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Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan

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Abstract

This case study evaluated the impact of synchronous and asynchronous E-Language Learning activities (ELL-tivities) in an E-Language Learning Environment (ELLE) at Virtual University of Pakistan. The purpose of the study was to assess e-language learning analytics based on the constructivist approach of collaborative construction of knowledge. The courses selected for random sampling were *English Comprehension* (Eng101), *Business & Technical English* (Eng201) and *Business Communication* (Eng301). Three methods were employed to collect the data: observation of the communication and performance on given channels, students' opinions on Graded Discussion Board (GDB), and a survey questionnaire. Out of a total population of 9919, 1025 responses were received for the survey questionnaire. The findings revealed that asynchronous e-language learning was quite beneficial for second language (L2) learners, but with some limitations which could be scaffolded by synchronous sessions. Based on the findings, the researcher suggested a blend of both synchronous and asynchronous paradigms to create an ideal environment for e-language learning in Pakistan.

Keywords: E-Language Learning Environment, E-Language Learning activities, constructivism, asynchronous communication, synchronous communication, second language learning

Introduction

We shape our tools, and thereafter our tools shape us (McLuhan, 1995, p. ix)

Online learning environments can be divided into a triad of synchronous, asynchronous and hybrid learning environments. Synchronous learning environments provide real time interaction, which can be collaborative in nature incorporating e-tivities (Salmon, 2013) such as an instructor's lecture with a facility of questions-answer session. However, a synchronous session requires simultaneous student-teacher presence. On the other hand, asynchronous environments are not time bound and students can work on e-tivities on their own pace. A hybrid online environment blends synchronous sessions with asynchronous set of e-tivities. It can be called hybrid as it combines simultaneity with non-simultaneity as instructional design for both synchronous and asynchronous teaching may have altogether different patterns. A study by Karen Swan (2001) maps learners' satisfaction and perceived learning in an asynchronous mode. She finds clarity of design, interaction with instructors, and active discussions among course participants as key factors of students' satisfaction and perceived learning. Mc Brien, Cheng and Jones (2009) analyze the impact of synchronous sessions on students' learning and find it a good way of reducing distance in distance education. It is important to know how students perceive their learning behavior in both media (Somenarain, Akkaraju & Gharbaran, 2010). Based on students' perceptions and learning analytics (Greller & Drachsler, 2012), this paper discusses the strengths and weaknesses of the two paradigms in general and with reference to English language learning/teaching in particular. The case study in this regard is Virtual University of Pakistan (VUP), with its twelve years of e-learning experience.

Asynchronous E-Learning

An asynchronous mode of learning/teaching has been the most prevalent form of online teaching so far because of its flexible modus operandi (Hrastinski, 2008). Asynchronous environments provide students with readily available material in the form of audio/video lectures, handouts, articles and power point presentations. This material is accessible anytime anywhere via Learning Management System (LMS) or other channels of the sort. LMS is a set of tools that houses course content and provides a framework for communication between students and teachers like a classroom. Other terms sometimes used instead of LMS are Course Management System (CMS) and Virtual Learning Environment (VLE). CMS is comparatively an older term and its usage is less common today as it implies basic management of course content, while LMS indicates the system that supports the learning process. The term VLE also implies the support of the learning process, but it is more frequently used to describe systems that support blended learning environment (Watson, Gemin, Ryan & Wicks, 2009). Some institutions develop their own LMS; others either utilize an open source or purchase an LMS. The case study in this paper, Virtual University of Pakistan, has developed its own LMS to provide a virtual learning environment to students.

Asynchronous e-learning is the most adopted method for online education (Parsad & Lewis, 2008) because learners are not time bound and can respond at their leisure. The opportunity of delayed response allows them to use their higher order learning skills as they can keep thinking about a problem for an extended time period and may develop divergent thinking. The spontaneity of expression is replaced by a constructed response. Therefore, asynchronous space leads to a self-paced, independent, student-centered learning (Murphy, Rodríguez-Manzanares & Barbour, 2011). Hence, asynchronous e-learning can scaffold students' previous knowledge with new concepts (Lin, Hong & Lawrenz, 2012). Less reliance on memory and notes and more opportunity of discussions with peer groups help build critical thinking and deep learning (Huang & Hsiao, 2012). Shyness is reduced due to the distance mode, which alleviates the fear of the teacher. As there is less pressure than a real time encounter, the affective filter remains low and learners can respond more innovatively and creatively. The chances of getting irritated by technological problems—like low speed and non-connectivity—are the least, as ample time to attempt e-tivities is available.

Asynchronous e-learning can be challenging as only a carefully devised set of strategies can keep students engaged and interested in this sort of learning environment to facilitate motivation, confidence, participation, problem solving, analytical and higher order thinking skills. Moreover, it is a self-paced system in which the students have to be self-disciplined to keep themselves active as well as interactive to keep track of e-tivities. Whereas discussions on forums and blogs can keep them active, going off topics can also distract them. Delayed feedback can be another frustrating factor (Huang & Hsiao, 2012). Moreover, there are insufficient opportunities for socializing and students have to look for ways of networking themselves.

Synchronous E-Learning

Synchronous e-learning, on the other hand, refers to learning/teaching that takes place simultaneously via an electronic mode. Synchronous voice or text chat rooms provide an opportunity of teacher-student and student-student interaction. Apart from chat, video-conferencing facilitates face-to-face communication. Web conferences through surveys, polls and question-answer sessions can turn out to be more interactive than video conferencing.

Synchronous mode instills a sense of community through collaborative learning (Teng, Chen, Kinshuk & Leo, 2012; Asoodar, Atai, Vaezi & Marandi, 2014). A synchronous virtual classroom is a place for instructors and students to interact and collaborate in real time. Using webcams and class

discussion features, it resembles the traditional classroom, except that all participants access it remotely via the Internet. Lessons can be recorded and added to an e-library. Using the archived e-library, students can access and replay teacher's lectures as many times as necessary to master the material. Direct interaction with teachers and students in real time is very much like a traditional face-to-face classroom, rather better, as distance is no more a barrier and by connectivity via the Internet no time is wasted in traveling. etc. Synchronous sessions can result in high levels of motivation to stay engaged in e-tivities due to teacher and class-fellows presence (Yamagata-Lynch, 2014). Instant feedback and answers can help students resolve any problems they encounter in learning. Facial expressions and tones of voice can aid them to have the human feel at a broader spectrum and lead to global interaction without much cost.

Some of the challenges of synchronous education can be the need of the availability of students at a given time and the necessary availability of a good bandwidth Internet. Participants can feel frustrated and thwarted due to technical problems. In addition, a carefully devised instructional design is required as pedagogy is more important than technologically facilitated media. For example, Murphy et al. (2011) consider synchronous mode more teacher-oriented. Special e-tivities need to be created to broaden the scope of synchronous communication from a lecture or teacher-student discussion only.

Language Learning in Asynchronous and Synchronous Modes

Broadly speaking, effective learning refers to strengthening the relationship between learning processes of collaboration, interaction, participation and responsibility, and learning objectives and outcomes like problem solving skills, critical thinking and higher order thinking (Watkins, Carnell, Lodge & Whalley, 1996). Therefore, the design and implementation of any e-language learning pedagogy should provide maximum support to students for achieving objectives and outcomes to avoid frustration (McCloskey, Thrush, Wilson-Patton & Kleskova, 2013), especially in comparison to traditional face-to face language learning process which provides a real time interaction, immediate feedback and a feel of human touch. This can be achieved by creating a context of language learning through collaboration as a communicative approach of language teaching to encourage group e-tivities and social construction of language through interaction with a shift of focus from teacher-centered pedagogy to learner autonomy (Borg & Al-Busaidi, 2012). The researcher has coined a new term 'Elltivity' (E-language learning activity) for any e-tivity devised for an online language classroom in general and second language (L2) classroom in particular.

Online learning facilitates a multiplicity of language learning styles. A community of inquiry model (Garrison, Anderson & Archer, 1999) with a teacher, cognitive and social presence can be a great aid to both a/synchronous language learning. A conversational framework for direct communication (Laurrilard, 2013) based on question-answer mode and direct feedback from teacher can be facilitated through synchronous mode. However, a teacher's observation is not sufficient unless we get to know how learners wish to learn what they want to learn (West, 1994). Therefore, the first step in designing any language course is students' needs analysis (Johns, 1991). The needs analysis should be pedagogic (West, 1994) as well as psychological and social (Seedhouse, 1995) to achieve successful communication in a target situation (Chambers, 1980). With reference to online learning, students must be aware about the environment in which they learn a language. Students' comfort with synchronous and asynchronous E-Language Learning Environments (ELLE) is important because the language learning styles and strategies as well as teaching methods that work well in one paradigm may not be equally fruitful in the other (Dudley-Evan & St Jones, 1998). Online language teachers should strive to design environmentally sensitive courses (Jordan, 1997), which

can lead to a carefully devised instructional design based on technological pedagogic content knowledge (Koehler & Mishra, 2005). Technological pedagogical content design is a time taking process, as it needs a deep understanding of the relationship between content, pedagogy, technology and the context where it would be operational (Koehler, Mishra & Yahya, 2007). A careful analysis of the perception of language learners about the environment they learn language in and the context it creates for them is significant for facilitating them with a better ELLE.

Asynchronous e-language learning facilitates students from myriad backgrounds and different levels of L2 skills to formulate syntactically and semantically correct sentences by writing and re-writing them for either writing emails or posting discussion comments. This provides them an opportunity of revising their sentences for correctness. The peer pressure of their questions/comments being openly available to be read by their fellow students and teachers helps them work on better formulations of statements. The answers help develop understanding of the concepts (McLoughlin & Lee, 2010a). Moreover, they have ample time to attempt Elltivities, revise their texts or even seek guidance about their writings before uploading them.

Synchronous e-language learning allows them to listen to their teachers providing them an exposure to native/non-native listening input. Simultaneously they get direct feedback for their error analysis, which can lead to conscious language learning or meta-learning. Written presentations by the teacher provide necessary pressure to read and comprehend immediately, as well as writing in chat box leads to immediate construction of sentences to be monitored by the teacher or fellow students. As learner anxiety can have adverse effect on L2 learning progress, learners' emotional behavior must be kept in mind while designing Elltivities for a synchronous session (Chen & Lee, 2011).

Establishing the current practices of synchronous and asynchronous e-learning/teaching in English language, this study evaluates the effectiveness of a/synchronous environments towards better English language learning at Virtual University of Pakistan (VUP). There are three choices: first, the continuation of the asynchronous model; second, switching to a totally synchronous model, and third, to strive towards a perfect blend of the two. Researches show that learners often prefer a blend of a/synchronous e-language learning (Pérez, 2013), as it can better cater their multiple needs and facilitate in enhancing their capabilities to learn L1 or L2. VUP has been using asynchronous model for language teaching since its inception. The synchronous mode was introduced in 2013 and this paper evaluates the strengths and weaknesses of a/synchronous contexts for English language teaching/learning.

This paper aims to address the following research questions:

Q1.   What is the perception of language learners about different a/synchronous Elltivities used in a virtual learning environment?
Q2.   Do asynchronous Elltivities facilitate language learning or hinder the process?
Q3.   Can an asynchronous pedagogical model be totally replaced by a synchronous model or a blend of the two better facilitates language learning?

Literature Review

Teaching presence must be as concerned with cognitive development as with a positive learning environment, and it must see content, cognition, and context as integral parts of the whole (Garrison & Anderson, 2003, p. 69)

Innovations in electronic or virtual learning have also affected language learning and teaching (Martín-Blas & Serrano-Fernández, 2009). Second Language Acquisition (SLA) is a multifaceted

process that occurs spontaneously in communicative situations. SLA is generally considered a conscious, knowledge-accumulating process that usually takes place through formal education (Bialystok & Hakuta, 1999). Online learning can be an ideal medium for language learning because of its potential to utilize multiple teaching methods, strategies and learning styles.

Howard Gardner (2011) challenges any educational system that provides same pedagogical design, i.e., same content and method of teaching to all students. Students have multiple intelligences. Each may have a different cognitive approach to learning and the learning style may vary from visual-spatial to kinesthetic, musical to interpersonal or intrapersonal and linguistic to logical mathematical (Gardner, 2011). To cater multiple and unique learning styles of students, a pedagogy of multiliteracy is required (Guth & Helm, 2012). Online learning environments provide a room for multiliteracy because of multiple ways of communication through multiple media connected to a multiple world in a multiple ways (Stein & Newfield, 2006). This expanding landscape of learning is all the more important for English language learning, which has gained the status of an international or global language (Crystal, 2012), because online learning provides a global context for teaching English as a second language (TESL). ELLE has the potential to move from Grammar Translation to Audio-lingual methods or from The Silent Way and Suggestopedia to The Communicative Way (Larsen-Freeman & Anderson, 2013). The potential to utilize them all leads to a principled eclectic approach (Mellow, 2002), which is pluralistic in nature leading to the timely use of any method based on needs analysis.

Asynchronous e-learning can incorporate all L2 teaching methods that allow for delayed feedback and delayed response as in emails and discussion boards. Asynchronous language learning can be more encouraging for learners to ask questions that require long answers (AbuSeileek & Qatawneh, 2013). Written nature of communication allows greater opportunity to reflect and express ideas more freely than in face-to-face oral communication. Learners get ample time to reflect on other students' language expression and can compose their own by careful design and improvement for precision. Written exchange of communication can also be useful for those students who do not actively participate in written discussions and remain passive readers. Forum discussions can be helpful in discourse development for timid students due to the anonymity of identity (MacIntyre, Clément, Dörnyei & Noels, 1988). However, asynchronous mode has its disadvantages in reducing direct feedback and immediate interaction.

Synchronous language learning is closer to the communicative way of language teaching/learning with whiteboards, video chat or voice chat providing immediate feedback to help students improve their language skills. Thus, it can duplicate the face-to-face real time classroom (Keegan et al., 2005). The familiarity of the classroom model, immediate feedback from teacher and fellow students and creating contents quickly in the classroom are the hallmarks of a synchronous language-learning environment. Synchronous net-based discourses can improve understanding of complex subject matters (Pfister, 2005) and, as a result, non-native English speakers can outperform face-to-face language. However, it can be problematic for students due to being time bound and the availability of technology on a scheduled time.

Both a/synchronous modes can be beneficial for language learning (Pérez, 2013). A blend of the two models can give students an opportunity to better learn than any of the individual models. A/synchronous modes can complement each other in teaching/learning language through the conversational framework (Laurillard, 2007) and constructivist approaches of creating meaning through dialogue, reflection and experience (Reynolds, Wang & Poor, 2002). When blended, they can provide a wonderful model for enhancing language learners' cognitive participation, information processing and motivation (Ge, 2011). Language learning is more of a skill-oriented process rather than content mastery. To develop listening and speaking skills, recurrent synchronous sessions are

required (Wang & Chen, 2009). As most of online students work and study simultaneously, asynchronous mode is more appropriate (Mcloughlin & Lee, 2010b) to avoid anxiety resulting from being time bound in synchronous sessions (Guichon, 2010). Most of the studies related to a/synchronous media have explored students' performance and level of engagement so far; however, the context of learning is mostly ignored, especially with reference to EFL/ ESL learners (Yang, 2011). It is important to learn students' perceptions about the impact of synchronous and asynchronous sessions on their behavior to improve online learner-centered language pedagogy (Sun, 2011).

Method

To evaluate the effectiveness of asynchronous mode, three methods were used to triangulate data: first, the overall observation of the participation of a/synchronous Elltivities in Fall 2013 semester; second, the collection of students' opinions via a structured questionnaire about a/synchronous modes for learning language; and third, their discussion about the preference of a/synchronous modes on the Graded Discussion Board (GDB).

The usual mode of Elltivities in VUP remained asynchronous with students'-instructors communication via emails, Moderated Discussion Board (MDB); and their assessment was based on Elltivities through assignments, GDB and exams (Figure 1).

Participants in this study consisted of three classes at VUP: *English Comprehension* (Eng101), *Business and Technical English* (Eng201) and *Business Communication* (Eng301). The observation of communication and performance lasted for one semester (Fall 2013) of approximately 5 months. To conduct this study two synchronous sessions were conducted in all three courses, one before the midterm and the other one after the midterm. The number of active students in Eng 101 was (N=4248), in Eng 201 (N=3906) and in Eng 301 (N=1765). Although the study is qualitative, as much data as possible was collected via a survey questionnaire and opinions of the students posted on Graded Discussion Board (GDB) for an in-depth understanding (Polkinghorne, 2005). As a result, 1816 opinions in Eng 101, 1993 in Eng 201 and 816 in Eng 301 were posted on GDB, which makes a total of 4625 posts out of the total population mentioned above.

To reinforce the observations of the researcher about students' response to a/synchronous Elltivities, a survey was conducted via a questionnaire that was filled by (N=1025) students from all over Pakistan. The question items were developed based on the researcher's observation of E-Language Learning Environment (ELLE). The questionnaire consisted of 20 questions; both open and close-ended questions were included in the survey to gain maximum insight about students' experiences in ELLE. The questionnaire data was collected over the semester. The respondents' response was overwhelming.

Demographic Details of the Sample

The demographic details of the students were collected in the first five questions. The first question identified gender. The total number of participants in the questionnaire was 1025, out of which 644 -i.e. 64%- were male and 362 -i.e. 36%- were female. The second question helped gather data about the age group of students. 854 students -i.e. 84%- were 17–30 years and 138 -i.e. 14%- were 31–40 years. Most of the active students belonged to the 17–30 years age group i.e., young adults. The third question collected details about the province they belonged to. 78% of the students were from Punjab and 9% (n=93) from Sindh. Question four collected data about their academic qualification. A total of 53% were bachelor degree holders, 23% Master degree holders, 23%
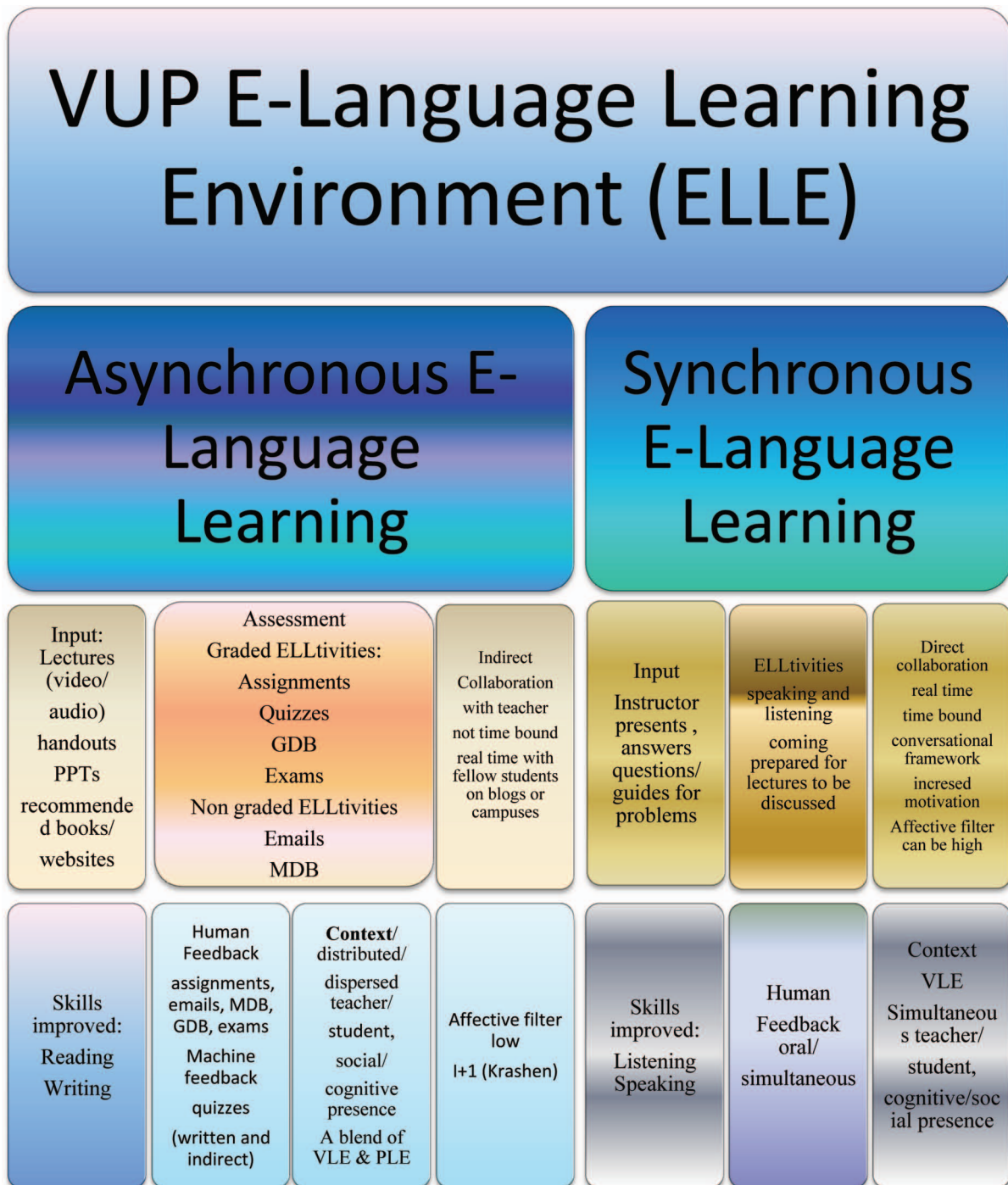
VUP E-Language Learning Environment (ELLE)

Asynchronous E-Language Learning

Synchronous E-Language Learning

Input: Lectures (video/ audio) handouts PPTs recommended books/ websites	Assessment Graded ELLtivities: Assignments Quizzes GDB Exams Non graded ELLtivities Emails MDB	Indirect Collaboration with teacher not time bound real time with fellow students on blogs or campuses	Input Instructor presents , answers questions/ guides for problems	ELLtivities speaking and listening coming prepared for lectures to be discussed	Direct collaboration real time time bound conversational framework incresed motivation Affective filter can be high
Skills improved: Reading Writing	Human Feedback assignments, emails, MDB, GDB, exams Machine feedback quizzes (written and indirect)	**Context**/ distributed/ dispersed teacher/ student, social/ cognitive presence A blend of VLE & PLE	Affective filter low I+1 (Krashen)	Skills improved: Listening Speaking	Human Feedback oral/ simultaneous	Context VLE Simultaneous teacher/ student, cognitive/social presence

Figure 1: A/synchronous ELLE at VUP

Intermediate, 4 MS and 1 PhD. The findings revealed that majority of respondents had completed bachelors. The fifth question referred to the working/non-working status of students. 387 participants -i.e. 41%- were almost always and currently employed, 29% (n=279) were almost always unemployed, and 21% (n=200) were occasionally employed. So most of the enrolled students were employed.

Results

The major focus of the questionnaire was to collect students' opinion about the usefulness of a/synchronous modes for English language learning based on their experiences in the semester Fall 2013. Following is the description of their responses.

Awareness about A/Synchronous E-Language Learning

Questions 6 and 7 referred to students' awareness about a/synchronous e-language learning.
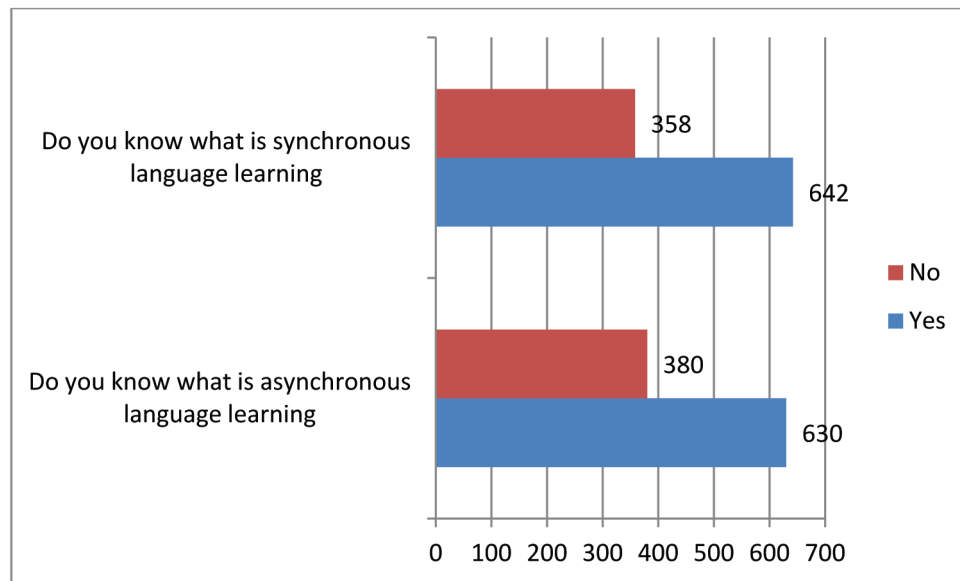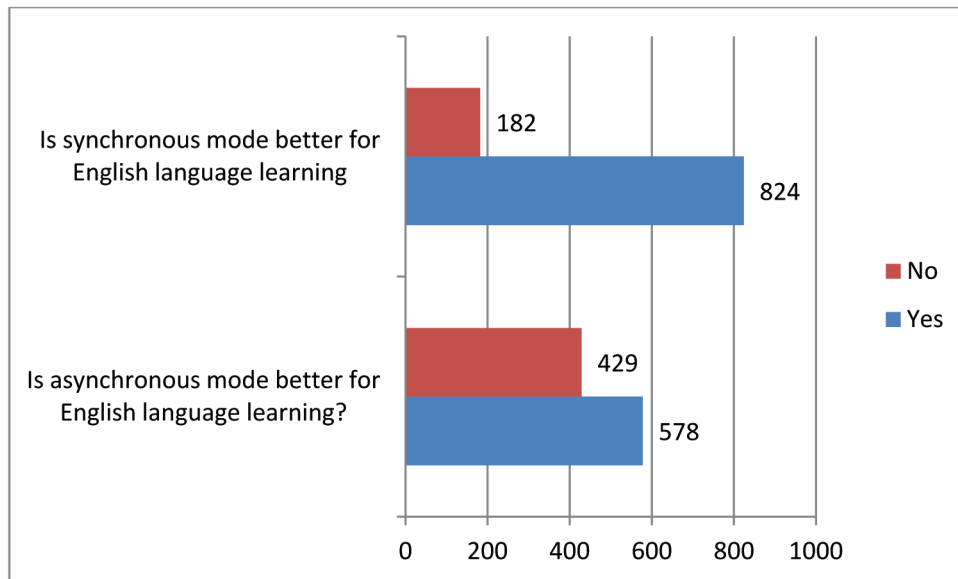

Figure 2: Awareness about a/synchronous e-learning

The visual graphics in Figure 2 show that 630 participants -i.e. 62%- were aware about asynchronous e-learning whereas 380 -i.e. 37%- were not aware of the term asynchronous e-learning, and 640 participants -i.e. 64%- were aware about synchronous e-learning whereas 358 -i.e. 36%- were not familiar with the term synchronous e-learning.

   A total of 64% and 62% of participants were well aware of synchronous and asynchronous modes of language learning respectively.

English Language Learning in A/Synchronous Modes

Questions 8 and 9 were close-ended question seeking participants' opinion whether English language could be better learnt a/synchronously or not.

Figure 3: Is a/synchronous mode better for ELT?

578 participants -i.e. 57%- were positive about asynchronous e-language learning whereas 429 -i.e. 43%- were not in favor of asynchronous e-learning (Figure 3). 824 participants -i.e. 82%- were in favor of synchronous mode of language learning whereas 182 -i.e. 18%- were not in its favor.

Desirable Duration of a Synchronous Session

Already one-hour synchronous sessions were conducted during the semester, so the students were asked in the next question about the desirable duration of the session. Four options were given in this regard: 20, 30, 40 and 50 minutes.
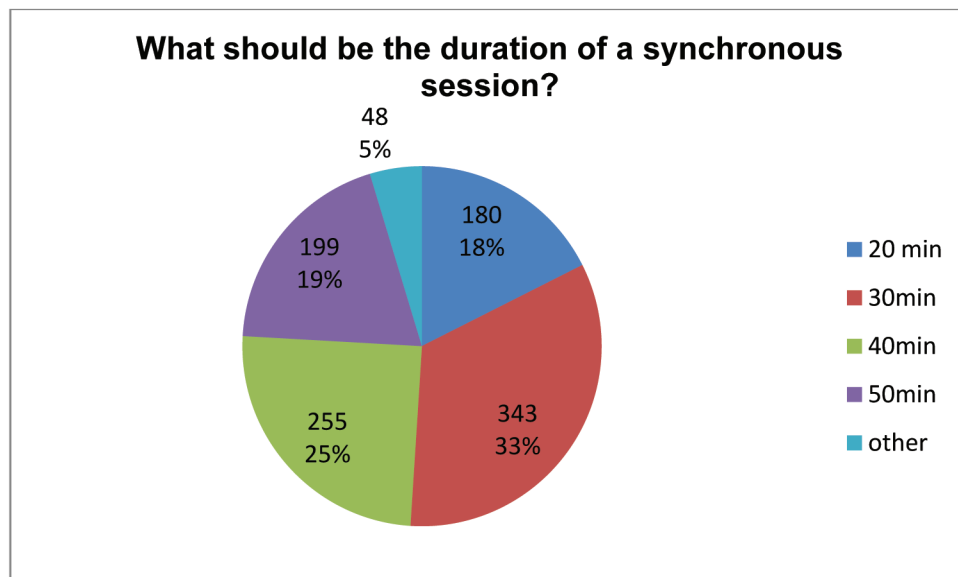
Figure 4: Duration of a synchronous session

Figure 4 shows that 343 -i.e. 33%- were in favor of a 30 minutes synchronous session; 255 -i.e. 25%- were in favor of a 40 minute session and 199 -i.e. 19%- were in favor of a 20 minute session. The results show that most of the participants were in favor of a 30 minutes session.

Most Helpful Asynchronous Activity for Language Learning

Question 11 asked about the most helpful activity in asynchronous mode of language learning. 'Email', 'GDB', 'MDB', 'Quiz' and 'assignments' options were given, along with 'all of the above' and 'none of the above' options. They were also given the option to give any other comments. The results are given in Figure 5:
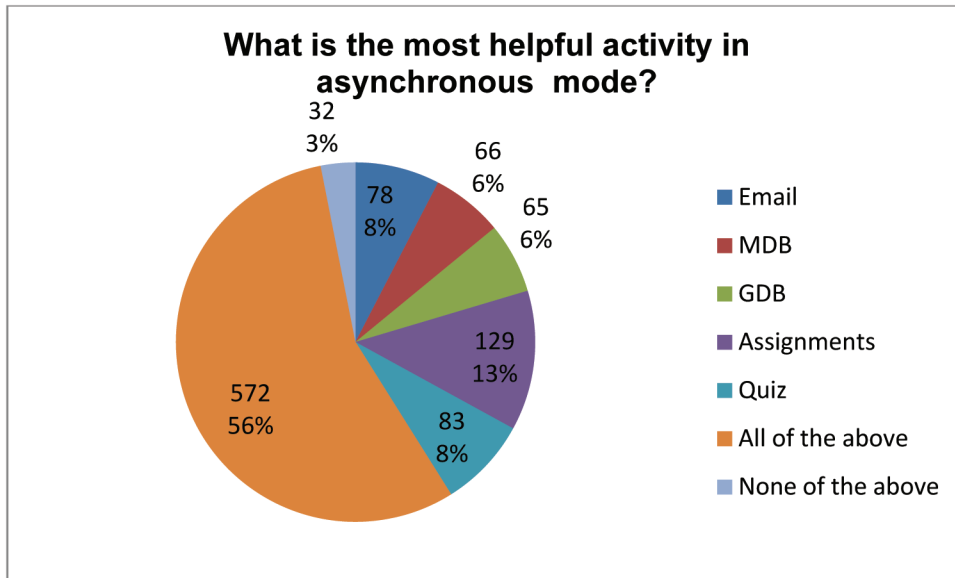

Figure 5: The most helpful activity in asynchronous e-language learning

A total of 572 participants -i.e. 56%- found all Elltivities to be helpful in asynchronous language learning whereas 129 -i.e. 13%- found assignments as the most helpful activity in asynchronous mode.

Active Participation in a Synchronous Session

Question 12 asked about students' active participation in synchronous sessions.
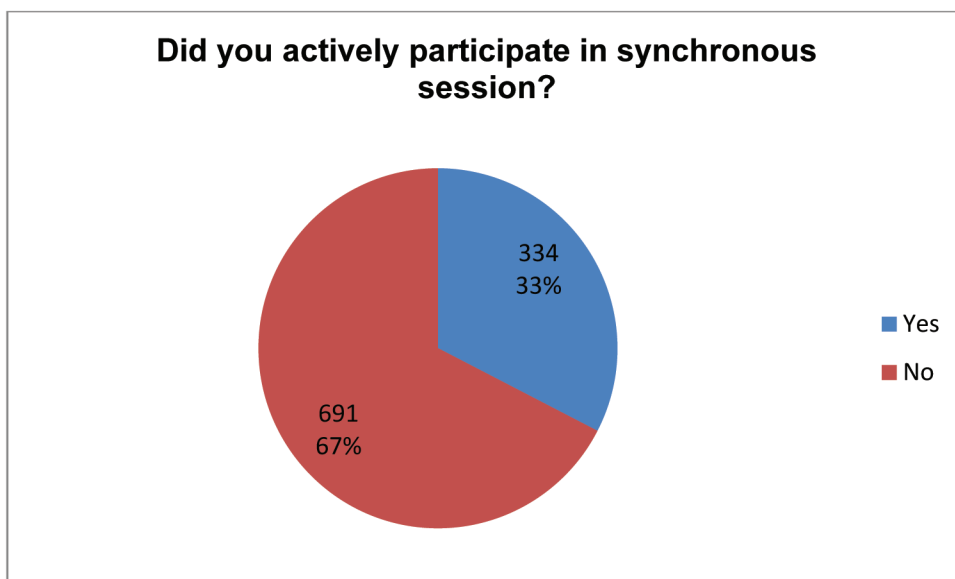
Figure 6: Active participation in a synchronous session

Figure 6 shows that 67% (n=691) did not participate in the synchronous activity and 33% (n= 334) participated in it. So most participants did not attend the synchronous sessions.

Question 13 asked whether synchronous activities helped them improve their English and 62% agreed whereas 38% disagreed (Figure 7).
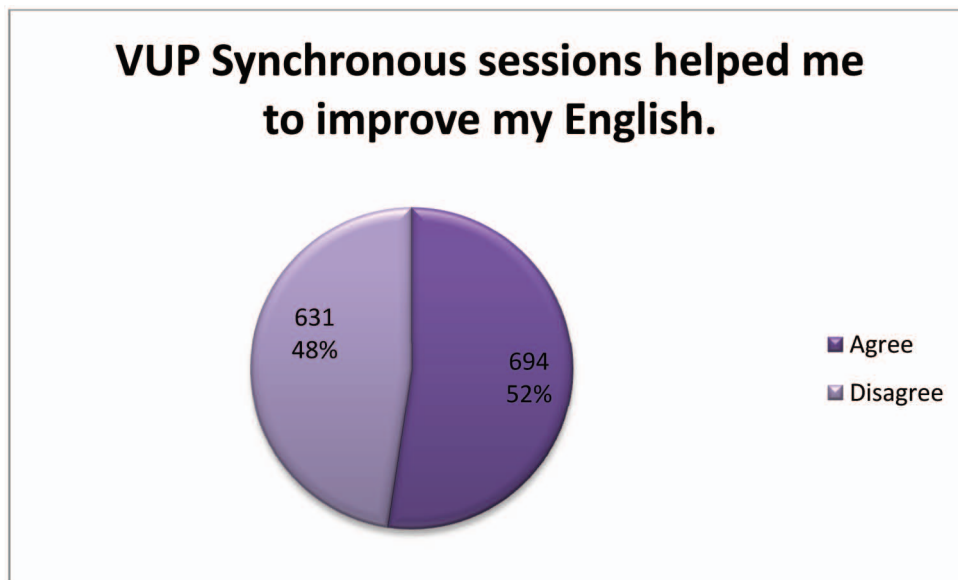

Figure 7: Synchronous sessions helped in improving English

Strengths and Weaknesses of Asynchronous E-Language Learning

Question 14 sought participants' opinion about the strongest point of asynchronous e-language learning. They were given the options of 'not time bound', 'not place bound', 'allows time to reflect', 'written responses' and they could choose all or none of the above, as well as give any additional remarks.
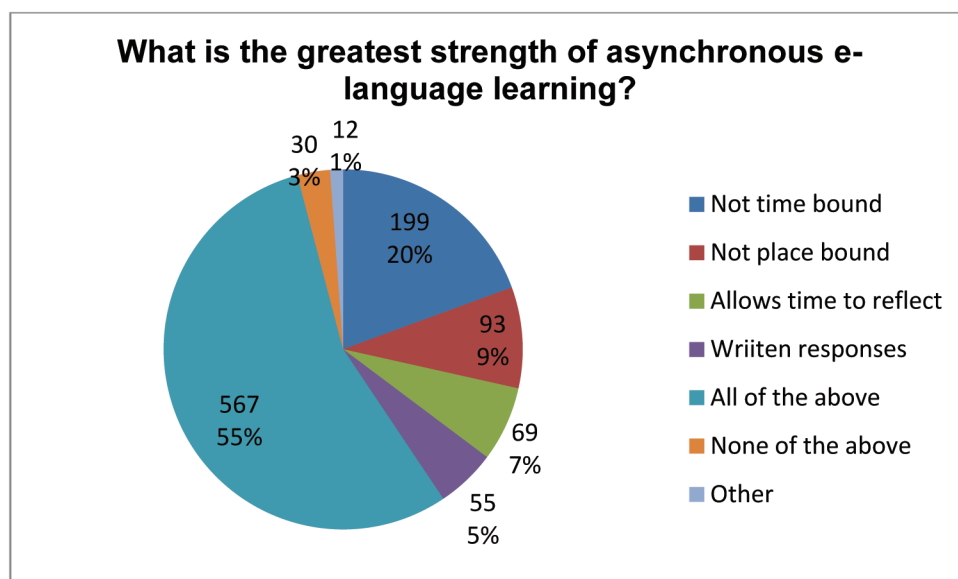

Figure 8: The strongest features of asynchronous e-language learning

Figure 8 shows the description of the strongest points of asynchronous e-language learning. A total of 567 participants -i.e. 55%- considered all options as the strong points of asynchronous e-language learning and 199 -i.e. 19%- pointed out that the best aspect was that asynchronous e-language learning was 'not time bound'.

The greatest weakness of asynchronous language learning was explored by question 15. Apart from all of the above, none of the above and any other, the options given were 'no face to face interaction with the teacher' and 'no simultaneous answers'. The results are shown in Figure 9.
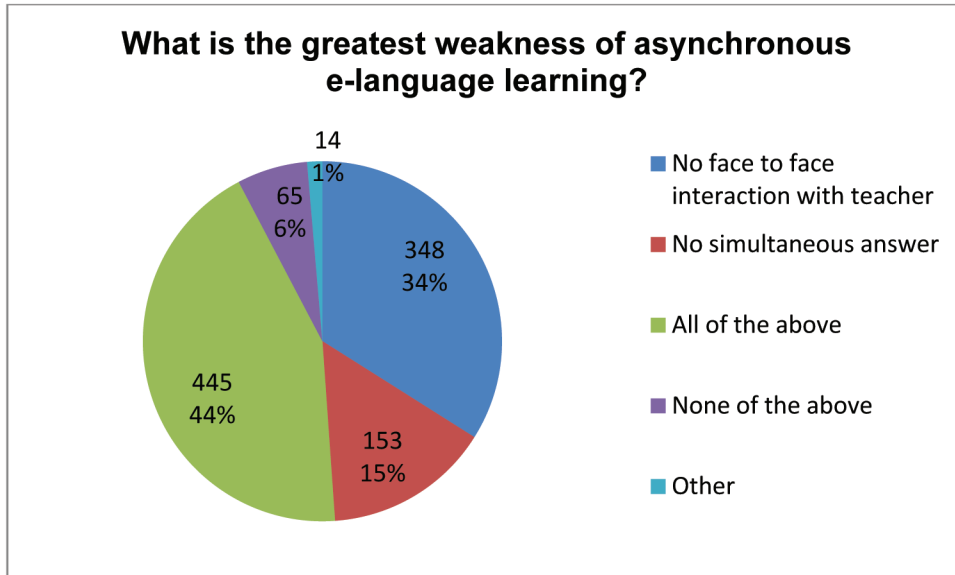

Figure 9: The greatest weakness of asynchronous e-language learning

43% chose 'all of the above' option whereas 34% considered 'no face to face interaction with teacher' as the greatest weakness.

Strengths and Weaknesses of Synchronous E-Language Learning

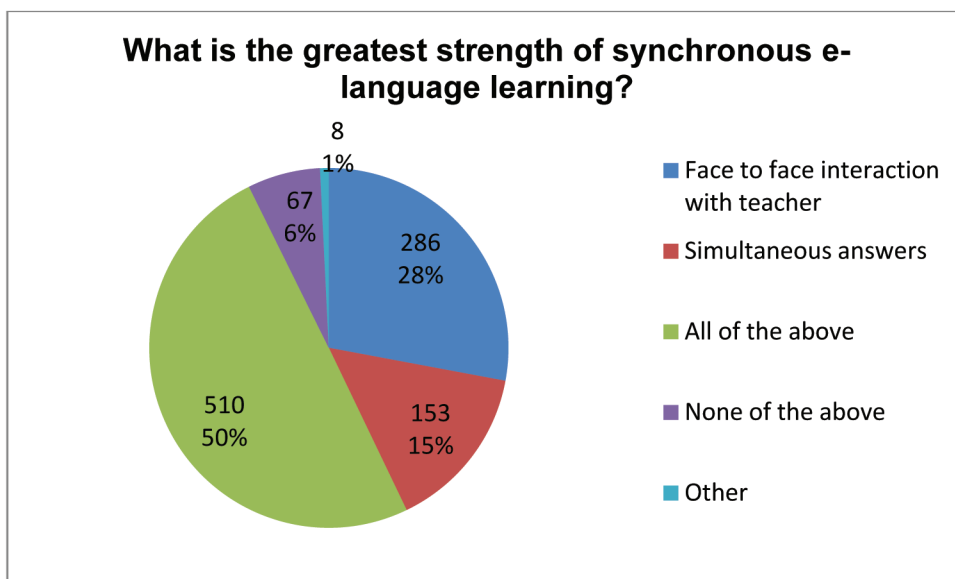Question 16 asked about the greatest strength of synchronous e-language learning (Figure 10).

Figure 10: The greatest strength of synchronous e-language learning

50% participants (n=510) found all aspects as strengths of synchronous e-language learning and 28% (n=153) were in favor of face-to-face interaction with teacher as the greatest strength.

The students were asked about the greatest weakness of synchronous e-language learning in the next question (Figure 11). The options given were 'time bound', 'connectivity bound', 'high bandwidth requirement' and 'immediate response'.
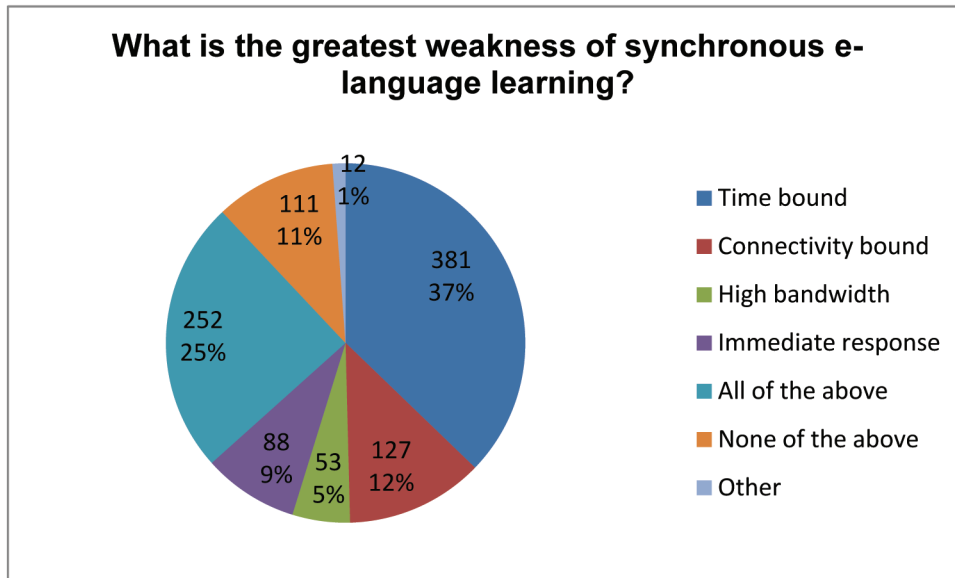

Figure 11: The greatest weakness of synchronous e-language learning

37% of the students (n=381) considered 'being time bound' as the greatest weaknesses of synchronous e-language learning, and 25% (n=252) considered all options as weaknesses of synchronous e-language learning.

Ideal Context for E-language Learning

Question 18 sought students' preference for a/synchronous modes or a blend of both (Figure 12).
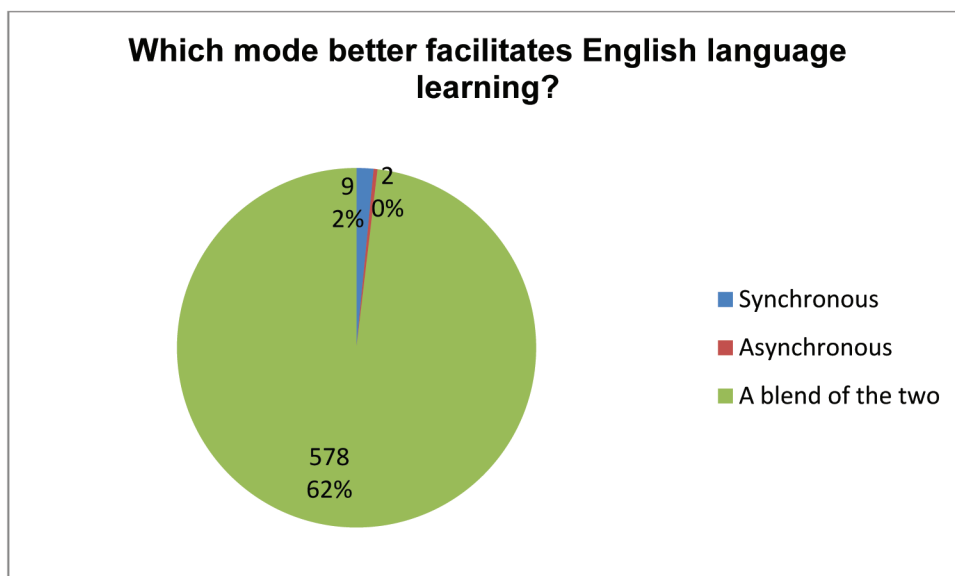
Figure 12: Better mode for e-language learning

62% (n=578) were in favor of a blend of synchronous e-language learning and asynchronous e-language learning and 1% (n=9) were in favor of synchronous e-language learning.

The last two questions (19 and 20) were explicitly open-ended, seeking participants' suggestions and additional comments, if any. The opinions were very much like the responses to question 18, i.e. a preference for the blend of two models. A summary of the responses is as follows:

1. A blend of a/synchronous should be there
2. Asynchronous mode is beneficial for on-job students; therefore, synchronous sessions should be conducted after 5 pm.
3. Synchronous sessions are very important for the improvement of the spoken English of the students.

The summary of the additional comments is as follows:

1. Some attention should be paid to the handwriting aspect.
2. Synchronous sessions should be bilingual.
3. All lectures should have Urdu/English subtexts.
4. Traditional face-to-face teaching facility should be available at campuses.
5. Announcements should be sent to the students' mobiles as text messages.

On GDB, almost all students favored a blend of the synchronous and asynchronous model.

Discussion

Although synchronous e-learning is increasingly becoming popular all over the world due to better speed of the Internet and technological advancements (Chen, Ko, Kinshuk & Lin, 2005), the observation of the participation of the students shows them to be more active in asynchronous mode, whereas their opinion is more in favor of the ideal blend of the two modes of instruction.

The responses of the students to the questions whether English language can be better learnt in a synchronous or asynchronous mode is very interesting. As per the researcher's expectations, 82% of the participants favored synchronous mode, whereas about asynchronous mode 57% responded positively. This reflects a psychological sense of loss of not being able to talk to or see the teacher and a wish to interact directly, as they used to in their traditional classrooms. However, majority of them were in favor of a 30 minutes synchronous session, contrary to the practice of one-hour session already in practice in all English courses.

Simultaneously, they were very positive about all asynchronous Elltivities, like written compositions on MDB and GDB and assignments. Majority (56%) considered all of the options, whereas 13% considered assignments to be the most helpful Elltivity. If the 'all of the above option' were not there in the questionnaire, students might have chosen assignments as the best Elltivity for language learning. As per data analytics, most of the students actively participate in submitting assignments, although the weightage of assignment marks is not much in the overall result. The assignments help them improve their written constructions of English more than any other Elltivity. This is because they get ample time to read, reread, and practice for finally composing their answers. Assignments questions are carefully devised to facilitate task-based language learning. Assignment writing polishes reading and writing skills of students whereas synchronous sessions can improve their listening and speaking (Wang & Chen, 2009). Students' opinions clearly reflect their awareness about the possible improvement of speaking skill via synchronous session and a desperate desire for that as well. This reflects their metacognition about the possibilities ELLE provides for L2 learning, as well as extrinsic motivation to learn English speaking as that is a prerequisite for a successful career and even self-esteem in Pakistan.

The most interesting part of the responses is that a majority of participants admitted that they did not actively participate in the synchronous sessions (hardly 1% participated as per VU data record), yet 62% claimed that the participation improved their English. The responses to the two questions have a discrepancy and as per the data analytics of synchronous sessions, students either could not participate in synchronous sessions because of job commitments or the technological problems became a barrier. Students' demographical details as well as their opinions clearly manifest that majority is that of working professionals and they may prefer synchronous sessions after 5 pm i.e., after office timings. Due to this aspect, participation in asynchronous Elltivities remains far more overwhelming than synchronous Elltivities as many students get enrolled in online programs because of their asynchronous i.e., not time bound nature (Hrastinski, 2008). Another possible reason for least participation could be their low level of listening and speaking proficiency in English language. As the mode of interaction in synchronous sessions was English language, they might have low level of confidence in participating due to affective filter (Krashen, 1982). Students' demographic details show that most of them must have an exposure to English in their previous study programs. Still, for conducting a successful synchronous session in English language, a careful needs analysis of the students is required, as they may not have an exposure to listening and speaking English. This is obvious from their opinions as they wish for bilingual session. These results further strengthen the need of synchronous sessions for improving listening and speaking skills.

The issues discussed above can be further elaborated by the participants' response to the strongest and weakest points of asynchronous modes of language learning. Whereas 34% felt the deficiency of face-to-face communication as it can increase their motivation (Yamagata-Lynch, 2014), 15% complained about non-simultaneity of answers/communication. However, they were happy with the fact that asynchronous mode was not time and place bound and gave time for reflection to construct responses in L2. Therefore, asynchronous mode is more suitable for them. This is also confirmed by their response to the greatest weakness of synchronous mode where instead of choosing 'all of the above' option, 37% participants chose 'time bound' option. These results show that in a virtual system students are mostly not available for time bound synchronous Elltivities because most of them are on job (McLoughlin & Lee, 2010a).

The results show that students would like to have a blend of the two models for best possible language learning. They cannot be time bound and would prefer for asynchronous mode already in use at VUP but occasional synchronous Elltivities—which should be optional—can give exposure to listening and speaking skills and provide face-to-face interaction and motivation, which will help them a lot without becoming difficult to cope with. Both modes complement each other; synchronous can be resorted to for discussing more complex concepts but switching to asynchronous mode would be appropriate where reflection over a time period is required (Hrastinski, 2008). Both modes facilitate different types of cognitive processing and can polish students' metacognition about language learning. The results of the study complement the researchers' observation that both a/synchronous modes have gaps which can be filled by a blend to improve students' integrated skills through a principled eclectic or multimodal approach.

The unexpected result was one of the students' suggestions about giving some consideration to the improvement of handwriting in English language by getting the scanned handwritten assignments. Handwriting of a foreign language is a major issue to ponder upon in online learning. The students also suggested subtexts to be run in both Urdu and English languages, which shows their background of learning English language through Grammar Translation Method. Student's being time-bound was also determined by the opinion that even announcements of LMS should be sent to them via mobile phone text messages. No system can be perfect, however, efforts to achieve the best possibilities should continue. A hybrid or blended model can be a solution to many problems.

Conclusion and Implications

The findings of the study indicate that a blend of synchronous and asynchronous modes is more desirable for English language learners of Virtual University of Pakistan (VUP). The assessment of the perception of the students about a/synchronous language learning environment helps the researcher to develop deeper understanding of the relationship between content, pedagogy, technology and the context of the existing instructional design (Koehler & Mishra, 2005); as well as the measures to be taken in the future for developing an integrated instructional design for language teaching in general and second language teaching in particular. Collaborative language learning can take place on both synchronous and asynchronous forums with the only difference of simultaneity. Asynchronous mode can be beneficial as students can construct their responses in L2 by carefully thinking and analyzing. Synchronous sessions can add pressure to respond immediately and they can monitor as to how much deep learning has taken place when they have to respond immediately using correct constructions. Therefore, synchronous Elltivities should be scaffolded over asynchronous Elltivities for deep learning. A blend of both can work in an ideal manner for teaching language, as it will encompass all techniques/methods of language learning/teaching. Only a careful planning of when to use which mode is required on part of the planners/teachers. For this purpose, a specific virtual language teaching curriculum/ instructional design should be worked on to cater the needs of Pakistani students.

The results excavate many areas for future research e.g., the blend of face-to-face and online language teaching environments, challenges involved in the use of bilingual online mode for L2 teaching, future of students' English handwriting and teaching L2 through the use of kinesthetic in both a/synchronous modes, etc. As the sample size was large, the results can be generalized to all other subjects taught at VUP. Last but not the least, as online education is no more a new phenomenon, it's time to design subject-oriented a/synchronous learning environments rather than just to talk about general online learning environments.

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