Technology in Action: Perceptions & Practices of Students in Using Online Language Learning Material at Higher Education Level

Dr. Akifa Imtiaz
Assistant Professor, Department of English
Fatima Jinnah Women University, Rawalpindi, Pakistan.
Email Address: akifa.imtiaz@fjwu.edu.pk
ORCI: https://orcid.org/0000-0002-9417-9923

Saima Umer
Lecturer, Department of English
National University of Modern Languages, Multan Campus, Pakistan.
Email Address: saima.umer@numl.edu.pk

Yasmin Akhtar
Lecturer, Department of English
Fatima Jinnah Women University, Rawalpindi, Pakistan.
Email Address: yasminakhtar1991@yahoo.com

ABSTRACT

The aim of the present study is to investigate students' perceptions and practices at the higher education level concerning the use of online language learning materials for learning purposes. It is an explorative study conducted on students (n = 150) from two Public Sector universities of Rawalpindi/Islamabad where the use of online helping language material as part of the pedagogy environment has been implemented. The research is quantitative in nature employing Xu (2007) theoretical framework along with SPSS (version 21) to assess the main benefits and constraints about students' use of online language learning material out of class as part of their in-class assessment. A questionnaire is designed based on the hypotheses to explore how far students at higher education level consider the use of online helping material useful in enhancing their language learning skills. The findings of the present research reflect that the students have a positive perception of the use of online language learning material which has an impact on their learning practices. Moreover, as results depict the use of online helping material is beneficial in developing students' language learning skills at the higher education level. However, certain constraints like network speed, internet connection and understanding language at times hinder their learning but these can be somehow to some extent overcome and catered to with teachers' help and guidance. Moreover, the use of technology is an innovation reflecting a transition from a traditional teacher-centred to a learner-centred environment that is ultimately beneficial for both teaching and learning experiences, particularly, in this post-modern digitized world of information.

1. Introduction

The use of Educational Technology has become the need of the hour, rather it has become a "New Normal". According to John Dewey, the Educational theorist, "If we teach today's students as we taught yesterday's, we rob them of tomorrow" (as cited in Pilgrim, Bledsoe & Reily, 2012, p. 16), and these savvy words as yet seem to be correct in the present digital 21st-century classroom. The present educational system shows that students adapt more efficiently in contrast to what they did ten years prior to the present digitized scenario, therefore, teachers are required to accomplish something more other than just teaching the regular course. The Digital Natives of today's world, the students, have never seen a time without the internet, therefore, they have grown up with this innovation of online gaming, messaging apps and social media platforms. Moreover, a recent report by the Kaiser Family Foundation has found that youngsters spend a normal of seven and half hours out of every day devouring media, sitting in front of the TV, surfing the web, playing computer games, utilizing cell phones, and tuning in to music (as cited in Ahuja, 2013). This consistent technological integration in a pedagogical environment has transformed the way in which students adapt and learn in contemporary times. Thus, to grasp and bridle the innovation enriched situations that have turned into the standards of living and that 21st - century digital natives have generally changed the expected ways to deal with educating, learning, and learner's involvement, too.

However, the change and implementation of technology coordination for teachers are not as easy and consistent

www.psychologyandeducation.net

as simply putting innovation in the hands of students. Moreover, the teachers, unlike students, are digital immigrants, not digital natives, therefore, they experience various hindrances and fears in using technology inside their classrooms. A lot of this anxiety and opposition comes from the way that numerous teachers did not adapt themselves to the use of pervasive technology; educators now and again contend that they learned fine and dandy without innovation and were occupied with school, so what is the point to use technology inside classrooms in the current scenario?

It is in this background that the objective of the present study is to analyze and measure how students studying in two selected public-sector universities of Rawalpindi and Islamabad perceive and practice the use of online language learning material with reference to their language skills development. The main aim of the study is to explore the importance of consulting technology outside the class for enhancing language skills as directed and guided by the teachers. The research was conducted at the universities where the use of Technology Enhanced Learning (TEL) is mandatory outside the class because separate class portals are actively used by the lecturers (for sharing helping material or websites) and students (consulting them) in order to fulfil course or subject requirements to achieve good grades. Because, in the 21st century, especially in the days of COVID-19, the expression "technology" is of vital importance in numerous arenas, particularly, education and it has become a ground reality that technology has turned into a knowledge-sharing-bridge in many nations and academia.

The present generation of students adapt uniquely in contrast to those of the past because they are surrounded by technology and their access to an abundance of information is just a click away. Research by Ehrlich et.al (2013) at Chicago Schools found that 92% of students had technology in the home, but less than half used it for schoolwork. Keeping in view this fact, teaching methods must change by converting technology use at home for learning purposes to make it beneficial. When teachers continue to keep teaching with the same traditional method, which students consider obsolete and useless "in the real world, then students may lose inspiration and enthusiasm as the intrinsic value of what was learned is lost." (Usher & Center on Education, 2012). By fusing technology into education, teachers will be able to promote interests and include the entire spectrum of students from learning disabled to gifted and talented students. In order to make learning a more fun activity for the students at higher education level teachers should indulge them in using technology outside of class/campus. Therefore, the present research is conducted to analyze the usefulness of online language learning material from students' perspective in enhancing their language learning skills.

1.2. Objectives: The main objectives of the study are as follows:

1. To find out students' perception of using online language learning material with reference to their practice of using technology for educational purposes
2. To investigate the constraints faced by the students while consulting online helping material for educational purposes
3. To explore how far online language learning material is helpful in enhancing students' language learning skills

1.3. Significance of the Study:

The present study is a significant contribution to the existing body of research with reference to the effects technology has on the motivation of the students and enhancing their language skills at the higher education level. The research was conducted concerning how students perceive and practice consulting online language learning material as directed and shared by their teachers on their class websites and/or portals. The findings of the study can be useful for a variety of audiences, from Boards of Education down to the actual teachers who provide technology implementation as integral for their students to practice at home (if not in the classroom due to various constraints) to improve their language skills. This may strengthen the use of technology with reference to the Constructionist Approach revolving around a student-centred learning environment.

2. Literature Review

Throughout the process of language learning and teaching, the role and potential of the internet has been underscored by the related literature. Most of the studies conducted in this domain have indicated the ready availability of the internet to both the learners and the instructors. Shadiev & Huang (2019) say that technology promotes the learning and performance of language learners, it increases learner's motivation and provides them with efficient means for language learning. According to Ponterio (2000) due to technological advancement and accessibility of the internet, it functions as a virtual library and hence makes sure the availability of authentic language material to the language learners across the globe. Thus the web has the advantage of ready access as pointed out by Pino (2008), that due to readily accessible internet, institutions have planned and extended the use of online language materials and course delivery systems as a regular part of their pedagogical environment.

Shadiev & Yang (2020) believe that the rapid technological advancement in the current years has provided the teachers with opportunities to use technology for education. They further say that the use of educational technologies has become quite ubiquitous for language learners. The present information age requires the students to acquire and equip themselves with functional, critical, academic and technological skills. So keeping in mind this demand of the new age the educational institutions provide their students access to the internet. This access enables the students to integrate learning materials into their lessons and use them to hone their language skills. As technology has

become not only a necessary ingredient of literacy but also a means of achieving it. Therefore, it must be made a part of ESL courses. Furthermore, the internet can be used as a tool to accelerate the process of knowledge construction and to promote language skills (Kasper, 2002).

The role of online available language learning material is very important in learning a second/foreign language. Such material provides access to authentic language samples. Chantel (2002) views the traditional features of literacy as outdated and emphasizes the need for ESL learners to "understand and embrace the nature of the new, technologically-based literacy". Thus for ESL/EFL learners, the ability to utilize web-based language learning materials is very important as it plays a significant role for them to acquire a second language.

The world wide web is replete with the resources to provide students with realistic learning experiences. The availability of animation, videos, songs, drama clips, movies etc. make learning interactive and fun as compared to traditional textbook activities. The access to such language material also serves to motivate the students due to its interactive nature. In a study Young (2003) found out the positive impact of computer-mediated education on students learning. The study indicates that learning language in the computer-mediated environment lowers student's emotional barriers, thus, helps them to express themselves freely, by enhancing not only their communication skills but also critical and problem-solving skills. A similar study conducted by Pino (2008) underscored the online language environment as a "sheltered learning environment" where the learners can practise the language at their own pace without experiencing anxiety. However, the effectiveness of online language material for gifted students is also found by Thomson (2010) because of this individualized and student-centred approach.

Since the learners are central in the present research, so related literature conducted on finding the perception of the students using the online language learning material has also been reviewed thoroughly. In a study, Stepp-Greany (2012) examined the perception of the learners about the comparative effectiveness of traditional textbook-based activities along with viewing internet activities, CD-ROM, electronic pen pals and threaded discussions. The learners reported a preference for internet-based instructions as compared to traditional textbook-based activities.

DePew (2015) has propounded that learners demonstrate a positive attitude towards accessing online language learning material. The study also revealed the participation of the students as autonomous learners divert the learning process from teacher-centred to student-centred. A similar study conducted by Mohamad (2009) reported the significance and usefulness of internet-based grammar teaching and training in ESL classroom as compared to textbook-based grammar activities as students performed better in internet-based activities.

However, the vibrant and dynamic nature of the internet and technology brings about rapid changes due to new innovation. However, Shadiev & Yang (2020) further elaborate that we need to keep track of the applications and changes in the educational technology as these technologies used for language learning and language teaching are developing so fast. Due to the focus of student-centeredness approaches in the present-day pedagogy, this requires incessant research in exploring and finding out students' perceptions about the usability and effectiveness of such tools and materials. The present study aiming to explore students' perception and practices about online language material is also such an endeavour.

3. Research Methodology

The nature of the present research is quantitative employing Xu's (2007) framework as theoretical grounding. The research has two hypotheses providing analytical grounds for framing the questionnaire. The research was conducted at two public-sector universities i.e. Fatima Jinnah Women University, Rawalpindi and Quaid-e-Azam University, Islamabad. The data analysis has been done by operationalizing SPSS (version 21). The analysis is in a tabular form reflecting the aspects of frequency, mean and correlation between perceptions and practices to verify and validate findings appropriately. The spirit of this research on technology was maintained by using technology as the main and only source of data collection and then of data analysis.

3.1 Sample: Through the convenient sampling technique, one hundred and fifty students of Bachelors and Masters in English from the departments of English were selected from the above-mentioned two universities.

3.2 Procedure: A questionnaire was designed utilizing Google form and distributed through online class portals to one hundred and fifty students enrolled in Bachelors and Masters in English programs. Questionnaires complete in all respects were received from all 150 students participating as the source of data collection.

3.3. Theoretical Framework: In order to analyze the students' perceptions and practices regarding utilizing online helping material at higher education the model proposed by Xu (2007) has been employed as the main theoretical framework. As already mentioned that the main spirit of the study is to explore students' perceptions and practices towards using technology integral to their learning experience therefore, analyzing major benefits, and constraints, on evaluating the effectiveness of online programs as proposed in the very model will be considered. Though Xu's (2007) main work is on analyzing the effectiveness of online programs but the model adapted by her is appropriate for the present study because it focuses upon measuring the benefits and constraints as experienced by the students while consulting online material for language learning outside the classroom as a home task. The following is the figure depicting the main aspects of the model by Xu (2007):
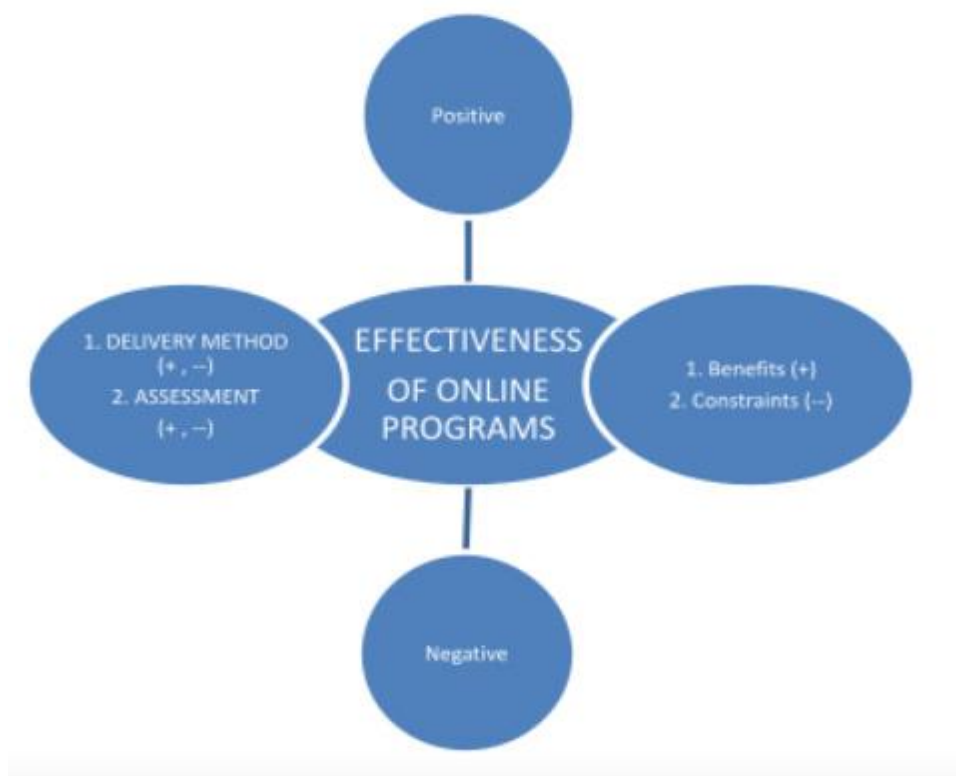
Figure 1. Theoretical Framework by Xu (2007)

3.4. Data Presentation and Analysis: The present study attempts to find out and examine students' perceptions and practices regarding language learning material available online. The study is quantitative in nature and employs a survey questionnaire as the main tool to explore the phenomena of interest. The data for this quantitative research were analyzed for both descriptive and inferential statistics using SPSS (version 21) software.

The analysis includes both descriptive and inferential analysis. We have used descriptive analysis to analyze the frequency and percentage of the overall population. Besides, it is also used to determine the mean, frequency and percentage to identify the effectiveness of online language learning material in enhancing students' English language learning at the Higher Education level. Students' perceptions (positive/negative) can influence their use of online language learning material so the correlation of the perception and practices is also sought through the statistical tool Pearson correlation in built-in SPSS version 21.

The questionnaire consists of two main sections: practices and perceptions. The practice section is further categorized as a. general questions b. Ways/Methods of finding appropriate online learning material. And, likewise, the perception section is also categorized as a. perceptions (general) b. problems. This categorization is expected to facilitate the analysis process. The data is presented in graphical and tabular form followed by description and analysis.

4. **Data Analysis on Practices and Perceptions of the Students**

After obtaining the data, both practices and perceptions were analyzed and their correlation was found out.

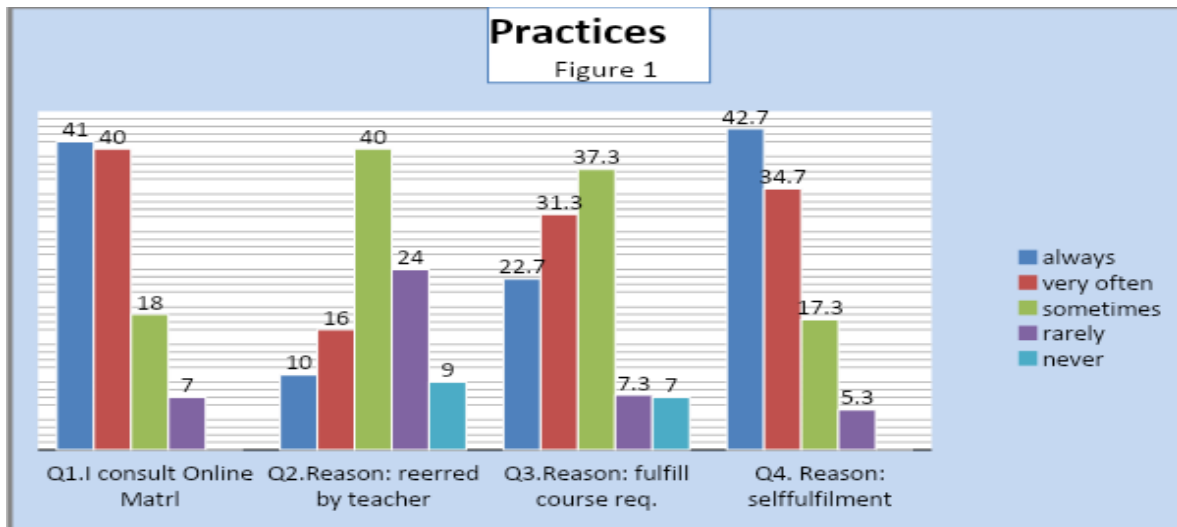*4.1 Analysis of Practices of the students*

Figure 2: Practices of the Students

Descriptive Statistics (Frequency Table 1)				
Questions	No	Minimum	Maximum	Mean
Q1. I consult online learning helping material for educational purposes.	150	2	5	4.22
Q2. Reason for my consulting learning material online: referred by the lecturer	150	1	5	2.93
Q3. Reason for my consulting learning material online: fulfil course requirements	150	1	5	3.68
Q4. Reason for my consulting learning material online: self-fulfilment	150	2	5	4.15

Table 1: Descriptive Statistics Frequency

This section pertains to students' practices of using online helping material for educational purposes. Figure *2,* given above, shows that the majority of the students access and use online material for educational purposes. When asked whether they use online material for educational purposes, 41% of the students mentioned that they always consult online learning material for educational purposes, 40% of the sample reported that they consult it very often, whereas 18% and 7% reported their use as sometimes and rarely, respectively. No one out of the 150 students reported in 'never'. It indicates that the majority of the students as evident from the mean frequency of 4.22, shown in

Table 1 above, consults online learning material for educational purposes. Thus, the mean frequency is 4.22 which is significant and illustrates the majority of the students' frequent use of online material for educational purposes.

The next question in this section pertains to finding out the reasons for accessing and consulting the online learning material. When the students are asked the reason for consulting the online material it is found out that 10% of students always consulted the online material because they were directed by the teachers to do so. While 40% reported that they were very often directed by the teacher, 24 % reported rarely and 9% said that they were

never asked by the teacher to consult the online material. In response to the third question that was related to how often they consult online learning material to fulfil a course requirement. The respondents reported that 22.7% of them always consulted the online material to fulfil a course requirement, 31 % reported very often while 37.3 % sometimes,7.3 % rarely while 7%never consulted online material to fulfil a course requirement. The majority of the students, as evident in the graphical representation, always consulted the material for self-fulfilment.

Table 1 given above shows the frequency in the use of online material for different reasons. The mean frequency in these four questions is 4.22, 2.93, 3.68, and 4.15 respectively. A comparative analysis of these figures shows the highest frequency in the case of the 4th reason i.e. 4.15. It demonstrates that the students are more prone to the use of online material for their personal fulfilment. While the least frequent reason for their resorting to online material for educational purpose is the reference from the teacher.
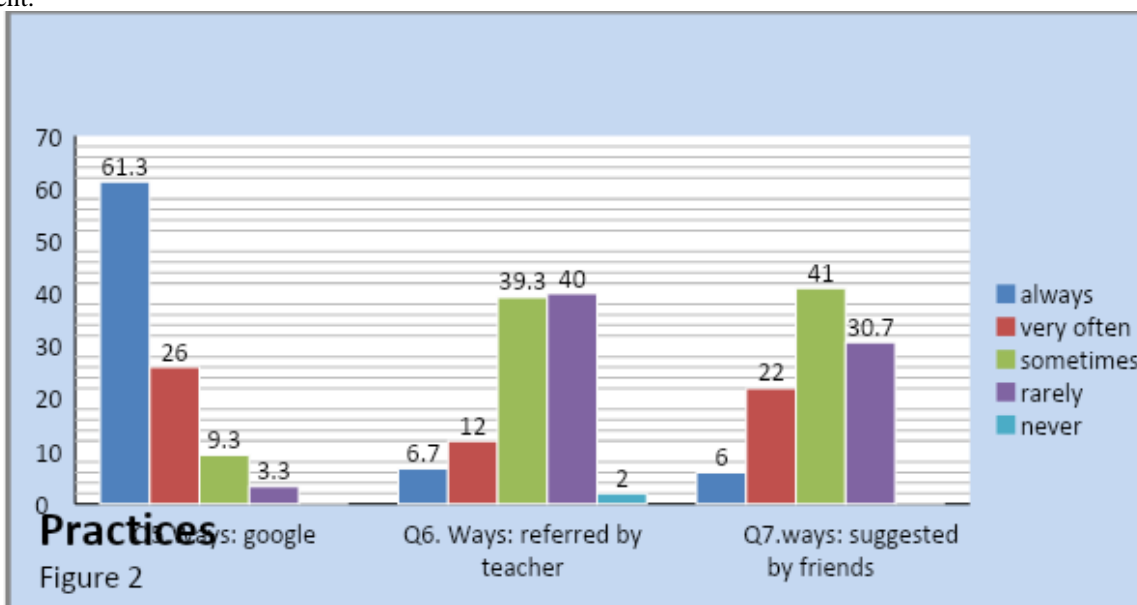

Figure 3: Practices of the Students

Descriptive Statistics(Frequency Table 2)				
Questions	No	Minimum	Maximum	Mean
Q5. Ways/Methods of finding appropriate online learning material: a. I google	150	2	5	4.45
Q6. Ways/Methods of finding appropriate online learning material: b. because those websites are reffed to me by teachers	150	1	5	2.81
Q7. Ways/Methods of finding appropriate online learning material: c. because those websites are suggested to me by my friends	150	2	5	3.07

Table 2: Descriptive Statistics Frequency

This section of the questionnaire is pertinent to find out the ways and methods students employ to access online learning material. The respondents were also asked how they find the appropriate website to access online learning materials. Figure 3 and also the corresponding Table 2 illustrate that the majority of the students that is 61.3% mentioned that they always 'Googled' to find out the appropriate websites. While 6.7% were referred by the teacher and 6% were suggested about that material by the friends. The mean frequency illustrates the ways students' access learning material is by using keyword search through Google search engine. It is also evident by the mean frequency which is highest in question 5 i.e. 4.45 while the next frequent practice as referred by friends is 3.31 and by the teacher is 2.81 which is the lowest. So the most frequent practice among the students so far as the ways to access the online material to find appropriate material is to google it. Teachers' role seems very negligible in contributing to encouraging the students to access specific websites.
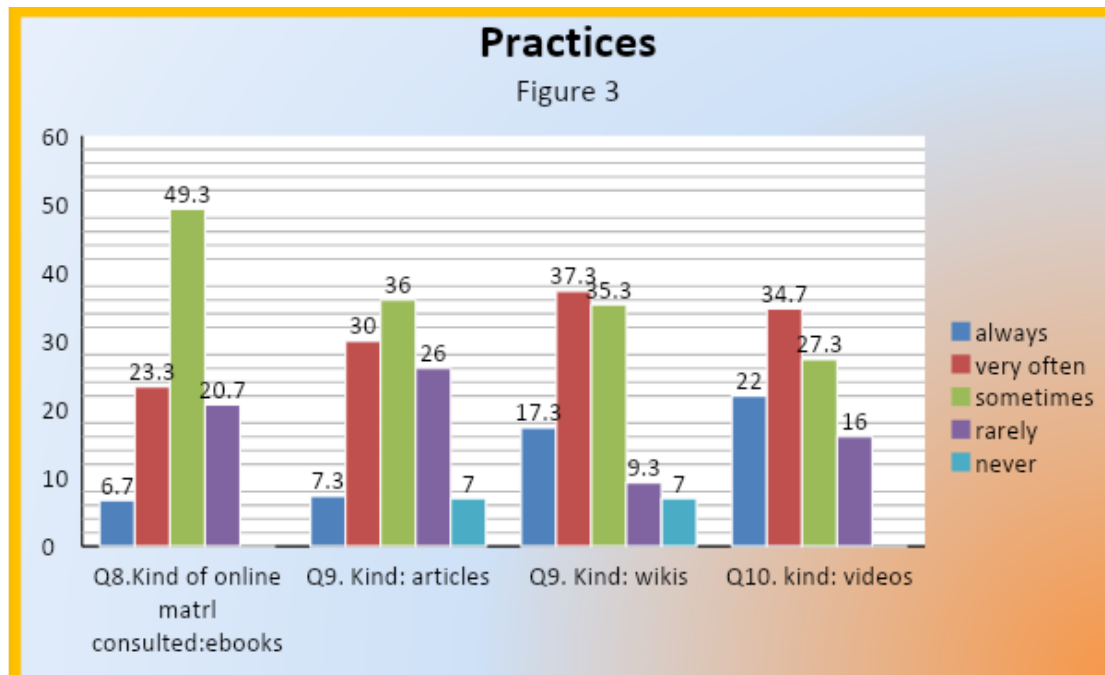
Figure 4: Practices of the Students

Descriptive Statistics(Frequency Table 3)				
Questions	No	Minimum	Maximum	Mean
Q8. The kind of online reference material I consult. a. Ebooks	150	2	5	3.16
Q9. The kind of online reference material I consult. b. Articles	150	1	5	3.17
Q10.The kind of online reference material I consult. c. Wikis	150	1	5	3.61
Q11. The kind of online reference material I consult. d. videos	150	2	5	3.63

Table 3: Descriptive Statistics Frequency

This section of the questionnaire aims at finding out the type of resources most frequently consulted by the students. Questions 8 to 11 deal with finding out student's practices regarding the kind of online materials most frequently consulted. The analysis of the collected data indicates videos as the most frequently consulted resources. 22% of students always consult videos as a helping material to be consulted for educational purposes followed by wikis 17.3%. The frequency count illustrates the frequency

mean of the use of eBooks, articles, wikis and videos 3.16, 3.17, 3.61, 3.63 respectively. A comparison of the means shows insignificant standard deviation hence it can be concluded that all of these materials are consulted frequently by the students for educational purposes.
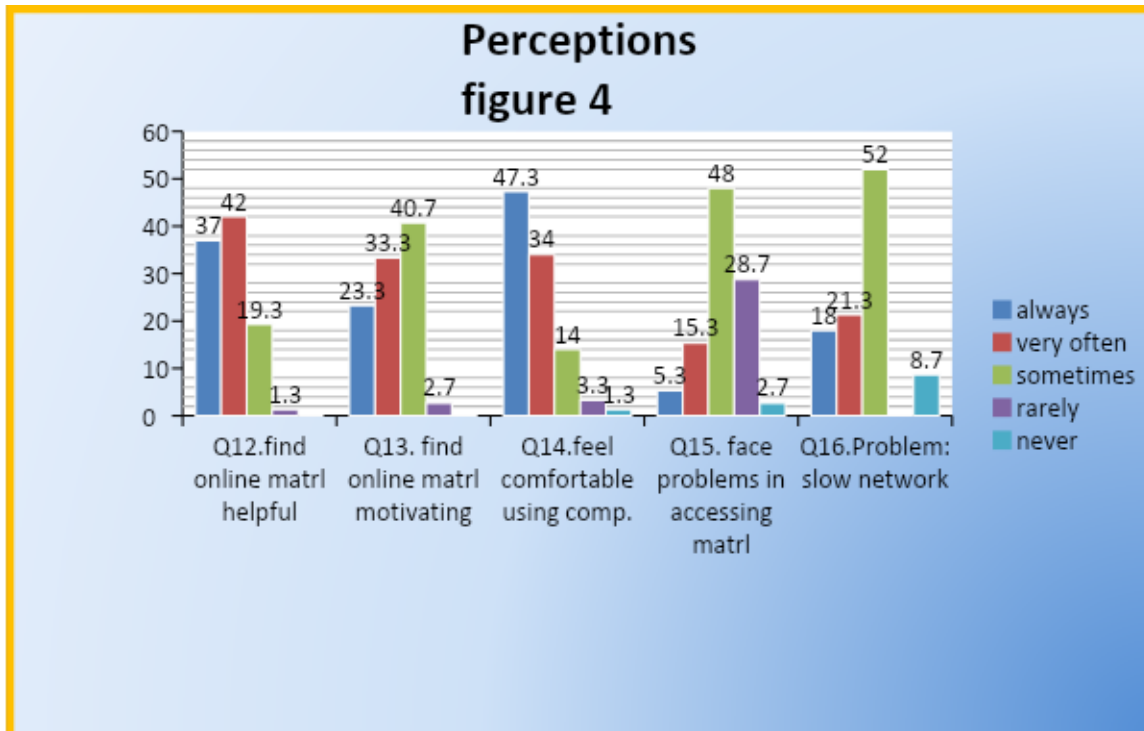
4.2 Analysis of Perceptions of the students

Figure 5: Perceptions of Students

Descriptive Statistics(Frequency Table 4)				
Questions	No	Minimum	Maximum	Mean
Q12. Online learning material helpful.	150	2	5	4.15
Q13. Online helping material motivating in learning.	150	2	5	3.77
Q14. I feel comfortable using a computer to consult online helping material.	150	1	5	4.23
Q15.I face problems in accessing the online helping material.	150	1	5	3.40
Q16. Problems faced: a. Slow network speed	150	2	5	3.29

Table 4: Descriptive Statistics Frequency

This section of the data analysis pertains to the questions regarding students' perception of the use and access to online helping material for educational purposes. Figure 5 and the corresponding Table 4 given above, demonstrate students' perceptions about the websites they visit to access helping material for educational purposes. The *37%* of students find the material always helpful, *42%* very often and *19.3%* sometimes find it of any help. None of the students filled out the 'rarely' or 'never' category. From the table given above, it is evident that the majority of the students find online material helpful. The students either find the material helpful always, very often or sometimes. It is seldom that the students 'rarely' or 'never' found the material

helpful. The mean frequency of *4.15* and *3.77* shows the students' positive perception about the online material being helpful and motivating. The majority of the students reported they feel comfortable while using the computer to access online material always is *47%.* Only *1.3%* of students reported that they never felt comfortable while using the computer to access online learning material.

The rest of this section gauges students' perception of the problems they face while accessing online material and about the material they access. The students were also asked whether they encounter any problems when using online learning materials. The majority of them agreed with the statement that they face problems while

accessing online material. The mean frequency in this regard is **3.40** which is highly significant. While only **8.7%** of the respondents reported that they do not encounter any difficulties.

Some of the problems that they encounter are related to the network speed of internet connection or wifi which is most of the time slow. The majority of the students i.e. **48%** find access to online material problematic very often. The frequency mean in response to the question is

3.77 which is quite significant. On the other hand, **2.7%** of students never faced any problem. Frequency mean i.e. **2.9** indicates that most of the time majority of the students face problems. Majority of the students **52%** reported encountering problem due to slow network and processing speed. However, **8.7 %** of students reported that they never faced slow network problem.
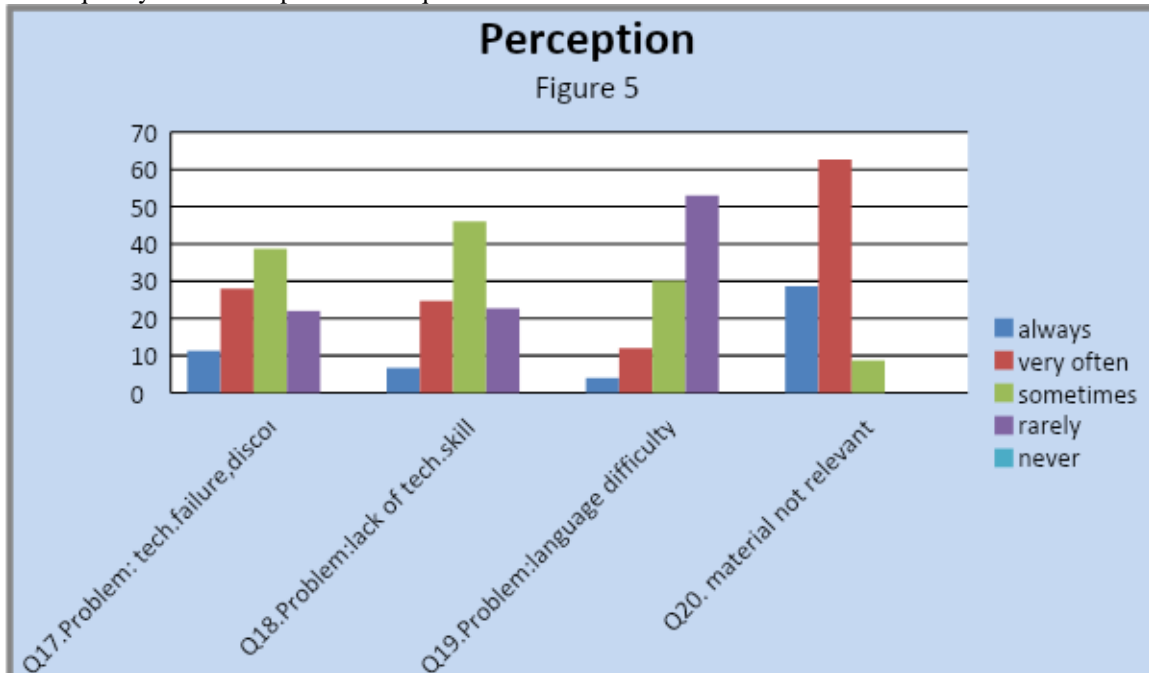

Figure 6: Perceptions of Students

Descriptive Statistics(Frequency Table 5)				
Questions	No	Minimum	Maxim um	Mean
Q17. Problems I face while accessing the online helping material: b. Technical failure i.e. internet disconnectivity	150	2	5	3.15
Q18. Problems I face while accessing the online helping material: c. Lack of expertise in consulting online material	150	2	5	2.67
Q19. Problems I face related to the consulted online material: a. Because language is difficult	150	2	5	4.18
Q20. Problems I face related to the consulted online material: c. because relevant material is not found	150	3	5	2.95

Table 5: Descriptive Statistics Frequency

The above graphical and tabular representation of the data is the continuation of the students' perceptions about the type of problems most and least frequently faced by them while accessing online learning material for educational purposes. The most frequent problem faced by students is a language difficulty. The mean frequency for this option is **4.18**, which is the highest and hence most significant. This is also evident from a

comparative analysis of frequency means in the mentioned problems as shown in Table 5 above. The students' perception regarding the problems such as internet disconnectivity, technical knowledge, language difficulty, and relevancy of the material was sought. The mean frequencies regarding these problems are 3.29, 3.15, 2.67, 4.18, and 2.95 respectively. The most frequently encountered problem is language

difficulty and the least frequent one is material relevancy, which impedes them to take full advantage of the resource consulted.

4.3. Analysis of Correlation between practices and perceptions

In order to find out the correlation between practices and

perceptions SPSS inbuilt program Pearson correlation model was employed. Table 6 given below shows the correlation between practices and perceptions of the students regarding the use of online helping material for educational purposes.

Correlation		Perception	Practice
Perception Pearson correlation		1	.550
Sig. (2tailed)			.000
N		150	150
Practices Pearson correlation		.550	1
Sig. (2tailed)		.000	
N		150	150
Correlation is significant at 0.0l level (2 tailed)			

Table 6: correlation between practices and perceptions

The correlation value is quite significant which is 0.01 level. It means that the students have a positive perception of the use of online material which influences their practices positively. Though they face problems but the majority of the students find online language learning material effective and helpful in enhancing their learning at the Higher Education level. They perceive their experiences very positively. The students also face some problems as reported by them in this regard as well. However, the significant correlation indicates the positive effect of perceptions on students' practices.

5. Findings and Discussion

The study aimed to find out students' perceptions and practices about the use of online learning material for educational purposes. The analysis of the data reveals that the majority of the respondents have a positive attitude towards the use of online material. The correlation between perceptions and practices is significant (c.f. section 4).

The study demonstrates the motivating nature of online material that intrigues students to incorporate the best available resources on the internet to enhance their educational performance. It also suggests that if teachers direct and guide the students towards using the online material the students' progress will enhance twofold because of internal motivation already present.

The analysis of the frequency in the question of the methods to access online material exhibits the use of search engine the most resorted one which is evident from the mean frequency i.e. *4.45.* It is quite significant so far as the students' practices of finding out material through the use of a search engine are concerned. The teacher's role is the least significant in this regard as the frequency mean of *2.81* shows the teacher's suggested websites used by the students. A little bit of encouragement and directions by the

teachers can make the students enhance the frequent and well-guided use of online material.

The findings also reveal that the students perceive online material as helpful and motivating. It can positively make them more prone to use such material and incorporate it into their educational practices. The *37%* of students find the material always helpful, *42%* very often and *19.3%* sometimes find it of any help. The analysis of the data shows that the majority of the students find online material helpful. The students either find the material helpful always, very often or sometimes. It is seldom that the students rarely or never found the material that was not helpful. The mean frequency of *4.15* and *3.77* shows the students positive perception about the online material being helpful and motivating. The majority of the students, i.e. *47%* reported that they feel comfortable while using a computer to access online material always*.* Similarly, only *1.3%* of students reported that they never felt uncomfortable while using a computer to access online learning material. It shows that digital denizens are quite at home in the use of computer-related gadgets.

The study has also focused on the problems faced by the students while accessing online material. The students' perception regarding the problems such as internet connectivity, technical knowledge, language difficulty, and relevancy of the material was also analyzed. The most frequent is language difficulty and the least frequent is material relevancy, which impedes them to take full advantage of the resource consulted (c.f. section 4.2). The mean frequency in this regard is *3.40,* which is highly significant. While only *8.7%* of the respondents reported that they did not encounter any difficulties. The study indicates the need to address the problems faced by the students to help them maximize the benefits of online material to enhance their performance.

The results of the present study have implications for the teachers to change their teaching style by transforming lessons in accordance with the advantages the online resources can offer. Instrumental teachers can use the computers as a *'book behind glass'* strategy to encourage students to incorporate the online resources in enhancing their language skills. In general, the frequent use of online educational resources by the students entails a shift in the way students learn, as the online resources provide an interactive, exciting and media-rich new environments. The results of the present study indicate that policymakers should consider introducing technical and pedagogical support in order to facilitate both the teachers and students for their understanding of the full potential of Technology Assisted Language Learning.

6. Conclusion

In today's world, especially with the onset of a pandemic, technology has completely integrated into the daily lives of the average student, and this connects the students to an immense amount of information (Egbert, 2009). The use of technology in the classroom in the proper manner has the benefit of helping to raise academic achievement from the students and the teachers from all levels of skill (Courville, 2011).

The present study aimed to find out students' perception regarding their use of online helping material for educational purposes. Furthermore, the study also attempted to examine students' practices in the use of such material and the problems that they face in this regard. Through the online distributed questionnaire and the analysis of the data revealed a positive attitude of the students towards online recourses and hence their contribution and assistance in enhancing students' performance. The students encounter certain problems as evident in the data. The most frequent problem faced by the majority of the students is language difficulty and internet slow speed. In short, the study has suggested that the internet enables students to interact with language in new and varied ways and helps them develop and hone the range of literacy skills they need to succeed both in university and in our digital age of information. Thus, teachers have to guide students in choosing the right language learning websites and materials so that they can maximize the use of the internet to improve their command of the language.

References

1. Ahuja, M. (2013). Teens are spending more time consuming media, on mobile devices. *The Washington Post*. Retrieved from http://www.articles.washingtonpost.com

2. Banitt, J., Theis, S. & Van Leeuwe, L. (2013). The Effects of Technology Integration on Student Engagement. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/maed/7

3. Chantel, R. G. (2002). New technology, new literacy: Creating a bridge for English language learners. classroom. Teaching English in the Two Year College, 30(2), 129.

4. Dawson, K. (2012). Using action research projects to examine teacher technology integration practices. *Journal of Digital Learning in Teacher Education*, *28*(3), 117-124.

5. Downes, J.M., & Bishop, P. (2012, May). Educators engage digital natives and learn from their experiences with technology. *Middle School Journal*, *43*(5), 6-15.

6. DePew(2015). Preparing for the rhetoricity of OWI. In Beth Hewett, & Kevin DePew(Eds.), Foundational practices of online writinginstruction (pp. 439–467). Anderson, SC: Parlor Press. From http://findarticles.com/p/articles/mi_hb5835/is_200803/ai_n32281702/

7. Ehrlich, S. B., Sporte, S. E., & Sebring, P. (2013, April). *The use of technology in Chicago public schools 2011: Perspectives from students, teachers, and principals*. Retrieved from University of Chicago, Consortium on Chicago School Research website: https://consortium.uchicago.edu/sites/default/files/publications/Technology%20Report%202013_0.pdf

8. Francis, J. (2017). "The Effects of Technology On Student Motivation And Engagement In Classroom-Based Learning". All Theses and Dissertations. 121. http://dune.une.edu/theses/121.

9. Grabe, M., & Grabe, C. (2007). Integrating technology for meaningful learning (5th ed.). Boston, MA: Houghton Mifflin.

10. Ghavifekr, S., AbdRazak, A.Z., Ghani, M.F.A., Ran, N.Y., Meixi, Y. &Tengyue, Z. (2014). ICT Integration In Education: Incorporation for Teaching & Learning Improvement. *Malaysian Online Journal of Educational Technology (MOJET),2*(2), 24-46.

11. Ghavifekr, S. & Rosdy, W.A.W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science (IJRES), 1*(2), 175-191.

12. Kasper, L. F. (2002). Technology as a tool for literacy in the age of information: Implications for the ESL Learning and Technology, 6-9. Journal of Advanced Academic, 21(4), 622- 712.

13. LeLoup, J. W. & Ponterio, R. (2000). On the Net: Foreign Language Teacher Resources. Language.

14. Manuguerra, M., & Petocz, P. (2011). Promoting student engagement by integrating new technology into tertiary education: The role of the iPad. *Asian Social Science*, *7*(11), 61-65. doi:10.5539/ass.v7n11p61

15. Martinez, M., & Schilling, S. (2010). Using technology to engage and educate youth. *New Directions for Youth Development*, *127*, 51-61. doi: 10.1002/yd.362

16. Mohamad, F. (2009). Internet-based grammar instruction is ESL classroom. Journal of Pedagogies andNew England Reading Association Journal, 38(3), 45.

17. Montrieux H, Vanderlinde R, Schellens T, De Marez L (2015) Teaching and Learning with Mobile Technology: A Qualitative Explorative Study about the Introduction of Tablet Devices in Secondary Education. PLoS ONE 10(12): e0144008.

https://doi.org/10.1371/journal.pone.0144008

18. Pilgrim, J., Bledsoe, C., & Reily, S. (2012). New technologies in the classroom. *TheDelta Kappa Gamma Bulletin: International Journal for Professional Educators, 78*(4), 16-22. Technology in education. (2011, September 1). *Education Week*. Retrieved from http://www.edweek.org/ew/issues/technology-in-education.

19. Pino, D. (2008). Web-based English as L2 instruction and learning: Strength and Weakness. *Journal of Computer Assisted Learning*, 19, 447-461.

20. Shadiev, R. & Huang, Y.M.(2019) Investigating student attention, meditation, cognitive load, and satisfaction during lectures in a foreign language supported by speech- enabled language translation. *Computer Assisted Language Learning* ,1–26.

21. Shadiev, R. & Yang, M. (2020). Review of Studies on Technology Enhanced Language Learning and Teaching. *Sustainability*, 12, 524; doi:10.3390/su12020524

22. Stepp-Greany, J. (2002). Students perception of language learning in a technological environment: Implications for the New Millennium. *Language Learning & Technology,* Vol. 6, Num. 1 pp. 165-180.

23. Thomson, L. D. (2010). Beyond the classroom walls: Teachers" and students" perspective on how onlinetype. Educational Technology & Society, 11(4), 158-172

24. Usher, A. (2012). *What nontraditional approaches can motivate unenthusiastic students?*
Washington, DC: Center on Education Policy.

25. Young, S. S. C. (2003). Integrating ICT into second language education in a vocational high School. Journal of Computer Assisted Learning, 19, 36-51.

26. Xu, H. (2007). Effectiveness of Online Learning Program: A Case Study of A Higher Education Institution: *Butler University*, hxu@butler.edu.

Weblinks

https://www.doleta.gov/reports/papers/tbl_paper_final.pdf; Retrieved on 30 Jan 2019

http://pcf4.dec.uwi.edu/innovation.php; Retrieved on 30 Jan 2019

https://www.heacademy.ac.uk/individuals/strategic-priorities/technology-enhanced-learning 10:56pm; Retrieved on 30 Jan 2019

https://files.eric.ed.gov/fulltext/EJ1105224.pdf 21 Jan 2019 11:01 pm

https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1878&context=buspapers; Retrieved on 30 Jan 2019

http://oro.open.ac.uk/36675/1/TEL%20in%20Higher%20Education-;   Retrieved   on   30   Jan   2019What%20is%20enhanced%20and%20how%20do%20we%20know.pdf

https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1006&context=maed; Retrieved on 30 Jan 2019

http://web02.gonzaga.edu/comltheses/proquestftp/Brown_gonzaga_0736M_10115.pdf; Retrieved on 30 Jan 2019