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#### **Review Article**

# Web learning: Opportunities and challenges

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#### ABSTRACT

Web Learning is a powerful, world-class Virtual Learning Environment VLE that allows, information users like Students Faculty and Research Scholars to engage in meaningful online flexible delivery of courses and assessments to on-site or distance learners, while meeting their specific needs and learning styles. this concept represented multifaceted ideas. Transactional distance consisted of four dimensions—instructor-learner, learner-learner, learner-content, and learner-interface transactional distance. The results inform researchers and practitioners of Web-based instruction concerning the factors of transactional distance that need to be taken into account This article describes a year-long application of critical information literacy theory for social-science-related library workshops. Each of these workshops had a customized section that included working with special collections and university archives. The students who participated ranged from incoming freshmen to seniors at Stanford University. The curriculum development method for these workshops.

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#### 1. Introduction

Mixed learning is an instructive procedure which joins the customary homeroom with online exercises and finds its best application in the Flipped homeroom where the obligation regarding the showing system is in a manner 'moved' to that of the understudies who have direct admittance to the items in the example prior to going to class. Albeit the terms 'Mixed Learning' and 'Flipped Learning' are given various implications, they really share a lot of practical speaking. In this unique situation, the educator will turn into an ally and facilitator and will assist understudies in the progress with handling from information to the procurement of abilities and skills. This paper investigates these two E-learning approaches with the different hypothetical and instructive ramifications they have. It likewise delineates how a few exercises have

been carried out and coordinated considering these systems both in the English language on subjects of regular daily existence and in scholarly showing in secondary school classes through the computerized climate.<sup>4</sup> These study hall practices and approaches have been useful for other school subject, for example, Arithmetic, Material science and Workmanship that have tested Mixed and Flipped figuring out how to handily show CLIL more. Moreover, the most suitable method for completing Flipped training has been to make virtual classes via web-based entertainment, for example, Facebook or Edmodo, which are likewise valuable as a kind of online store of illustrations and as a conversation discussion between the instructor and his/her understudies. In this new point of view, understudies have encountered new procedures and methodologies through helpful realizing, that is an educating/learning mode which permits them to cooperate in little gatherings to accomplish similar objectives. Understudies have made computerized items and posted them on the Net, in this manner

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accomplishing extraordinary outcomes. Every one of the exercises have been intended to consider decisive reasoning, different learning styles, numerous insights and so as to get instances of the computerized proficiency guidelines expected for the 21st - century understudies

#### 2. Advantages and Popularity of Web-Learning

- 1. Increasing access to learning resources<sup>5</sup>
- 2. Improving interactive teaching and learning environment
- 3. Increasing student convenience<sup>6</sup>
- 4. Reducing educational delivery cost
- 5. Developing a scholarship of web-based pedagogy
- 6. Providing 21st century learning environment, supported by the latest information and communication technologies

#### 3. Reasons for Joining Web-Based Programs

- 1. Providing opportunity to acquire a higher degree for all those facing geographic problems and working professionals as well
- 2. Allowing scope to man or qualify for higher and responsible positions
- Building an appropriate professional career to gain new knowledge and skills required in the libraries and information centers
- 4. Computer-based presentations, communication with faculty and access course materials without waiting for available on campus computers
- 5. Selecting and specializing on the areas of interest out of the wide range of courses offered through virtual mode.
- Providing an opportunity to make quality computerbased presentations, communication with Faculty and access course materials without waiting for available on campus computers
- 7. Keeping students abreast with latest technologies and access to campus library and information resources/electronic resources
- 8. Providing an opportunity to build relationship with online community of learners and wide range of classes a chance to network with one another

#### 4. Web Learning: The Framework

- Pedagogical dimension of virtual learning refers to design, development and delivery of open an flexible courseware/learning systems in an online learning environment.<sup>7</sup>
- 2. Technological dimension of virtual learning framework refers to technology infrastructure, which includes infrastructure planning e.g. hardware, software, formats etc.

- 3. Interface design allows the over all look and feel of virtual learning program and encompasses page and site design, navigation, usability and testing.
- 4. Ethical considerations of virtual learning relate to socio-economic and political issues, cultural and geographical diversity, information accessibility and other legal issues.<sup>2</sup>
- 5. Institutional dimension is concerned with issues of universities, virtual universities with regard to learning resources, management and evaluation of the system as a whole to meet the objectives of the institution.
- 6. Evaluation for virtual learning includes both eight dimensions of the framework for over all evaluation of the instruction and learning environment.
- 7. Management of virtual learning refers to the maintenance of learning environment and distribution of information.<sup>8</sup>
- 8. Resource support dimension of virtual learning framework examines the online support and resources required to support an effective and efficient learning environment.

#### 5. Basic Components of Web-Based Programs

- 1. Committed Faculty and Learning Resources<sup>9</sup>
- 2. Instructional Technology Support
- 3. Electronic Reserve/Library Service to Distance Learners

#### 6. Committed Faculty and Learning Resources

- 1. Online Educators play a vital role to design and develop online courseware
- 2. Contents best suited to distance learners
- 3. Developing more number of Core and Elective courses
- 4. Setting up Bulletin Board, Assignment Questions, Project Seminar, and Final Test

#### 7. Faculty Satisfaction

- 1. Flexibility of time and place
- 2. High level and quality of student interaction
- 3. And the enjoyment of working with the technology

## 7.1. Faculty Concern On

- 1. Time commitment required to teach online
- 2. Lack of or reduction in face to face student contact
- 3. Occasional technical problems

#### 8. Instructional Technology Support

- To develop an appropriate online course management system <sup>10</sup>
- 2. IT support helps to handle the number of learners course wise, educational content, interaction between learners and tutors

 Online courseware are designed according to instructor's specifications which include-Readings, Lectures, Link to other web sites, Bulletin Board, Chat Options, E-mail etc. <sup>10</sup>

Two Courseware management system software are popular in USA.

- 1. Blackboard www.blackboard.com
- 2. Web CT www.webct.com/vista

#### 9. Delivery of Web-Based Education

- 1. Asynchronous learning via World Wide Web provides any-time interactive learning environment between instructors and students intermittently with a time delay. Examples are self-paced courses taken via Internet or CD-ROM, Question and Answer mentoring, online discussion groups and e-mail. In online asynchronous discussions, the moderator's competencies involve 1) allowing learner's time for reflection, 2) keeping discussions alive and on a productive path, 3) archiving and organizing discussions to be used in subsequent lessons. This method is based largely on the idea of the Web as an environment conducive to effective teaching and learning. Course delivery is designed to reduce transactional distance between instructors and learners by building carefully on the interplay between learning structures and communication and the communication flow between teacher and learner.
- 2. **Synchronous learning** refers to a real-time, instructor led online learning event in which all participants are logged on at the same time and communicate directly with each other. In this virtual class room setting, the instructor maintains control of the class, with the ability to call on participants. In most platforms, students and tutors can use a white board to see work in progress and share knowledge. Interaction may also occur via audio or video conferencing, Internet telephony or two way live broad casts. <sup>11</sup>
- 3. In online synchronous discussions e.g., chat the moderator must 1 establish ground rules for discussion, 2 animate interactions with minimal instructor intervention, 3 sense how on line text messages may appear to distance learners, and 4 be aware of cultural differences. <sup>12</sup>
- 4. The Web is changing the actual idea of society in manners unrivaled since the modern upset. It is influencing nearby, public and worldwide economies and their frameworks. Data is accessible whenever from any spot to any Web client. <sup>13</sup> This is setting out huge open doors for colleges to give a learning climate that is open to all. Similar time, same spot, just certain individuals conventional instructive climate is giving way to whenever, wherever and

anyone educational models. For colleges, the inquiry becomes how to protect and extend the advantageous parts of up close and personal showing models while making an interpretation of them into the new climate of Online instruction WBE. 14 This challenge is made considerably more mind boggling when found with regards to different patterns in schooling: the progress from uninvolved homeroom talks to involved, understudy focused, intelligent learning; the impression of understudies as clients, with expanded command over the growing experience; an advanced education market where conventional colleges need to rival for-benefit endeavors. This section inspects Electronic training and contends that it can effectively reproduce eye to eye showing models, while adding a few one of a kind highlights made conceivable by the innovation. <sup>15</sup> To find success, notwithstanding, this recreation requires changes in numerous areas, including understudy evaluation, workforce preparing and assumptions, and understudy assumptions and inspiration. Furthermore, the section analyzes a few basic parts of Online schooling, including mechanical, regulatory, quality and control gives that should be addressed to establish great conditions for Electronic instruction. 16

# 10. Electronic Reserve/Library Services to Web Learners

To provide remote access to university library' electronic reserve such as: 17

- 1. Index to Articles
- 2. Full Text Articles
- 3. Electronic Journals and Books
- 4. Online catalog of library collections
- 5. Books and journals are provided to learners on request
- 6. No difference between off-campus and on-campus students 17
- 7. Nearby learners also participate in library workshops on different topics which include:
  - (a) Searching online catalog
  - (b) How to find journal articles
  - (c) How to do research using Internet
  - (d) How to locate resources for specific academic disciplines.

#### 11. Emerging Areas of Research

Web Learning has led to new areas of research which include: 18

- 1. Comparative study between traditional and web-based class room instruction
- 2. Methodology in design, development and delivery of on line learning resources

- Effectiveness or efficiency of web-based LIS education both learning effectiveness and cost effectiveness.
- 4. Management of on line courses both from institution and learners point of view.
- 5. Learning out come or learning competencies self assessment /self evaluation
- 6. Use and access to technologies both by the instructors and students <sup>18</sup>

#### 12. Challenges Ahead

Webs based delivery of education and have confronted a number of challenges to learners, faculty, administrator and new organizations in terms of: <sup>19</sup>

- 1. Access
- 2. Contents
- 3. Competencies
- 4. Cost effectiveness 19

#### 12.1. As a new learner

- 1. Navigating on line courseware <sup>20</sup>
- 2. Navigating transfer credit policies
- 3. Access to electronic courses
- 4. Acquaintance with different hardware and software requirements <sup>20</sup>

#### 12.2. As a faculty member

- 1. Students finding problem in accessing course tool
- 2. New faculty and experienced students
- 3. New students and experienced <sup>21</sup>

### 12.3. As an administrator

- 1. Dealing with different graduating policies
- 2. Different academic calendar
- 3. Different tuition fee
- 4. Different cost sharing

# 12.4. As a new organization<sup>22</sup>

- 1. Setting an established platform
- 2. Creating demand for different courses
- 3. Balancing resources income and expenditure <sup>22</sup>

#### 13. Suggestions

- Bridge the digital divide: Governments, institutions, and organizations can invest in infrastructure and initiatives to improve internet access and provide devices to underserved communities.
- Offer tech literacy support: Provide training and support resources for both learners and educators to enhance their digital literacy skills and proficiency with

- online learning tools.
- Promote social interaction: Incorporate synchronous activities such as live lectures, group discussions, and virtual office hours to facilitate interaction and community-building among learners.
- 4. Implement quality assurance measures: Develop rigorous standards for online course design, delivery, and assessment, and provide training and support for instructors to meet these standards.
- Foster motivation: Offer incentives, rewards, and recognition for learners who actively engage in online courses, and provide ongoing support and encouragement to help them stay motivated.
- Use technology for integrity: Employ plagiarism detection tools, secure online proctoring, and other technologies to deter cheating and ensure academic integrity in online assessments.

By leveraging the opportunities and addressing the challenges of web learning, educators and institutions can create more inclusive, engaging, and effective online educational experiences for learners worldwide.

#### 14. Conclusion

Yet while there is a groundswell of enthusiasm for adopting Web practices in education, there is little evidence that uptake is happening to any significant degree. This is not helped by the fact that there remains very little research activity guiding the effective application of these new tools and practices. This may reflect the fast-changing nature of services and, therefore, the reluctance of researchers to aim their interest at such a moving target. However, slow educational uptake also reflects the fact that adoption of Web creates a number of practitioner tensions; these exist as significant challenges to innovation. The overall results suggest that students had positive perceptions toward the use of the web learning. Age was found to be an insignificant factor. However, gender and prior experience with the Internet were found to be significant factors Students who had more prior experience with the Internet had significantly higher positive perceptions toward using the web. Implications for practice are discussed and recommendations are made for future research.

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#### 16. Conflict of Interest

None.

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