

Online Education System- Challenges and Opportunities

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Abstract:

Learning is a complex process where student's motivation, teacher, learning material and several other aspects interact with each other. Nowadays the traditional classroom teaching has changed more and more into a virtual environment where different issues about learning has to be taken into account. The basic learning concepts remain the same wherever the studying place is. The students have to be motivated in the learning situation and the material has to be easily at hand. Learning has dramatically changed over recent decades when technical revolution has brought different opportunities to learn via the Internet.

Constructivist learning theory is nowadays "the theory" in learning. It emphasizes the learner's experiences in the learning process. Despite that, the studying is still very teacher centered also in the academic level with traditional lessons and practices. This makes students passive. The impression on teaching has changed from teacher-centered to student-centered learning. There the student's role as active learner is emphasized. The learning results depend on students and teacher's activeness and interest in the subject.

Student's activeness in the learning process can be activated with alternative learning methods such as group works, discussions and questionnaires. People differ from each other in the way they prefer to learn. Some like to read things whereas others want to listen. Whatever the best way is it changes between situations and people use multiple learning styles. People differ from each other in learning styles but also in other areas incorporating learning. Some of these areas are motivation, self-confidence and learning speed.

The purpose of this paper was to make a review on learning styles and how they are taken into account in OLE (Online Learning Environment). An assessment tool was developed in the form of a questionnaire to get information about students' interest and knowledge on learning styles. The questionnaire was tested in action when it was addressed to students. One aim of this thesis was to develop questionnaires for students about their studying habits and preferences. The surveys were with Moodle's tools. This was studied because of the interest in knowing better students' backgrounds and how they prefer to learn. The aim was to produce surveys for students which could be addressed at the beginning and end of a course.

Maintaining standard of education in more than a million schools worldwide, offering training programs to teachers, and keeping good balance with education system worldwide is a big challenge. Schools vary in size and resources and are forced compromise in the all round development opportunities they must provide to students. Having infrastructural constraints and social issues, it becomes harder to make education accessible to all segments of the society (women, minorities, poor). The cost of education is very high even for the people and places where it is accessible. E.g. the competitive pressure on students & parents forces them to opt for private tuitions & trainings to supplement the school education.

The ethnic diversity poses challenges to implement consistent education worldwide. There are many languages spoken throughout the world and makes it difficult to offer education tailored to specific social segment. Educating women in some societies is a big issue. Children of poor families are forced to work and miss out the learning opportunities. Illiterate adults have very limited opportunities to get educated at later age in their lives.

Keywords: VLE, OES, LMS

I. INTRODUCTION: WHAT IS ONLINE EDUCATION?

Online learning is learning which takes place in a network; it could be the Internet or just a school's internal/closed net. Ally (2004) wrote that there are at least the following synonyms used for online learning: e-learning, Internet learning, distributed learning, networked learning, tele-learning, virtual learning, computer-assisted learning, web-based learning, and distance learning. So it can be said that in online learning the learner is at a distance from the tutor or instructor and the learner uses some form of technology to access the learning materials. Online learning can be divided into three classes:

- contact learning supported by the net
- Multiform learning in the net
- Self-studying in the net

In the first class some parts of a course can be in the net for example the delivery of learning material and the lectures are given as contact learning. The second class is multiform learning which means using multiple options in learning for example: forum discussions, help from tutors and learning objects (e-books, videos, et cetera). The third class means that

the learner studies alone in the net or in a virtual learning environment without outside help.

With online learning, the traditional close learning lessons don't exist but the course material is available in the net for the students. E-learning is a form of distance learning where the teacher has more or less a tutor's role and student's contribution to his learning is greater than in a normal studying situation. Therefore it is considered to be e-learning and not e-teaching. E-learning is more difficult compared to the traditional method for both teacher and student. Courses can be totally in the net or for example the teacher gives lessons normally and just the lecture and exercise material are in the net. Using the virtual learning environment as a part of teaching poses an extra duty for the teacher. Less time is left for updating the material than when the whole course is in the net. This lowers the quality of the course.

According to Pantzar (2003) there are five points of view when considering the suitability of online learning and web courses with constructive learning theory. When the matters to be learned are connected with earlier knowledge and experiences the things to learn should be bonded to the student's own empirical world. Students' capacity for information is limited and therefore new information has to be in proportion to the receiver's capacity. Different interpretations of information bring challenges to learning if the student's interpretations differ largely from other students' points of view. Learning is bound by culture which should be taken into account when organizing the learning environment. A dynamic view of learning leads to the fact that information is changing and recurrent. There are various different versions available of the same learning concept in the learning process and the learners should have good metacognitive skills to be able to select and direct their learning behavior. The use of web-based learning in engineering education is a natural continuum to development of study methods. Although new technology has been attached to learning the reason for doing so has not been studied very well. The know-how to use technology among tech-students is high but it doesn't directly mean that it is useful for learning. The whole concept of online learning is so new that the use of the Web and VLE in studying should be taught to obtain the best possible learning level. There are several studies about the Web-based learning but most of them are done in the humanities. The studying process is basically the same in the technology field but the learned matters are completely different.

II. SELF-STUDYING IN NET

Studying in the net doesn't mean just sitting next to a computer "doing nothing". It gives the student the independency of time and place for studying but also the responsibility to gather the needed information instead of the teacher bringing the material into ones lap.

Although academy level students are used to academic freedom, studying in the net brings an extra step towards freedom and hence challenge students to a new learning method. This freedom also means the responsibility for students about their own studies. The students' own motivation and awareness on their learning style must be in order to achieve good learning results in e-learning. It is hard to affect student's motivation but for example a handy learning environment and bringing the course content interestingly up have a raising status in student's motivation. The learning environment should support motivation and the course material should be easy to reach to maintain the quality of learning. Here the environment's usability should be considered as an adequate factor for learning.

The teacher has as great importance of a virtual course, if not even greater, as on a contact teaching course. In e-learning the face-to-face contact is missing between the student and the teacher but it shouldn't mean that a contact is missing between them. The student needs support and motivation in his/her studies and the most suitable person for this is the teacher. Questioning and feedback possibilities should be provided for the student in the learning environment. The teacher should also ensure that he responds to students' questions. It could be presupposed that teaching in the net brings more time for the teacher to do other activities and relieve the workload since there is no more lectures or exercises to be given. But putting up a virtual course itself is a time consuming process when all the course material has to be created to the net. On the other hand once the course has been created it doesn't vanish and it is easier in the following years. However the updating of the material and keeping it up to date takes a lot of time. The course has to be updated all the time and the teacher has to participate to the forum discussions. Also revising and evaluating the exercises and other assignments that students have returned takes time.

Strengths and weaknesses on online learning

One strength of online learning is that the students can access the e-learning material anywhere, anytime and at any pace they want. Space commitment is not relevant and students can freely study whenever they have time. The coordinator of an e-course can be for example in Finland and the participants all around the world. Everything needed to study is on the Internet and the material and other participants of the course can be accessed via the web.

When studying online, resources and ideas are shared between students themselves and between students and instructor. This dynamic interaction is one of the greatest traits in e-learning. High quality dialog can be attained using asynchronous discussion structures (for example forums), because participants have more time to consider their responses than in the face-to-face conversation. Interactivity is often self-evidently connected to working on the net. To bring about target-oriented collaborative learning is a major issue in online learning. It is a problematic issue and hard to realize and therefore an essential problem in online learning. What would be the key to reciprocal learning process? The way the students see learning should change so that other students are seen also as a source of information and comprehension. Online learning is based on technology. Nowadays technology plays an enormous part in the western countries and therefore online learning can be easily adapted to our society. In the less developed countries computers and internet connections are not everyday life and even in the developed countries not everyone has access to the Internet and online learning. Even if one has the possibility to participate an online course, the possession of needed computer

skills can be too limited. Also the limitations of the technology itself can hinder the learning. The technology is not 100% reliable.

Online learning brings a lot of responsibilities to students. Everyone is of course responsible for his own learning but in e-learning there are no authorities and strict schedules when and how to work. The facilitator of an online course must be capable to compensate the lack of physical presence with other methods to be accessible. Otherwise alienation between students and instructor can occur.

The online environment itself can limit the levels of synergy. With large groups (more than 20 people) the dialog becomes somewhat limited. The virtual environment is not suitable to all kinds of education, for example public speaking, surgery or sports. Putting up an online curriculum and learning environment one cannot directly transfer the old courses into virtual ones to obtain a high quality e-course. The need of qualified professionals to develop distance education programs is often overlooked.

Objectives and Need of the Study

1. Overview the role that online Education System (OES) programs can have for higher education in meeting the needs of traditional undergraduate and graduate students, lifelong learners, and audiences who need update-to-date information and professional development opportunities;
2. Identify needs, opportunities and challenges for OES programs among individuals; and
3. Discuss the current and potential role that collaboration can play to address the needs and challenges as well as create new opportunities for OES programs through which multiple individuals could benefit.

III. REVIEW OF PREVIOUS STUDIES

Many studies and scientific research have been conducted with regard to the effectiveness of the use of technology in an educational setting. However, the current research investigates the effectiveness of using e-learning as compared to traditional learning on the achievement and attitudes of students in higher education.

However, the purpose of this paper is to review the literature in relation to the current study that have been conducted in recent years as from 2005 to date in higher education to compare between them and the current study in accordance with the following themes:

- Studies compared e-learning and traditional learning and their influence on higher education students' achievement and attitudes.
- Studies compared blended learning and traditional learning and their influence on higher education students' achievement and attitudes.
- Studies compared e-learning and blended learning and their influence on higher education students' achievement and attitudes.
- Studies compared e-learning, blended learning and traditional learning and their influence on higher education students' achievement and attitudes.

Methodologies of Online Education System

There were many myths and misconceived notions about online education until recent past. It was also believed that only those students having access to computers and modern means of communication would benefit from online education. However, with time such notions are giving way to an open acceptance where people have started accepting online education as a viable alternative for conventional education. Not all online education options have a similar methodology and approach. Here we are discussing the learning methodologies for online education:

Online Education Methodologies - Different Options

Live: This methodology is also known as synchronous mode of learning. In this mode of online education, there is instant communication between the students and teachers and at times even among different students. The biggest advantage of synchronous method of online education is that it allows instant feedback for the student's performance and allows active interaction among the students and teachers. Thus the students can get the training and education that is tailored suit their needs. **Asynchronous:** Asynchronous mode of online education is popularly termed as store and forward education. Self-paced courses are the examples of asynchronous online education where the students communicate with the teachers and amongst themselves by exchanging emails and posting messages on online bulletin boards and discussing groups. This is the more popular mode of online education because it offers more convenience and flexibility to the students and they can decide the pace and schedule for their education and training. Despite of the advantages, this mode of online education has its disadvantages too. The students in this mode of learning, lack discipline and motivation and generally tend to develop a lacklustre attitude towards education. The mixed mode of learning in online education combines the advantages of both the modes and it is a combination of personal lectures or face-to-face interaction learning through online activities.

Synchronous e-Learning lets teachers conduct classes over the Internet. The synchronous technologies also allow people to interact with peers and experts.

Virtual Classroom

A virtual classroom duplicates the capabilities found in a real classroom. A virtual classroom provides:

- A place to meet: Students and teachers use their computers to go to a virtual meeting place instead of a classroom.
- Take attendance: A list of students is recorded.
- Lecture: Teachers can choose from a variety of synchronous technologies including:
 - Slide presentation
 - Audio and video conferencing
 - Application sharing
 - Shared whiteboard
- Interaction with students: Students can indicate when they want to speak by virtually raising their hand. Teachers can let students speak through audio and video conferencing. Teachers and students can use instant messaging and chat.
- Quizzes: Teachers can present questions to students.
- Breakout Sessions: Students can work together in groups.

Most companies that sell virtual classroom software provide all of these capabilities in a single package.

Audio and Video Conferencing

Audio conferencing can be implemented in two ways:

- Computers connected to the Internet. Common names for this kind of implementation are IP Audio Conferencing or Voice-over-IP.
- Phone conferences. People dial the same number to participate in an audio conference.

Video conferencing can also be implemented in two ways:

- Computers connected to the Internet. The computers need digital cameras.
- Special video conferencing devices that connect over the Internet or over phone lines.

Chat

Chat allows several people to communicate with each other. Each participant uses a computer to type their comments. The other participants can see the name of the person and their comments.

Shared Whiteboard

A shared whiteboard lets a group of people communicate by typing comments, drawing, highlighting and pointing. A shared whiteboard is a common feature within virtual classroom software packages.

Application Sharing

You can demonstrate how to use software applications to remote learners with application sharing. A teacher can also let the learner take control of the application to practice performing tasks.

Instant Messaging

Instant messaging is similar to chat. One person communicates to another through typing. Instant messaging also provides some additional features. With instant messaging, you can keep a list of list of people that you might like to chat with. The list will indicate if they are online, offline, available for chat or busy. These features make instant messaging an excellent tool for learning from peers.

Challenges in implementing Online Education System

There are many challenges and many rewards for online teachers. Not only does the instructor need to be comfortable with the material being taught, but also with the technology used to deliver the instruction.

The instructor who can make full use of the technology and the vast resources of the Web will certainly enhance the student's learning experience.

Some of the challenges faced by online instructors include:

- Developing technical and media skills that enable the instructor to use the available (and developing) tools and technology to enrich and enhance the educational experience for their learners.
- Encouraging contact between the learner and the instructor and between the learner and other learners in the course that promotes meaningful exchange and reflection of ideas and past experiences.
- Balancing the goal of learner centeredness and learner responsibility with the need to keep discussions focused on intended learning outcomes and course objectives (keeping online discussions on topic without getting overly involved and imposing too much control).
- Encouraging meaningful collaboration and cooperation amongst students.
- Developing meaningful active learning activities and apprentice-like activities that promote learning by doing.
- Providing students with prompt feedback while maintaining a reasonable workload (both for student and teacher).

The major challenges for online education system are Planning and implementation experience, Short term cost overheads (online & offline must run in parallel), Electricity & Communication infrastructure, Social issues (to some extent), Logistical challenges like training of educators & students and Technology constraints.

Challenges for Instructors

- Lack of training to teach online or the assumption that no training is needed
- The assumption that your face to face course will translate to an online course without design and development
- Lack of familiarity with the online environment and technology needed to teach online
- Capacity to use the medium to its advantage
- Being available to students on an extended basis electronically
- Providing timely responses and feedback to students
- In asynchronous activities, the lack of body language and facial expressions from students

Challenges for Students

- Greater responsibility for students
- Students must be well organized, self-motivated, and possess a high degree of time management skills in order to keep up with the pace of the course.
- For these reasons, online education is not appropriate for students who are dependent learners and have difficulty assuming responsibilities required by the online paradigm.

Challenges for All

- Both students and facilitators must possess a minimum level of computer knowledge in order to function successfully in an online environment.
 - A student or faculty member who cannot function in the online system will drag the entire program down.
 - Reliability of technology.
 - As assumption by the student that “online is easier.”
- Let’s outline some of the challenges in detail:

1. Lack of in-person contact with students. This is probably the biggest and most intimidating one at the beginning. In an online class, you get basically no face-to-face time with students. You have no regularly scheduled meeting in a classroom that provides students with a built-in question-and-answer time both before and after class. You can lecture them with video lectures, but you’ve got absolutely no way to see for sure if the materials getting through because you get none of the feedback indicators (facial expressions, particularly) that you normally use to gauge how the lecture’s going. You have no faces to put with a name, which makes it difficult to have a personal connection with the student, and sometimes even difficult to invest any interest in student success. If you’re not careful, students are boiled down to nothing more than names and numbers, as if they’re customers at a bank. And then, most of the joy many of us derive from teaching is gone.

The next three issues we see are really corollaries of that first challenge:

2. Lack of interaction amongst students. An important and perhaps underrated part of the traditional university education is interaction with colleagues, both from an intellectual standpoint (classroom discussion, study groups, etc), but also from a social standpoint (friendship, emotional support). Because an online class doesn’t meet in a face-to-face environment, these interactions are endangered. Intellectual discussion has been a benchmark of the educational process since the ancient Greeks, because even back then we realized that discussion served an important cognitive function for understanding. We absolutely cannot sacrifice this for the convenience and fiscal profit of online instruction. At the same time, the classroom has long served an important social function. For students who are less outgoing, an online class provides between 30 and 45 fewer chances for social interaction than a traditional class because there are no classroom meetings that bring students into the same room for a common purpose. Those opportunities are invaluable to students who might otherwise not strike up a conversation with peers in a strictly social environment.

3. Little pride in work. We can’t underestimate the power of social influence for some students’ desire to work hard and succeed. By losing the face-to-face social interaction between students and faculty, and amongst the students themselves, we risk losing that positive influence on student success. Much like how we, as teachers, are dependent upon student feedback to know if we are really doing our jobs well, students are dependent upon our feedback to know that they are succeeding in completing the course’s objectives. Without face-to-face meetings, tones of voice and other communicative tools that we are used to using for this type of expression, it is difficult for students to receive messages related to their progress. By communicating through text on a computer screen, praise comes forth as shallow and without meaning, while constructive criticism often suggests a nasty tone from the instructor. Without our normal inflection, it’s difficult for students to understand otherwise. At the same time, there is value in minor competitions that often exist between classmates, whether comparing grades on an assignment or exam, or competing for praise and recognition from the instructor or from peers. These things can be easily lost in an online course.

4. Not knowing who is actually taking the course. This is actually a problem that has plagued large sections of classroom sections for years. How do we know that the students registered for a course are actually the ones taking the course? Sure, in the past we’ve used tools like the freshman facebook, had students include Social Security Numbers or

other identifying information on submissions (which, of course, is now illegal due to FERPA!), or other various techniques. Today, one of the universities I teach for provides student ID pictures of each enrolled student with the course roster, which would be helpful if the pictures weren't so grainy and pixelated. For online classes, with the loss of face-to-face interaction, none of these approaches work for ensuring that a student registered is actually taking a course. Beyond the loss of face-to-face interaction and the threats posed to the educational experience, the functionality of using a web portal, no matter how advanced, is certainly a departure from a traditional classroom. That's the theme of these next few points.

5. Limitations of the online Learning Management System. There are dozens of different LMS out there used by various universities. Blackboard is probably the most popular, although Blackboard has purchased several companies in the past few years so some LMS still in use (such as WebCT and ANGEL) fall under their umbrella as well. There are also others, including products like Desire2Learn, eCollege, Hot Chalk and many more. Like any software genre where there are many players, each of these suites have advantages and disadvantages, strengths and weaknesses, though most of them at least generally fulfill the purpose that they're intended for. And every single one of them has compatibility problems of some sort with one OS or another, one or multiple browsers... trust me, there's just no escaping this. Not that you could anyway, since more than likely your institution has invested a significant amount of money (typically hundreds of thousands of dollars) to purchase licenses for and implement the particular LMS that some faceless schmuck in IT decided that your school should tie its ship to. You've already got the ring on for this (likely poorly) arranged marriage, so you might as well start figuring out your spouse. You'll save yourself a lot of grief and time in the months ahead.

6. Limitations in some LMS effectively discourage any form of critical thinking. As a teacher, you've become versed in honing the critical thinking skills of your students. You know that properly used lectures, videos, guest speakers, discussions, group projects, individual reactions can all inspire students to think outside the box and really expand their abilities to be productive and well-rounded citizens of the world. In some LMS, these normal techniques simply don't translate very well to the software infrastructure provided for the learning experience. As a result, it's way too easy to turn an online course into a class that has nothing but textbook readings and five multiple choice exams, which the software grades automatically. The lazy instructors who do this should be a) immediately fired and b) should have to donate all salary earned from online classes to charity. That's not teaching! But, it's a big temptation, particularly if the only LMS that your school has purchase effectively robs you of the normal tools you employ for pushing students to think critically.

7. Too much grading and too much responsibility. So, you want to make sure you're not one of those lazy instructors who only requires a textbook and five exams, and you've decided you really want to embrace online instruction to get students thinking critically and engaging with the materials. Well, there's a problem with that, because one of the draws for this online class to your university is the high capacity. If you give your 200 online students a series of papers to write which will definitely engage their critical thinking skills, then voila, you've got 200 submissions to grade for each assignment. Want to have an online course discussion? Now you've got to patrol a series of chat rooms for trolling, flaming, harassment and other such misbehaviour. You want your students to submit questions via email? Be prepared for a daily barrage of hundreds of emails that take hours to sift through and respond to. By losing the ability to talk to student's in-person and answer questions before and after class, you can very quickly get overwhelmed by it all.

While the Learning Management Systems have their own limitations, which of course provide consequences to the learning experience, their functional issues are not the only hurdles to a successful online course. These LMS typically aren't quite connecting with the technological expectations or abilities of the students themselves.

8. Limited technological skills of students. Despite the popular perception, college students aren't necessarily the most technologically advanced of groups. First of all, a far larger number of students in online courses are non-traditional students, which include folks above the age of 25 (and up to 75 or older!) who may already be working in careers, have families and the myriad of responsibilities that come with those stages of life. I've had online students who span the wide range of demographics, including retirees, homemakers, career professionals, teachers seeking professional development credits, and even folks who are incarcerated in prison for the foreseeable future. These people have vastly different experiences with technology than the stereotypical first-semester 19 year-old freshman. At the same time, don't give that 19 year-old too much credit either... high schools use technology to different degrees, not every home has a personal computer even still, and to many of these students, the computer is a social device, not a work machine. In a recent course full of such freshmen, I asked if any of them knew how to create a PDF document without Googling instructions to do so. One person raised her hand. Just because these kids are born and raised in the age of technology doesn't mean they are as capable in it as their peers, any more than being around during the 1960s automatically meant someone was a hippie.

9. The LMS Systems don't speak to students on their wavelengths. Look at most of the LMS systems on the market today, including Blackboard, WebCT, Web Chalk and Springboard by Desire2Learn. Any of these systems could have reasonably existed in the web's infrastructure back in 1999. Sure, maybe there's some back-end coding in those suites today that hadn't been invented in 1999, but the look and feel and interactivity of these suites is definitely based in Web 1.0. Students are constantly online using social networks such as Facebook, Twitter, FourSquare and are constantly creating content through blogs, Tumblr, Yelp and other services. Students in some cases are more likely to access these services through their smart phones than a laptop or computer. To my knowledge, there isn't an LMS on the market right now that has an iPhone app. Shouldn't we be making an effort to communicate with students using media they actually access on a regular basis?

Online Education System's Opportunities

Improve Quality of Education

- Computer aided adaptive testing
- Encourage collaboration among students, teachers, parents, alumni, activists & institutions
- A consistent grading system to measure and rank Students, Teachers, Schools & Universities
- Reward all round development of students
- Promote alternate education & ideas
- Continuous improvement by statistical feedback

Improve Accessibility

- Online & open information portal accessible anytime from anywhere to everyone
- Bring the books & other resource (videos of lectures, speakers) online
- Promote distant learning initiatives to spread the education in rural areas
- Provide online courses to students with special needs.
- 24×7 schooling for those who cannot attend regular schools during daytime

Reduce the cost of education

- Services at lower cost via online solutions
- Encourage “learn yourself” and “community learning” via online system, promote volunteers by providing common infrastructure at lower price
- Tools for teachers, schools & exam boards to offer courses and conduct examinations & assessment
- Measurement of returns and guidance on future spending

Social

- Online system creates anytime, anywhere engagement model
- Online Learning from home opens the doors for girls to get education if social & cultural reasons are preventing them.
- Promote vocational courses and self paced learning for adults
- Bring culturally diverse India on a common learning platform which is offered in all languages

Effective online learning environments engage students toward higher levels of thinking, promote active student involvement, accommodate individual differences and motivate learners.

Opportunities for Instructors

- You will likely have more participation from more students.
- You can experiment with new teaching techniques using technology that will work for your online courses and face to face courses.
- You can reach students who may not otherwise be able to take your courses.
- The diversity of students in online courses can be one of the most rewarding aspects of teaching online.
- You do not have to teach somewhere at a certain time. Teaching online is flexible and convenient.
- You can hold “office hours” on weekends or at night.
- You can teach anywhere you have Internet access.
- Most online instructors feel they become better teachers in general because of a heightened awareness of what they do in the classroom.
- There are opportunities for different types of communication with your students.

Opportunities for Students

- Control over learning
- Increased interaction with instructor and other students
- Convenient and flexible especially for non-traditional students with jobs, families, etc.
- Forge bonds not possible in conventional classrooms because of geography
- Don't have to drive somewhere, find parking, wait outside instructors' offices, take tests on campus, etc.
- The lack of travel saves time and money.
- Provides a safe environment for students who might not ordinarily participate to join in

Opportunities for All

Student-Centered Learning The variety of online tools draws on individual learning styles and help students become more versatile learners.

Collaborative Learning

Online group work allows students to become more active participants in the learning process. Contributing input requires that students comprehend what is being discussed, organize their thinking coherently, and express that thinking carefully.

Access to Global Resources

Students can easily access online databases and subject experts in the online classroom.

Experiential Learning through Multimedia Presentations

New technologies can be used to engage and motivate students. Technology can also be used to support students in their learning activities.

An educational system augmented by online components presents unique opportunity to solve multitude of challenges in quick time at affordable budget. Here is an overview of advantages of an online system.

IV. CONCLUSIONS

The online education system allows educators and students to exchange ideas and information, work together on projects, around the clock, from anywhere in the world, using multiple communication modes. Given the advantages and resources of this rich learning environment, how can multiple instructional strategies best be utilized for online learning? Just as in the traditional classroom, instructional strategies are most effective when employed specifically to meet particular learning goals and objectives. Effective course design can begin with asking and answering the key question: what are the major learning goals and objectives for this course? Once these goals and objectives have been identified and clearly articulated, the question of which learning strategies, activities, and experiences to employ can be addressed.

Online learning can employ any of the strategies discussed here. Much of the power of learning via the Internet lies in its capacity to support multiple modes of communication including any combination of student-student, student-faculty, faculty-student, faculty-faculty, student-others, others-students, etc. Taking into account the varied learning styles of learners and providing opportunities for self-directed and collaborative learning, educators can facilitate powerful, effective courses geared to achieve specific learning goals and outcomes using the vast resources and capacities of online learning.

The online education system is, after all, just another learning environment, in some ways similar to and in some ways different from more traditional environments such as conventional classrooms, seminar rooms, or labs. When we move our class onto the Internet, we should plan for and make the best use of the online environment. The various instructional strategies we use to meet the goals and objectives of our courses are likely to be similar in each environment. However, the ways in which we utilize the strategies will differ as we make the best use of the characteristics and capacities of each environment.

REFERENCES

- [1] Ally, M. (2008). Foundations of educational theory for online learning. In: T.Anderson, ed. Theory and practice of online learning. Athabasca, AB.: Athabasca University, pp. 15-44.
- [2] Al-Musa, A. & Al-Mobark, A. (2005).E-learning the fundamentals and the Implementations. Riyadh: datanet.
- [3] Akkoyuklu, B. &Soylu, M. Y. (2006). A study on students' views on blended learning environment. Turkish Online Journal of Distance Education, 7(3), ISSN 1302-6488.
- [4] Al-Ali, N. (2007). Comparing the effectiveness of computer-assisted instruction with conventional teaching on students' achievement at Yarmouk University. The Journal of Education and Psychology, Faculty of Education, Bahrain, 3, (8), pp. 213-232.
- [5] Al-Amoudi, S. (2005).Development of teaching at king Fahd University of petroleum and minerals using e-learning. In: king Abdul-Aziz University, Workshop on the effective use of technology in higher education, (30-1st February 2005). Jeddah: Saudi Arabia.

General Web Links to Key Topic

- [6] <http://www.ion.uillinois.edu/resources/tutorials/pedagogy/instructionalstrategies.asp>
- [7] <http://www.e-learningconsulting.com/index.html>
- [8] <http://www.fao.org/docrep/015/i2516e/i2516e.pdf>
- [9] <http://etheses.dur.ac.uk/817/>
- [10] <http://www.mohe.gov.sa/en/studyinside/Pages/default.aspx>