number of features such as built-in abilities for document management and alerting, blogs, wikis, and Web Parts for publishing and receiving RSS feeds. It allows teams to work together effectively, collaborate on and publish documents, maintain task lists, implement workflows, and share information through wikis and blogs, create a personal MySite portal to share information with others and personalize the user experience and content of an enterprise Website based on the user’s profile.

The case studies published by Microsoft show that numerous enterprises and institutions have launched the SharePoint Server in general and the SharePoint LMS, in particular. For example, SchoolNet used Microsoft Office SharePoint Server 2007 to build, manage, and publish schoolnet.com, a K–12 achievement Web portal focused on empowering student success. Another example is North Carolina’s Queens University of Charlotte that wanted to better support its community’s need for online education. Queens University deployed Microsoft Office SharePoint Server 2007, the Microsoft Learning Gateway portal, and the Microsoft SharePoint Learning Kit to create a portal with customized sites for every course offered. Queens’ faculty can easily create online courses and better communicate with students. Queens is using Office SharePoint Server 2007 technology to collect student work and better measure learning outcomes over time, expand enrollment through online offerings, and acquaint students with collaboration technology used in the professional world. A third example is the Center for Teaching, Learning, and Technology (CTLT) at Washington State University (WSU) that is well known for its research into how technology can encourage student-centered learning. To integrate collaboration technologies into university curriculum, to help students take control of their learning experience and reach beyond the boundaries of the classroom, the CTLT faculty and students are using the Microsoft Office SharePoint Server 2007. All over WSU, students and faculty are using My Site to move beyond traditional classroom learning, better preparing graduates for using collaborative digital technologies in the workplace.
Using the *My Site* feature, students can create their own workspaces, reflect on their learning, and share information with people inside and outside the university.

Like other institutions, King Saud University (KSU), in Riyadh, Saudi Arabia launched its Web Portal using the Office SharePoint Server 2007 in September 2007, in order for KSU’s educational and research activities to have presence on the World Wide Web and to be a knowledge gateway for the KSU faculty, students, and worldwide visitors. Towards that end, a website with standardized components and tools was created for each of the university’s 4600 faculty members in its 39 colleges. The university faculty were requested to upload their publications, conference presentations, course materials, exams and reports in PDF format. A contest for best faculty websites at the university and college levels was initiated and winners were announced in the Spring of 2008.

Since SharePoint provides faculty and students with many Online Learning Management System tools such as forums, blogs, wikis, document libraries, picture libraries, a calendar, announcements, RSS feed, a tool for creating surveys and others, users can create as many sub-websites, blogs, wikis, forums, document libraries as they need, and for any purposes. Since SharePoint has all the features and functionalities of an Online Learning Management System where students and faculty can efficiently collaborate, communicate, find resources, create and manage content and workflow, the present study aims to find out the following: (i) The percentage of faculty utilizing the SharePoint’s LMS features such as the forum, wiki, blog, surveys in their courses, (ii) The percentage of faculty utilizing each tools, and (iii) the factors affecting their utilization of such features.

An extensive search of the ERIC database, Science Direct, Wilson Web’s Applied Science and Technology, Scirus, Google and Google Scholar has shown that studies that investigate how SharePoint LMS tools are utilized by college instructors are lacking. Therefore this study bridges the gap in this area.

II. SUBJECTS

King Saud University has 39 colleges (College of Arts, Education, Business, Political Science, Languages And Translation, Archeology And Tourism, Arabic Language Institute, Teachers’ College, Physical Education, Engineering, Science, Food And Agriculture, Computer And Information Science, Architecture And Design, Medicine, Dentistry, Pharmacy, Nursing, Applied Medical Sciences, 8 community colleges and 11 branch colleges), about 100,000 students and 6180 faculty (Ph.D., M.A. and B.A. holders and language instructors), 29% of whom are females. A sample of 634 faculty websites, consisting of 75 faculty winning websites from 25 colleges and 10% of the faculty websites randomly selected from each of the 39 colleges, in addition to all male and female faculty websites at the Educational Technology Department and College of Computer and Information Science.

In addition, a total of 90 subjects were randomly selected (2 faculty per college, 5 faculty from the Educational Technology Department, 5 faculty from the College of Computer and Information Science, and 2 technicians from the KSU Portal Department).

III. DATA COLLECTION AND ANALYSIS

To find out the percentage of faculty using SharePoint LMS features for online instruction, the author searched each subject’s website for SharePoint LMS tools such as blogs, forums, wikis, surveys, the calendar and others. When available, she examined the content. Frequencies of blogs, forums, wikis, surveys, and calendar were calculated and then converted into percentages.

Second, to find out the factors that affect use of SharePoint LMS features by the KSU faculty, the 90 subjects were individually interviewed by phone. An open-ended questionnaire-survey was used to record the responses. Findings of the present study are reported qualitatively and where possible, percentages are given.
IV. RESULTS

4.1 Utilization of SharePoint LMS Tools

Examination of the faculty websites selected showed that all of the subjects have utilized the course tool to upload their course objectives, outline, materials, e-books and samples of teacher-made tests and answer keys in POWERPOINT, WORD or PDF format. Many have posted links to internet websites related to their course topics. Some posted exam announcements. Students can have access to their professors’ publication and conference presentation abstracts and even full text papers. Most pictures uploaded in the pictures libraries are personal and unrelated to the course content, i.e. have no instructional purposes. Some uploaded samples of their students’ projects, research papers and activities. Despite these, none of the subjects uses SharePoint as an Online Course Management System for delivering online instruction whether in full or as a supplement to in-class instruction. Instruction at KSU is still traditional and it depends on class lectures only.

An examination of the sample websites has also shown that.017% of the subjects have created a blog; .005% have created a wiki; another .005% have created a survey and .01% have created a discussion forum. Some of those few faculty have left their forums and wikis blank, some posted a question, or a couple of blog entries. Those who have posted few questions or entries have little or no response from the students. The few available surveys have a question that asks about visitors’ opinion of the website or seek suggestions for improvement with no responses at all.

An examination of the Educational Technology Department and Computer and Information Science faculty websites has revealed striking results. It was found that none of the male and female faculty majoring in educational technology computer and information science uses SharePoint for delivering online instruction and none has created a blog, a forum, a wiki and not even a calendar.

4.2 Factors Affecting SharePoint LMS Utilization

Results of the questionnaire survey showed extrinsic factors (administrative support, incentives, coordination, training) as well as intrinsic factors (SharePoint LMS utilization skills, workload, lack of time and interest) to affect the use of SharePoint LMS.

4.2.1 Lack of time

Since 2006, KSU has opened up its student admission policies, as a result of which it has been admitting twice as many students as before. Many departments have large student bodies, are understaffed and many faculty teach large classes. The College of Computer and Information Science, in particular, has been experiencing significant increases in student enrollment. The college is severely under-staffed. Shortage is solved by merging classes, by raising the teaching load of instructors, and by assigning classes to technicians and T.A.’s. The subjects also reported that in some courses, the faculty: student ratio in many computer courses is 1:100 and 1:150. With large numbers of students, many instructors feel that available computer labs cannot accommodate large classes let alone online instruction.

The subjects also indicated that in addition to their teaching positions at KSU, many computer science faculty have an additional 1-5 consultation jobs. They hardly stay on campus beyond class time. Once they are finished with classes they leave. Teaching and consulting duties leave them with little time for exploring, developing online courses, interacting with, following up and responding to students in the e-learning environment.

This state of affairs results in instructor burnout, and lack of time for online instruction, in general, and creating and conducting instructional activities using the SharePoint LMS.

4.2.2 The University Culture

About 50% of the subjects indicated that the teaching-learning environment at KSU is not technology-oriented. Many faculty feel that using the SharePoint LMS is a luxury rather than a necessity. Many students are still traditional especially those in the humanities colleges and feel more comfortable and secure with books and handouts. They are not interested in using technology in learning, have no experience learning through technology, and many do not know English. Some do not know how to use the Internet. They are critical of instructors who give assignments that require
internet searching to locate information or visiting certain websites to answer questions related to what is covered in class. In the faculty evaluation form, they rate those instructors unfavorably.

Some faculty have negative attitudes towards using online courses. They feel that online courses require additional time and effort and will increase their teaching load.

4.2.3 Lack of incentives

Subjects indicated that most KSU faculty get a computer bonus equal to 25% of their salary, without any discrimination between those who are techsavvy’s and those who have basic computer skills such as word-processing. No incentives are offered for those who use online instruction using the SharePoint or otherwise.

Many faculty are not motivated to teach online because they are not pressured to do so by the university. Creating online courses is done on a voluntary individual basis and is initiated by personal interest. Those who have online courses use them as a supplement to in-class instruction. Fewer than 1% are self-motivated and self-trained. They teach online or have their own online courses with Moodle or Nicenet but not the SharePoint LMS.

4.2.4 Lack of administrative support and standards

When the KSU administration felt that it is important for each faculty member to have a website, faculty websites were created using the SharePoint Server within a month. In order to motivate instructors to upload their publications, course files and documents, the minimum standards to be fulfilled were set and each faculty that met the minimum standards was awarded a laptop. A promotional contest was announced to all faculty, colleges and departments in the academic year 2007/2008. The best 3 faculty websites at the university level and in each college were granted awards. Criteria were set for evaluating the best 3 websites. Those included: (i) full contact information (name, e-mail, office phone, address); (ii) Full list of publications and conference presentations (abstracts, presentations and full text articles); (iii) Courses taught (materials, sample tests and answers, students’ projects and activities). In the academic year 2008/2009, a second promotional contest has been announced. Awards will be granted to each of the 10 first-class, 10 second class, and 10 third class winners, at the university level. The criteria for this year’s contest are: (i) each faculty should link his/her website with other researchers, other faculty abroad or foreign websites related to his/her area of specialization, (ii) The website content should be logically organized with no broken links and no blank pages. Awards will granted to the most-referenced faculty websites. Each week, the Portal department announces the 5 most-visited faculty websites, the 5 most active websites, and the 5 most referenced websites. The aims of these contests are to increase the Web presence of KSU in the Webometrics Ranking of World Universities and to have a position in the world’s top universities.

Integration of the SharePoint LMS features by the KSU faculty in the teaching-learning process does not seem to be a current priority by the KSU stakeholders. As a result, it is not a priority for the KSU faculty either.

4.2.5 Lack of Training

All of the subjects indicated that most faculty are not trained in using the SharePoint LMS. Fewer than 5% can use online courses, including faculty members specialized in educational technology, computer science or engineering. Many subjects also do not know how to integrate a blog or a wiki in instruction and need special training in those. No user guides and no training workshops in using the SharePoint LMS are currently offered by KSU. The eLearning and Distance Learning Deanship conducted several training workshops to introduce the KSU faculty to online instruction and “Jusur” LMS. However, no training workshops were offered to introduce the SharePoint LMS. The Technical Support personnel at the Portal Department do not provide any guidance or help in using SharePoint LMS. When the author needed to know how to create a second blog, the former Portal Supervisor declined to help and indicated that he would rather help faculty who need to acquire basic SharePoint skills, rather than spending time responding to advanced requests. When the author created a forum, her students could not publish their posts due to a user permission problem. The Portal technicians could not solve the problem so she gave up and continued to use Moodle and Nicenet for
her online courses. Such user permission problems might be inherent in the SharePoint structure as it is a new technology.

4.2.6 Lack of Coordination

KSU has 3 administrations in charge of IT and technology issues: The eLearning and Distance Learning Deanship, the Deanship of e-Transactions and Communication, and the KSU Portal Department. The Portal Department is in charge of the faculty websites, whereas the eLearning and Distance Learning Deanship is in charge of developing, integrating and training faculty in online instruction. This deanship conducted a number of workshop to introduce faculty to e-learning and online course development using Jusur LMS. It is not involved in the SharePoint LMS, and the Portal Department is not involved in the e-learning aspects of SharePoint. The technicians are computer engineers who know little about online instruction.

4.2.7 No Publicizing of the SharePoint LMS Features

Some subjects, including some computer and IT instructors indicated that they did not about the SharePoint LMS features and did not know how to use them. When a memo about a training workshop is sent to the KSU faculty, those at the College of Computer and Information Science are excluded and never invited to attend such training workshops, as the memo senders assume that they know-it-all and do not any training.

V. DISCUSSION

Findings of the present study have shown that online instruction using the SharePoint LMS by KSU faculty, even those specialized in Educational technology and computer and information science are almost lacking. The study also revealed several factors that affect the integration of SharePoint LMS online instruction such as lack of time due to heavy workload, a traditional university culture, lack of incentives and motivation on the part of the faculty, lack of administrative support and tech standards, lack of training, coordination among deanships in charge of technology and IT issues.

Findings of the present study are consistent with findings of a study by Artman (2003) which indicated that intrinsic and extrinsic motivators and institutional supports all motivate faculty to participate in online education and that internal inhibitors and institutional barriers could counteract or reduce faculty motivation to become involved or continue involvement in online education. Bathe (2001) also indicated that personal interest and perceived need on the part of faculty played a major role in online course development. However, in some cases, faculty were not compensated for this development; there seemed to be little pressure to develop online courses; faculty viewed the use of multimedia in online courses negatively; faculty members who preferred teaching online to teaching in the classroom represented only 15% of respondents; 17 students (35%) preferred classroom learning; many students indicated that they were not prepared to take online courses; and faculty and administration were concerned about screening prospective online students, the quality of online courses, and testing integrity (Bathe, 2001). Al-Harbi also (2003) found that the most important factors that hinder the integration of technology at Imam University were: Too many work responsibilities and inadequate technical and administrative support.

Unlike the present study, Wilson (2000) found that faculty members at Kentucky Higher education institutions were intrinsically motivated to use instructional technology to improve student learning. Faculty and staff in Bathe’s study seemed to have sufficient technological and pedagogical support available to them; overload or reassignment time was used to pay faculty for the development of online courses.

VI. RECOMMENDATIONS

Although King Saud University has been in the process of integrating technology in the teaching-learning process for few years, the study found the SharePoint is not used as an Online Course Management System for delivering online courses, and revealed several factors that negatively affect the integration of SharePoint LMS in college teaching and learning such as lack of training, incentives, faculty burnout, and university culture. By reducing institutional barriers, increasing institutional
supports, or providing extrinsic motivators, administrators can affect faculty enthusiasm to participate in online courses, online degree programs or campus initiatives in online distributed education (Artman, 2003). Therefore, this study recommends that the same initiatives, strategies and procedures that the KSU administration followed for publicizing and motivating all faculty to activate, create and develop their websites in 2007 be followed the encourage all KSU faculty to integrate SharePoint LMS in their teaching. The process involves the following steps:

- A directive from the KSU Rector;
- Financial and technical support;
- A third contest that focuses on the utilization of the SharePoint LMS;
- Setting standards, providing awards and incentives for faculty with the best utilization of the SharePoint LMS. Setting online course development standards for granting those awards. Those cover educational and technological aspects such as: Online course goals, course content, instructors’ online support to students, online teacher-student collaboration, course delivery evaluation and so on.
- Preparing a SharePoint LMS user manual.
- Hiring Technical Support staff that can provide training, help and guidance in SharePoint LMS.
- Each college can have an online course expert who is capable of training faculty, providing help and guidance upon request, solving problems and answering questions.
- Issuing a weekly report on faculty with largest number of instructional blog and wiki entries and forum posts, and electronically-generated tests and surveys...etc.

Faculty should be trained in using the SharePoint LMS, to be able to take advantage of the opportunities available for them, to enable students to achieve their best, and to make the use of SharePoint cost effective. Joining SharePoint LMS training workshops by faculty members at all departments must be made mandatory and must be made part of faculty evaluation criteria and promotion. Faculty may be trained in low-peak periods at the beginning and end of each semester. Training should be conducted online with hands-on practice.

Graduate students and pre-service teachers at the College of Education may be also trained in using online courses, online course design and online course material selection using the SharePoint LMS, as an integral part of their professional preparation programs. Mastering computer and Internet skills should be made part of their graduation prerequisites.

The KSU administration should look into staff shortage, faculty teaching load, admission policies, faculty-student ration and conditions permitting faculty participation in consultation.

Finally, every effort should be made to help the KSU faculty to integrate the SharePoint LMS in in-class instruction.

BIBLIOGRAPHY


