

Designing an e-Model for Open and Distance Learning in Pakistan

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Abstract

This descriptive research focused on designing an e-model for open and distance learning (ODL) in Pakistan. After studying various e-models, blended learning and issues relating to ODL in Pakistan, the researcher designed and executed an e-model on a group of students. The researcher designed and offered online Postgraduate Diploma in Teaching of English as a Foreign Language (TEFL) offered by Allama Iqbal Open University (AIOU) Islamabad, Pakistan. The participants' feedback supported e-model as a solution to their problems which they were facing in traditional ODL programs. The online courses improved their learning, reduced their expenses incurred on attending tutorials, improved tutor-students and student-student interaction. **Keywords:** e-learning, open and distance learning, English language teaching

1. E-learning Models

Researches have designed a number of e-learning models based need analysis. The purpose of these models was to involve students in meaningful tasks and quick feedback through online discussion and assessment. The instructional design focused on content delivery and enhanced outcome with the help of technology supposed to stimulate the learning process. Here are a few e-models which helped the researcher to design AIOU e-model in Pakistan.

1.1 K. Salmon's e-tivities Approach

E-tivities is a five-step approach introduced by Salmon (2004) for online teaching and learning. The purpose was to motivate students' participation in online tasks which he termed as e-tivities. The five steps include prerequisite of the course and induction of participants, establishing their online identities, exchange students' information, initiate course-related discussions, and personal development in the achievement of goals.

1.2 The Open University UK

A VLE (Virtual Leaning Environment) project was initiated by the UK Open University in 2004. The tools included were; conferencing, authentication, template driven content delivery, blogging, assignment and assessment. The UKOU developed an e-learning strategy which had direct resonance with the VLE project, an open source, which allowed flexibility in approach, and also demonstrated a degree of technical engagement with the VLE community (UKOU website).

1.3 Opencourseware@MIT

Massachusetts Institute for Technology initiated the Opencourseware aiming at putting together all its educational materials online. It included course outlines, syllabi and activities, book lists and assessment exercises. Opencourseware used an open access approach to learning materials to provide the benefits of open access for all to education around the world (ocw 2006:online).

1.4 EMAR (Educational Management Action Research) model

The EMAR is based on the initial framework proposed by Goodyear and Khakhar (McPherson and Nunes, 2004) as a first attempt to build a general action research management framework. Action research cycle comprises Diagnosis (data gathering, analysis and representation), Action Planning, Action Taking, and Action Evaluation.

1.5 The ITM CPDE pedagogical model

Information Technology Management developed the CPDE (Continuing Professional Development Education) model based on "a constructivist approach, which implies the assumptions that learning involves an active process of construction by the learners at both individual and social levels, rather than the passive reception of knowledge" (McPherson and Nunes 2004:49). CPDE consists of a set of explicit materials including a number of exercises, reflective tasks and problem solving case studies. Essential features of this model are collaboration and peer support which help students to get engaged in dialogue, exchange of experience, ideas and feedback, and overcome isolation. The role of the tutor is that of "a facilitator who supports independent engagement in the process of construction through scaffolding and the provision of advanced organizers into the learning environment" (ibid).



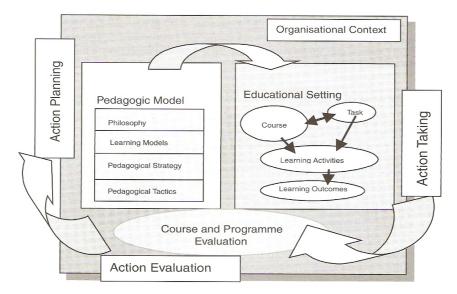


Figure 1: The Educational Management Action Research Model

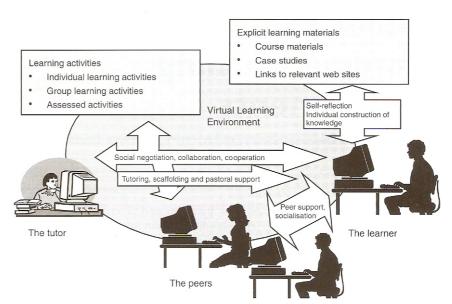


Figure 2: The Educational Management Action Research Model

These models reflect that the ODL has recognized "the need to provide opportunities for social interaction to support effective learning and have therefore tried to simulate face-to-face communication through the development of instructional systems based on technologies such as audio-conferencing, videoconferencing and computer mediated communication that can support two-way communication between students and teachers (McPherson and Nunes 2004:53).

2. The Open Source

Open Educational Resource (OER) or Educational Open Source (EOS) or simply called Open Source (OS) is a legal framework for the shared development with a purpose to provide equal access to knowledge and educational opportunities throughout the world. OS provides free access to teaching, learning, and research resources which reside in the public domain. They have been released under an intellectual-property license that permits their free use or customization by others. There is a freedom to share, reprint, translate, combine, or adapt that makes them educationally different from those that can merely be read online. Batpurev, B. (2005:online) says that OS is "an essential part of providing the fastest and most efficient enterprise solutions. Over hundreds of commercial and non-commercial ODL software is available on the internet. Over 50 such



systems based on open source software alone".

There are three models of OER/EOS: cost/benefit models; third-party funding models; and value-added models. Cost/benefit models are based on institutional self-funding resources for production and delivery and student services by enhancing the student experience with access to online resources. Third-party models are funded by government, foundations, voluntary donations by users, endowment, or membership fees for users. Value-added models provide value-added services to specific user segments such as self-study version of a course and charging a service fee for instructor support.

Open source software such as Moodle, Linux and Apache has been successful and has been adopted by a number of higher educational institutions. However, over recent years there are a number of prominent open source projects. The reasons for this include "low cost, technical developed, accepted and interoperability" (Weller, 2007:99). Due to escalating cost of commercial software universities adopted open source software. There have been a number of technical developments which make the concept of sharing applications or services more viable.

Weller (2007:101) enlists a number of open source VLEs and related projects. However, three of these, namely Sakai, LAMS and Moodle, are being briefly discussed here. The Sakai project was initially founded as a consortium comprising the University of Michigan, Indiana University, MIT, Stanford as well as the Open Knowledge Initiative and the uPortal consortium who have developed the open source portal, http://www.uportal.org. There are two major aims of the project - to develop an architecture that allows a service oriented approach to VLE development and to develop open source tools that would act as components in the architecture. Moodle is an open source VLE, started and led by Martin Dougiamas. It supports a social constructivist approach by promoting discussion and collaboration. It has a similar set of tools, including discussion boards, quizzes, content upload, and assignment handling (www.moodle.org). The Learning Activity Management System (LAMS) was developed by James Dalziel and his team at Macquarie University. It promotes an activity based approach to learning by creating a number of pre-specified activities from which an educator can construct a sequence (http://www.lamsfoundation.org).

3. Instructional Design

Instructional design is a process of analyzing learning needs and developing a delivery system. According to COL (2005:2), instructional design is "the systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction".

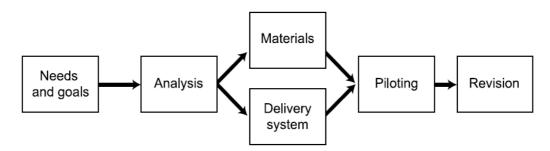


Figure 3: The instructional design process (COL, 2005:2)

It includes development of instructional materials and activities, execution and evaluation of instructions and learner activities. It is, therefore, a systematic way to translate learners' needs and goals into successful learning.

Most of the students in ODL are adults who possess certain characteristics that may affect the approach to learning and instructional design. The most commonly quoted characteristics of adult learners are: adults need to know why they are learning; see themselves as responsible, self-directed persons; come to post-school education with a wealth of experience; are likely to choose to learn when they are ready to learn; in their learning, are problem-centered; and tend to be motivated by personal factors. The instructional designer needs to "include opportunities for learners to recall their prior knowledge and experience, and encourage them to reflect on this and compare it with what they are learning, design adult curricular around the needs of learners" (COL 2005:10). Also a designer needs to learn providing a positive social environment to adult distance learners using an electronic medium. A wide range of experts, including specialists in instructional design, systems design, electronic information systems, database design, graphic design, student administration, electronic publishing, project management and content experts is required for developing technologically sophisticated teaching and learning systems. Jochems, et al (2004:80) suggests that the fast-pacing growth in the field of "instructional design and technology has promoted a shift from a single-teacher system of design, development, delivery and evaluation of education and training program to a multi-disciplinary team approach wherein a wide range of



specialist expertise is applied to the generation of training programs".

4. Developing Study Material

Study material for students at distance is different from the study material for students in face-to-face classroom. The process of course production is a lengthy process in the ODL context. Most of the ODL formats adopt the combinations of different media like print, audio, video, computing and face-to-face.

- print (study guides, workbooks, textbooks, course guides);
- audio (radio, telephone, audiocassette, audio-conferencing and voicemail);
- video (videocassette, instructional TV, videoconferencing, satellite TV);
- computing (computer conferencing, e-mail, chat, multimedia, bulletin boards); and
- face-to-face: contact courses, study groups, regional tutorials (White, 2003:34, 200)

Printed text is still an important medium of instruction for ODL supported with the use of technology. Course designers may incorporate a range of delivery media into ODL packages, which include varying forms of print-based texts, audiocassettes, videocassettes, CD-ROMs, and online communications, and it may be supplemented by opportunities for face-to-face instruction.

Designing and developing web-based study material requires people with course development skills, instructional design skills and technical expertise in computing. In a web-based environment, learners collaborates using a variety of different tools, including chat rooms, net, e-mail, bulletin boards and various types of computer forums. "One of the key features of all technology is its flexibility; it offers several ways of achieving the same goal" (Carliner 2004:29). Study material for students at distance is mostly based on cognitive and constructivist approaches. According to cognitive approach material is chunked into small, meaningful pieces and mnemonics used to aid memory. At the same time, the distance learning course shows signs of the constructivist approaches such as: authentic, real-world tasks, learner choice of task or situation, case studies, complexity of the real world presented through the tasks, collaborative learning tasks, the learning package is open-ended in terms of what is to be learnt, and self-evaluation rather than formal assessment.

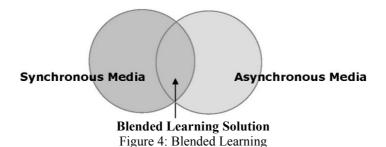
White (2003:205) suggests an enhanced course model which is "a more recent trend towards using multiple sources for learning, which provide learners with the possibility of selecting and accessing material in a textual form which accords with their own learning preferences". Learners are encouraged to navigate their own learning paths through the sources. So, the learners are able to choose how and the degree to which they interact with, interpret and derive meaning from a range of texts.

After having an instructional design and study material, the instructional strategy is the next step. The instructional strategy is not only sequencing the content but designing strategies how learners will interact with and learn in a web-based course. Before designing such strategies for a web-based course, the characteristics of the students, discipline, learning outcomes and prerequisite knowledge of the students should be considered. Much research has been conducted regarding the development of learning strategies. The effective dissemination of content through the use of distance learning media depends on the design of the instruction. Regardless of the VLE, instructions are designed to transfer knowledge from the tutor to the students in real-world environment. "Transfer of learning is facilitated by the development of instructional strategies" (Holden et.al. 2005:online). No single medium can support all the instructional strategies in ODL. Certain synchronous instructional technologies such as video teleconferencing asynchronous instructional technologies such as emails can be integrated to create a web-based learning environment. This situation also reflects that blended approach to education best operates through a combination of face-to-face and remote learning. Students at distance can be connected to their tutors and with learning resources through a range of instructional strategies. "Increasingly, Internet broadcast techniques such as podcasting are being used to provide distance learners with learning materials wherever they are studying" (John & Wheeler, 2008:35; Clarke 2004:117).

5. Blended Learning

Blended learning is a kind of instructional strategy which uses multiple media and can be applied into a traditional classroom or into a distance learning environment. Integration of a variety of synchronous and asynchronous media in blended leaning allows the course designer to get the most appropriate learning solution in a collaborative learning environment.





Collaborative learning in digital media can be "a great aid in the generation of creative thought processes through the provision of a shared electronic space within which learners are encouraged to take risks, make mistakes and think critically as they work together" (John & Wheeler, 2008:38).

Therefore, while selecting the most appropriate media, Holden, et.al. (2005:online) suggest the course designer to consider the asynchronous media, synchronous media and symmetry in using both the media. They suggest that "asynchronous media may be more appropriate for the lower cognitive levels where knowledge & comprehension and repetition or drill & practice are the primary focus" whereas "synchronous media may be more appropriate for the higher cognitive levels (synthesis, analysis, evaluation) where a synchronous learning environment is required to support a high level of interaction (dialogue)". There should be symmetry between the use of technology and teaching strategies.

At the time of selecting the instructional media for distance learning a number of variables need to be considered. "These variables include identification of knowledge and skill gaps, effective assessment and measurement tools, level of interaction, instructional strategies, complexity of content, and rate of content change" (Holden et al 2005; online).

6. Research Design

The researchers adopted a qualitative framework to analyze the appropriateness of the e-model in English language teacher education programs in distance education context in Pakistan. The researcher implemented e-model and facilitated students in online tutorials, submission of assignments and assessment. The researchers used weekly diary and focused discussion to collect the data. A group of 27 students enrolled in MA TEFL programme of Allama Iqbal Open University Islamabad, Pakistan was selected randomly from Islamabad, Rawalpindi, Abbotabad and Chakwal regions.

6.1 Research Questions

- i. Was the e-model appropriate and effective in Pakistani distance education context?
- ii. Was the e-model helpful in facilitating the MA TEFL students at AIOU?

7. AIOU TEFL e-Model

The e-Model does not project a new pedagogical framework but it enhances the previous models of learning by adding the component of technology with ODL to create a more cost-efficient way of bringing the learning environment to the learners. Technology reduces the distances and brings the remote learners closer to the campus and tutors. This need-oriented model has a clear understanding of students' previous knowledge, experience, solutions and strategies. All these aspects play an important role in specifying the structure, contents and delivery strategies. Furthermore, the web-based model has a clear concept of theoretical foundations of learning and cognition.

The e-model is equally effective for course development and adaptation/ adaptation process. The course development team conceives, defines and designs relevant teaching and learning activities to be supported by the web-based learning environment. Collaborative and problem-based learning activities though difficult to design and implement but such tasks are capable of challenging the learner. This process also determines the syllabus, the content, the learning tasks, the learning activities and the web-based learning environment. The model has been designed keeping in view constructivist approach. The design and specification phase outlines a comprehensive set of authentic activities, tasks, scaffolding and support to be provided to the students.

ODL involves flexible learning and it results increased access to students, creating link between education and work, removal of barriers to access higher education, the use of internet for content delivery and the practice of learning. This strategy is also terms as 'Blended Learning', which is one of the leading trends in education and training today. It helps the students to do their studies successfully, to search and get a job in the techno-based world. It facilitates the students by providing materials through internet. Blended learning combines web tools with traditional ODL and training to ensure maximum effectiveness. Students can share their experiences online and gain benefits of interaction with teachers and students via a virtual classroom. Student learning may improve



without sacrificing the convenience of time, place and pace. Another way to think of blended learning is taking the best from self-paced, ODL to achieve flexible, cost-effective education and training that can reach the widest audience geographically and in terms of learning styles and levels.

The reasons for implementing the blended learning in web-based ODL are reducing cost, delivering training in shorter period, providing flexible models for learners to increase rate of learning, and accommodating different learning styles (Igneri & American Management Association, 2005:online).

However, it requires design team that is familiar with both online and classroom delivery. The team must have appropriate technology and classroom logistics support; must have mechanism to ensure that students do work. This approach is being adopted by many ODL institutions over the world.

Most of the ODL institutions have progressed enormously in media-based ODL technologies and "have shown tremendous growth in terms of student enrolment, course development models, course choice in diversified areas, institutional networking and collaboration, and cross-border operations" (Panda, Librero & Bbatpurev 2005:online). Many institutions have adopted internet for effective course delivery, learner support and student learning. But the problems is that the tremendous quantitative expansion of these distance teaching institutions is questioned due to lack of research evidences regarding claimed best practices and the quality of the student learning and institutional outputs. Furthermore, most of the ODL practices in the Asia are based on adoption of models from other especially western.

The AIOU e-model has been developed as a standard model keeping in view English language teacher education program through distance learning. While designing the model characteristics of the tutors and learners, content, learning outcomes, and access to technology was considered.

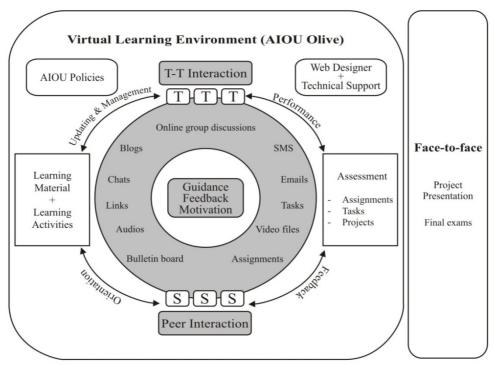


Figure 5: AIOU e-Model (Farooq, 2011)

The model has been designed according to AIOU virtual learning environment Olive, which is acronym of Online Learning Institute of Virtual Education designed by the Department of Computer Sciences of the University with the following objectives: "Quality and uniformity of learning in open and ODL, outreach to rural areas specially to girls at home, and support in postgraduate education and research from faculty abroad" (AIOU website). "Online delivery model has resulted in 33% reduced course cost, small feasible group and increased outreach. The cost of ICT based online education has reduced to about 33% and overall learning of students nationwide has improved to about 12% in many cases" (Sangi 2005:online).

The model has been designed in Moodle (Modular Object-Oriented Dynamic Learning Environment), an open source, which was developed by Martin Dougiamas in 90s. It is a free software package for producing internet-based courses. Moodle has been designed and developed under the influence of social constructionist pedagogy. Moodle's overall design is suitable for fully online classes as well as supplementing face-to-face learning because it is "simple, lightweight, efficient, compatible, low-tech browser interface" (Moodle website). Courses can be categorized and searched and one Moodle site can support thousands of courses. The site is managed by



an administrator who can customize the site colors, fonts, layout, etc. to suit local needs. Teachers can enroll and unroll student to their courses and can group together related courses so participants can interact with each other. Administrator or teacher can assign roles to specific participants as designer, teacher, students, guests, etc. A teacher can control all settings of a course, including course formats such as by week, by topic or discussion-based.

"There is flexible array of course activities - Forums, Quizzes, Glossaries, Resources, Choices, Surveys, Assignments, Chats, Workshops" (Moodle website). Assignments can be specified with a due date and marking criterion. Students can upload their assignments in any file format to the course website. Teacher's feedback on assignment or project can be appended to the assignment page for each student or sent through email. Chat module allows synchronous text-based interaction. All the sessions are available to the students for viewing later. Discussions can be viewed nested, flat or threaded, oldest or newest first. Lesson module can be presented in a linear fashion, in a non-linear, or in a combination of the two. Quiz module is storage of questions and are accessible for any course on the site. Quizzes are automatically graded, and can be re-graded if questions are modified. Resource module supports display of any electronic content, Word, PowerPoint, Flash, Video, Sounds etc. that are stored locally, or remotely. Files can be uploaded and managed (zipped, unzipped, renamed, moved, etc.) on the server. External content on the web can be linked to the course interface. Linked MP3 audio files can be displayed with flash player.

Moodle runs on a wide variety of web-servers/ database technologies. The largest live Moodle installation (Open Polytechnic of New Zealand) handles 45,000+ students and 6,500+ courses registered. All this implies that "Moodle's architecture makes it easy to respond to future demand, by adapting the technologies upon which it runs" (Moodle website).

Interaction and participation are two basic elements of the model in distance learning. Learners are encouraged to interact, not only with the teacher, but with one another. The tutor's role has included the role of a facilitator in an environment where interconnected students are expected to discuss meaning through multiple interactions. The interaction emerges when the students are engaged in an activity. "In highly learner-centered contexts such as research projects or key skills acquisition, the needs and goals of the learners are the first concern" (Beetham et al., 2007:29). Both, interaction and continuity lead to creative thinking by incorporating reflective and shared activities. Critical thinking is cognitive model that naturally starts from the inside and looks out. On the other hand, self-directed learning is a complementary social model that takes on an outside perspective and looks in. Both are central to the internet in general and in the model particularly.

The primary mode of communication in this model is text-based. There is significant evidence that writing has some inherent advantages over speech when engaged in critical discourse and reflection. One obvious advantage is the permanence of record of teaching and learning. The written word serves best to mediate recall and reflection, while the spoken word functions most effectively to mediate action usually in face-to-face context. The characteristics of written language facilitate in higher-order learning through text-based media such as chatting. Text-based communication for educational purposes also depends on environment of a community of learners.

The model also provides tools to: tutors can communicate with students, present and structure learning materials, mark online assignments, and monitor students' progress; students can manage their time, monitor personal progress, communicate with tutors and other students, access information and guidance services, develop a personal learning plan, undertake self-assessment and develop a portfolio; and administration can produce management reports, check enrolments, identify tutors' responsibilities and obtain contact details of tutors and students.

8. Researcher's Diary

A research diary is a record of the researcher's involvement in the project and the data in the form of information, observations, records, etc. that may yield information about the experiment. The diary contained information about the research, what academic and technical problems students faced, what the researcher did, and the process of research. The main reason for keeping a research diary was to reflect on students' practices and problems. The researcher/tutor used the research diary as a tool to reflect on their research practices. The researcher/tutor maintained a diary focussing on students' academic and technical problems which they faced during their studies and suggested remedies.

In this study, the researcher not only worked as an e-tutor in the first phase but also managed e-contents, guided the students in CMC-based environment and solved their problems. The researcher faced many problems during the CMC-based instruction. A weekly diary was maintained to record and analyze various problems, and to suggest strategies, actions and monitor backwash effects for improvement. The problems were categorized into two major sections, i.e., academic and technical.

Most of the problems were solved in the first four weeks of the semester as per available resources, support and researcher's capabilities but some problems were beyond control, like power supply failure, bad connectivity, etc.



which existed till the end of the semester. The academic problems including less participation in discussions, apprehension in sharing views, difficulty in composing ideas, no searching habits, less reading habits, lack of interest in some areas, less social interaction, projects and presentations were solved through suitable activities. The technical problems including login, uploading assignments, no backup of power supply to run server, capacity of server, slow typing speed, etc. were sorted out with the passage of time by using appropriate measures. The problems like bad connectivity, power supply failure (load-shedding), class disturbance (students' frequent coming in and going out) continued throughout the semester. Though certain measures like change in class timings and makeup tutorials were taken, these problems could not be solved completely. These problems were beyond the control of the researcher.

9. Focused Group Discussion

The purpose of the focused group discussions was to know and assess the responses of the students qualitatively about their CMC-based learning experience. According to the results of the focused group discussions in the first and second phase, most of the students described in the orientation session that they joined online MA TEFL program due to problems they were facing in travelling and time management to attend face-to-face tutorials. All the students preferred web-based learning to existing ODL system because the e-tutoring strategies were process-oriented and task-based. The classroom environment was based on independent and experiential learning strategies. There was a quick and productive interaction among tutors and students within and outside the classroom. They also experienced flexibility in joining online tutorials, either at home, offices, institutions, net cafes or any place they wished to attend the class. The students' queries and problems were effectively dealt with through classroom discussions and bulletin board. Though web-based classroom was more like a discussion forum, yet there was no mismanagement and the tutors kept the discussions thematic and focused. The students also experienced Olive as a comprehensive layout of learning material and activities along with guidance and counseling from their tutors for effective learning which was sometime not found in a face-to-face classroom. However, the students faced the problems of power supply failure (load-shedding) and slow connectivity as most of the students had been using dialup networks. Sometime, change in timings of the class was not communicated properly or could not reach the students in time so they faced problem and it was due to unscheduled power supply failure. They suggested that face-to-face component should be added in web-based learning. They also suggested that voice protocol should be added and online group work and activities should be included in the course modules for academic and social interaction. The idea of holding face-to-face tutorials in this model was not feasible as the students were scattered and to combine them physically for class and discussions was not possible. Adding voice protocol to the web-based learning model in Pakistan environment is a bit difficult where most of the students log in through their dialup connections and face problem of slow connectivity.

10. Conclusion

All the students expressed that they found web-based learning experience better as compared to existing ODL system in terms of learning, interaction, access, cost, etc. Majority of the students acknowledged that their learning improved in terms of performance in the examination. Also they had a wider exposure to learning resources in English language teaching around the world. Online learning helped them to overcome their problems of travelling and time management; hence it improved their access to materials, tutorials, tutors and peers. They appreciated that online learning reduced their expenses on travelling, books, learning materials, assignments, postage, etc. They also mentioned some problems in interaction with tutor and peers in the first phase, however, the situation improved in the second phase. Both the groups mentioned two major problems which were power supply failure and slow connectivity. All the students acknowledged that measures like makeup tutorials helped them to overcome these problems. In the web-based instruction, the responses of the students in both the discussions confirmed the findings of the data collected through document analysis, survey, mid-term and end-term questionnaires and results of the tests.

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TABLE 1: Researcher's Diary (Week-wise)

Orientation Workshop

	Academic	Technical
Reflection/Problems	 Less attendance in the workshop Though the students were informed about their usernames and passwords through emails before the workshop with the instruction to study the first units of both courses and allied material for discussion in the workshop, most of the students did not study the introductory units and allied material. 	 Almost 60% students experienced difficulty in logging in olive website. Slow connectivity.
Plan/Strategy	- Motivate the students to consult the study material and allied material available on the olive website.	- Seek help from technical support staff.
Action/Activities	 Tutor initiated a discussion regarding their concepts about general concepts of ELT and CMC. Tutor led the discussion to the first chapter of the course. After a brief introduction, he asked the students to join him in the virtual classroom. Individual guidance was also provided to all the students keeping in view their educational and working background. 	 Technical staff helped students in getting log in. Tutor asked students to consult Students Manual. Tutor guided them by inserting user name and password in a proper format as was communicated them before the workshop.
Observation/Feedback	- Most of the students participated in the discussion in the virtual classroom.	 All the students were logged in. Server was a bit slow due to repair of fiber optic cable by PTCL.



	Academic	Technical
Reflection/Problems	Less participation in group discussion Apprehension in sharing views Difficulty in composing their ideas No searching habits Less reading habits	Most of the students logged in successfully but some of them who were not present in the orientation workshop faced problem in login. Some students had slow typing speed bad connectivity power supply failure
Plan/Strategy	 Motivational strategies should be adopted for active participation in discussion. Links to relevant website should be created on the olive website. Searching tips should be introduced to the students. Students should be asked to read the relevant part of the text before entering into the classroom. 	 Technical assistance should be provided to the students. Students need to spend more time to improve their computer skills. Time for online tutorials may be adjusted keeping in mind schedule of power supply failure/load-shedding.
Action/Activities	 Short assignments relevant to topics of the week were given to the students. Searching tips were shared. The students were asked to go through the study material and allied material prior to tutorial. Tutor tried to involve all by asking questions. 	 Students Manual was revised by adding some practical tips keeping in view students' problems in accessing olive website and online contents. Students were provided Tutor's contact numbers for quick guidance if they face any problem/difficulty. Students were asked to compose their assignments themselves so that they could improve their computer skills. As load-shedding schedule varied region to region, some make up tutorials were schedules for students.
Observation/Feedback	 Participation level of the students in classroom discussion improved. Reading about their topics also improved in some students. Searching skills were also improved as evident from short assignments of some students. 	 All the students were able to access Olive website. An active link between tutor and students was established. Problem of load-shedding was partially dealt through makeup tutorials.

WCCK 2	T	
	Academic	Technical
Reflection/Problems	Hesitation in sharing ideas Difficulty in composing their ideas	Login (less)Class disturbance (Students frequent coming in and going out of classroom)
Plan/Strategy	- Motivational strategies should be adopted for active participation in discussion.	- Try to find out reasons of the above mentioned problem with students' discussion and help them out.
Action/Activities	- Some new online resources were identified and links were provided to the students for further study and activities	Change in tutorial schedule Makeup tutorials
Observation/Feedback	- More students started taking part in discussions.	- Though the problems of login and class disturbance minimized but it could not be controlled completely due to the factors beyond the control of the researcher.



	Academic	Technical
Reflection/Problems	 Lack of interest in areas, e.g., listening and speaking skills, which are not taught and assessed in conventional system. Less participation in group discussion 	 Problem in uploading assignment Server went down due to power supply failure in the middle of the session. No backup was available in case of power supply failure.
Plan/Strategy	- Realizing the students the importance of listening and speaking skills in a language classroom.	 Find out the reasons of the problem in uploading assignment and suggest alternate means. Provision of backup in case of power supply failure.
Action/Activities	 Certain listening activities were uploaded for practice. Links of websites related to listening and speaking skills were identified and provided on the olive website. Short assignments on listening and speaking were given to the students. 	 Assignment was supposed to be uploaded as single file and one time activity. Some students tried to upload their assignment in parts or after due date so they faced problem in submitting their assignment. They were advised to email the same to the tutor. Makeup tutorials were arranged.
Observation/Feedback	 Students realized the importance of listening and speaking skills in a language classroom. The came up with innovative ideas in short assignments on listening and speaking skills. 	 All the students submitted their assignments either by uploading or through email. Backup/alternate arrangements were made available in case of power supply failure.

Week 4

	Academic	Technical
Reflection/Problems	- Still there were some participants	- Slow/bad connectivity
	who were not participating in the	- Power supply failure
	discussion as they should be.	
Plan/Strategy	- Create an online forum for	- Previous strategy was adopted.
	discussion.	
Action/Activities	- Involving the students by asking	- Previous activities were continued.
	questions.	
	- A group of ELT practitioners in	
	Pakistan was formed at Yahoo.	
Observation/Feedback	- Only a few students joined the	- Student continued facing problems
	forum.	of bad connectivity and power
		supply failure.

	Technical	
Reflection/Problems	- Bad connectivity	
	- Power supply failure	
	- Some students faced problem in uploading second assignment.	
Plan/Strategy	- Previous strategy was adopted.	
Action/Activities	- Previous activities were continued.	
	- Students were asked to email their assignments if they face problem in	
	uploading their assignments.	
Observation/Feedback	- Student continued faced problems of bad connectivity and power supply	
	failure which created problem in attending the tutorials and uploading the	
	assignments.	



	Technical
Reflection/Problems	- Bad connectivity
	- Power supply failure
Plan/Strategy	- Previous strategy was adopted.
Action/Activities	- Previous activities were continued.
	- Students were asked to email their assignments if they face problem in
	uploading their assignments.
Observation/Feedback	- Student continued faced problems of bad connectivity and power supply
	failure which created problem in attending the tutorials and uploading the
	assignments.

Week 7

	Technical
Reflection/Problems	- Bad connectivity
	- Power supply failure
Plan/Strategy	- Previous strategy was adopted.
Action/Activities	- Previous activities were continued.
	- Students were asked to email their assignments if they face problem in
	uploading their assignments.
Observation/Feedback	- Student continued problems of bad connectivity and power supply failure which
	created problem in attending the tutorials and uploading the assignments.

Week 8

	Academic	Technical
Reflection/Problems	- Less participation in discussion	Bad connectivityPower supply failure
Plan/Strategy	- Persuade the students to take part in classroom discussion.	- Previous strategy was adopted.
Action/Activities	- Tutor asked the students that their assessment will be done on their participation in discussion to discourage silent presence.	 Previous activities were continued. Students were asked to email their assignments if they face problem in uploading their assignments.
Observation/Feedback	- Passive students also started participating in the discussion.	- Student continued problems of bad connectivity and power supply failure which created problem in attending the tutorials and uploading the assignments.

	Academic	Technical
Reflection/Problems	- Less social interaction in the classroom.	Bad connectivityPower supply failure
Plan/Strategy	- Group discussion on personal experiences of teaching.	- Previous strategy was adopted.
Action/Activities	- Tutor initiated the discussion and asked the students to share their experiences. He monitored the discussion and persuaded passive students to participate in discussion.	Previous activities were continued. Students were asked to email their assignments if they face problem in uploading their assignments.
Observation/Feedback	- A social and constructive environment was created by sharing personal experiences.	- Student continued faced problems of bad connectivity and power supply failure which created problem in attending the tutorials and uploading the assignments.



	Academic	Technical
Reflection/Problems	- Students were confused regarding	- Bad connectivity
	their projects and presentation.	- Power supply failure
Plan/Strategy	- Providing guidelines on conducting projects and making presentations.	- Previous strategy was adopted.
Action/Activities	 They were provided extra material on designing ELT projects. They were provided material and guidance on making effective presentations. 	Previous activities were continued. Students were asked to email their assignments if they face problem in uploading their assignments.
Observation/Feedback	- Most of the students came up with innovative ideas on the projects allocated to them.	- Student continued faced problems of bad connectivity and power supply failure which created problem in attending the tutorials and uploading the assignments.

Week 11

	Technical
Reflection/Problems	- Bad connectivity
	- Power supply failure
Plan/Strategy	- Previous strategy was adopted.
Action/Activities	- Previous activities were continued.
	- Students were asked to email their assignments if they face problem in uploading their assignments.
Observation/Feedback	- Student continued faced problems of bad connectivity and power supply failure
	which created problem in attending the tutorials and uploading the
	assignments.

	Technical
Reflection/Problems	- Bad connectivity
	- Power supply failure
Plan/Strategy	- Previous strategy was adopted.
Action/Activities	Previous activities were continued.Students were asked to email their assignments if they face problem in
	uploading their assignments.
Observation/Feedback	- Student continued faced problems of bad connectivity and power supply failure which created problem in attending the tutorials and uploading the assignments.