# Components and benefits of E-learning system

Dr. S.S. Gautam
*Associate Professor*
*MGCGV, Chitrakoot, Satna,M.P.*

Manish Kumar Tiwari
*Research Scholar*
*MGCGV, Chitrakoot, Satna,M.P.*

***Abstract: Here we discuss what is e learning system, different component of e learning system, benefits and drawbacks of e-learning system***

***Keywords: e-learning, requires, Content Engagement, Usability, Audience, Page Design, Course Structure, students***

**What is E learning**: Education via the Internet, network, or standalone computer. E-learning is basically the network-enabled transfer of skills and knowledge. E-learning refers to using electronic applications and processes to learn. E-learning applications and processes include Web-based learning, computer-based learning, virtual classrooms and digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV, and CD-ROM[1] E-learning was first called "Internet-Based training" then "Web-Based Training" Today we will still find these terms being used, along with variations of e-learning such as elearning, Elearning, and eLearning.[1]

COMPONENT OF E LEARNING SYSTEM:
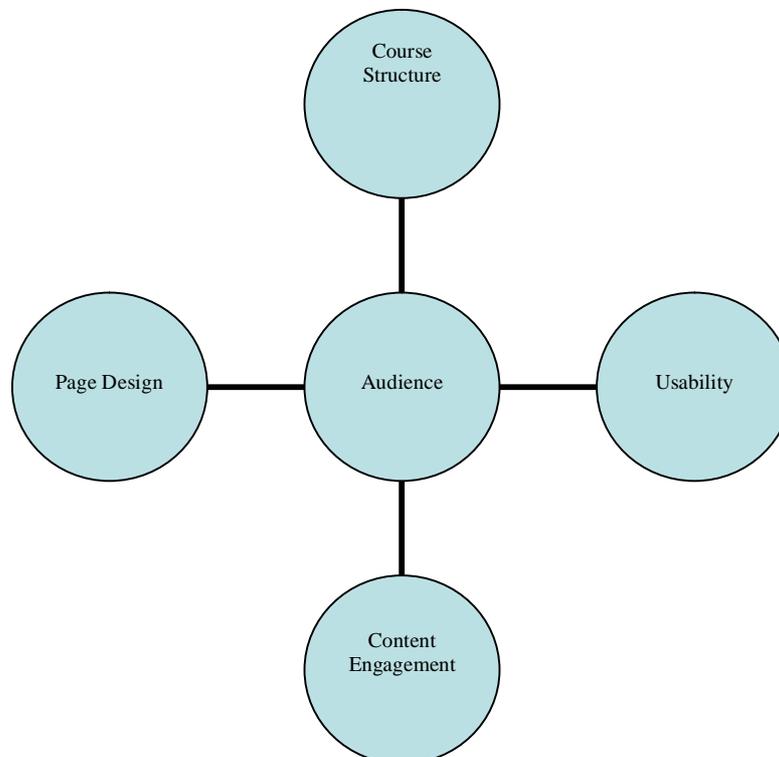


There are five eLearning Components that are essential for all successful online courses. The diagram above illustrates how these components are connected. Each e learning component plays an important role in designing an E-learning system.[2]

**AUDIENCE**

From concept to implementation, the student is a critical factor in the process of developing online courses. The whole thing intended and developed should be done with the student in mind. One of the first steps in the system designing is to conduct an student analysis. This analysis will help to find out the basic structure of the other four elearning components. As we begin to develop an online course we should forever consider the following about our student:

- *Expectations*
- *Learning abilities (prerequisites)*
- *Available hardware/software*
- *Learning Environment*
- *Job Responsibilities*
- *Preferences*

## COURSE STRUCTURE

Course structure refers to how a course is intended for elearning. The structure of a course plays a critical role in how our student learns the content. How the course should be structured and structured. For e learning. Consider the following items when structuring our course[2]:

- **Group content into logical modules:** Recognize the flow of the course and then find out how to modulate the information.
- **Size of modules:** Most people require to feel like they are accomplishing something and require those mental check points that indicate that they are progressing. Keeping our modules to 8-10 pages will help the student feel a sense of progress. Also, modules that tend to be long cause the student to loose interest and thus, the learning process becomes drudgery.
- **Incorporate interactive concepts:** our course structure should also include interactive concepts strategically placed throughout the course. Too much interactivity can cause the student to either forget why they are completing the course or simply loose interest. A good rule of thumb is to include an exercise or activity every third page with one major activity per module. This will establish a good balance between exchaning information and sustaining the interest of the student.
- **Use pictures/graphics to help explain ideas, concepts, or statements:** It is forever a good practice to include images whenever possible. Each image should have a purpose and should represent the subject presented on the page.

## PAGE DESIGN

The page design of an online course is critical to the learning process. How a page is intended can have a huge impact on the learning experience of our student. Consider some of the following tips when formatting our course:

- **Navigation must be intuitive.** Make navigation simple and easy to follow. The easier it is to navigate, the more engaging the course will be for the student.
- **Appearance must not hinder the learning process.** Remember, the purpose of the course is to instruct the student. The layout of the course should not be laborious for the student to understand what he or she must do on the page. If a page is confusing or frustrating for the student, they will lose interest and we will not achieve the learning objectives.
- **Balance between text and graphics is critical**. Avoid over powering the text with graphics or images. Graphics are a powerful resource for instructional designers. Using graphics wisely to stress a concept is a great way to help the student comprehend a complex topic. However, if the graphic becomes too dominate and over shadows the intent of the topic or concept on the page, the student can become distracted and lose interest in the course. Also, too much text with little to no images can also have an affect on student. Similar to images, too much text on a page can appear to laborious for the student and can psychologically impact the student in not reading the information. Thus, balance of images and text must be considered when designing a page.
- **White space is good.** Some people like to use every bit of real estate on a screen. This makes the page look cluttered and unstructured. Having a lot of white space is actually a good practice to incorporate into our training. Using white space effectively can promote a positive learning environment for the student as he or she will not see the page as labor intensive to complete.
- **Consistency is golden (includes fonts, layouts, and pop-ups).** Being consistent throughout our course will improve the learning experience of our student. Keeping objects and fonts consistent throughout our course helps the student to become less frustrated in navigating through the training.
- **Ease of scanning information is imperative.** Most people like to scan through a page. Making the page user-friendly by organizing information using bullets or numbers can greatly improve the learning experience. Organizing concepts and topics using bullets or numbers ensure a greater retention percentage for the student. It also helps the student to quickly find key points or facts to assist in comprehending critical topics.

## CONTENT ENGAGEMENT

Content engagement refers to how the student interacts with content of the course. Because studies have shown that the learning experience is greatly enhanced when exercises or activities are incorporated into the learning process, content engagement is critical. Consider the following when attempting to engage the student in an e learning environment.

- **Use hyperlinks for additional concepts, explanations, or definitions.** The advantage of online learning is that it provides the student with additional resources and information with just a click of the mouse. Linking to additional references can greatly improve the learning experience and offer added value to the content of the topic.
- **Incorporate interactive graphics such as animations or simulations.** If pictures are worth a thousand words, then interactive graphics should be worth 2,000 words. Creating interactive images help the student to experience a hands-on learning process that accelerates the learning. For example, information graphics provide a visual comprehension of the concept presented.

- If the student had to click on portions of the information graphic, the learning experience would be more impact to the student. Simulations and other animations also provide that same objective.
- **Provide additional options/choices for the student.** In today's world, people love the ability to choose various options. This is important when it comes to learning because everyone learns differently, including various learning style preferences. For example, most people learn visually. However, there are some people that learn better via audio. By incorporating both the visual and the audio aspects into our training, we allow the student to choose an option that best meets his or her learning requires.
- **Incorporate quizzes, tests, skill assessments.** Another way to engage the student is to test them on the things that they learned within the course. This allows both the student to verify that they understood the content while at the same time the instructional designer can verify that the contents achieved the training objectives. This also helps to establish check points for the student to know if they can move on within the course or return to previous topics to review the information again.
- **Create fun activities such as games or other educational methods of interactive learning.** When learning is fun, people can maintain their interest longer in the topic. As we incorporate activities into our training, remember to make it fun. Use games or other methods that help increase the learning experience. However, use caution in creating the games so as not to allow the games to over shadow the intent of the topic. Remember, the intent of these activities is to provide context around the explanation of the topic.
- **Keep activities focused on the course objective.** Forever ensure that no matter what we do to engage the student, the concepts must compliment the training objectives or topics. The temptation for many is to become so engrossed in interactive concepts that the reason for the training is often forgotten.

## USABILITY

Many creative ideas are refused because they do not work. Likewise, a well structured e learning course can be ill-received if it does not function properly. Usability refers to the testing of e learning content and applications.

Once we have built our online course, we should forever test it in the same environment that the student will complete the course. Consider the following when we conduct our usability analysis.

- Verify that all links work properly
- Ensure that activities function as intended
- Inspect content to ensure that grammar and spelling are correct
- Ensure that graphics are visible
- Verify that the course works appropriately in all applicable server environments
- Verify that screen resolution works for the intended student
- Verify that course objectives and expectations are met

## ADVANTAGES OF e-LEARNING TO THE TRAINER OR ORGANIZATION

Advantages to the trainer /organization are[3]:

- **Reduced overall cost**:-The elimination of costs associated with instructor's salaries, meeting room rentals, and student travel, lodging, and meals are directly quantifiable. The reduction of time spent away from the job by employees may be the most positive offshoot.
- **Learning times reduced,**
- **Consistent delivery** of content is possible with asynchronous, self-paced e-learning.
- **Expert knowledge** also available to all student and student can access any time. .
- **Proof of completion and certification,** essential elements of training initiatives, can be automated.

## ADVANTAGES TO THE STUDENT

E learning system increased retention, reduced learning time, and other aforementioned benefits to students, most important benefits of e-learning to students are[3]:

- **On-demand availability** enables students to complete training conveniently at from home and at any time.
- **Self-pacing** for slow or quick students reduces stress and increases satisfaction.
- **Interactivity**: Through the E learning system we can directly interact with student and solve their problems.
- **Confidence** that refresher or quick reference contents are available reduces burden of responsibility of mastery.

## DISADVANTAGES TO THE TRAINER /ORGANIZATION

It does have limitations. Some disadvantages of e learning system are [3]:

- **Up-front investment** There is requiring a larger amount to develop e learning system.
- **Technology issues** that play a factor include whether the existing technology infrastructure can accomplish the training goals, whether additional tech expenditures can be justified, and whether compatibility of all software and hardware can be achieved.
- **Cultural acceptance** is an issue in organizations where student demographics and psychographics may predispose them against using computers at all, let alone for e-learning.

**DISADVANTAGES TO THE STUDENT**

- **Technology issues** of the students are most commonly technophobia and unavailability of required technologies.
- **Portability** of training has become a strength of e-learning with the proliferation of network linking points, notebook computers, PDAs, and mobile phones, but still does not rival that of printed workbooks or reference content.
- **Reduced** social and cultural interaction can be a drawback. The impersonality, suppression of communication mechanisms such as body language, and elimination of peer-to-peer learning that are part of this potential disadvantage are lessening with advances in communications technologies.

**CONCLUSION**

Knowing and understanding these 5 major e learning components will help we build instructionally sound and successful online programs. The benefits and drawbacks of e-learning vary depending on program goals, target student and organizational infrastructure and culture. But it is unarguable that e-learning is rapidly growing as form of training delivery and most are finding that the clear benefits to e-learning will guarantee it a role in their overall learning strategy.

**REFERENCES:**

[1]. http://www.webopedia.com/TERM/E/e_learning.html.
[2]. www.instructionaldesignexpert.com/**eLearning_Components**.html
[3]. www.e-learningguru.com/
[4]. Selwyn, N. (2011) Education and Technology: Key Issues and Debates. London: Continuum International Publishing Group.
[5]. *Moore, J. L.; Dickson-Deane, C.; Galyen, K. (2011). "E-Learning, online learning, and distance learning environments: Are they the same?". The Internet and Higher Education* **14** *(2): 129–135. doi:10.1016/j.iheduc.2010.10.001.*
[6]. Tavangarian D., Leypold M., Nölting K., Röser M., (2004). Is e-learning the Solution for Individual Learning? Journal of e-learning, 2004.