

# Examining Students' Perception & Efficacy of Using Technology in Teaching English

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## Abstract

The widespread growing ubiquity of media technology has heightened the remarkable changes in higher education over a period of time. Successful technology-mediated teaching-learning has already created new trends and impact on students' learning motivation and on emerging new models of pedagogy. Technology in education has accelerated and promoted students' 21<sup>st</sup> century literacy skills related to workplace needs. Behind such promising perspective, this paper attempts to examine students' perception and efficacy of technology application in English language teaching-learning practices in the real classroom situation in the tertiary level. To this end, this study investigates students' real perception and efficacy of technology-mediated language classroom through survey questionnaire and observation. The data were collected through questionnaire from a total of 33 EFL students from some renowned universities of Asia. The research findings revealed that the students are immersed in the learning process actively and enthusiastically but many don't know how to integrate technologies into their learning process. It, therefore, suggests that technology-facilitated EFL text curriculum needs to be proposed and teacher trainers should arrange training for EFL students on how to integrate technology into their learning practices. The study also recommended that classroom should be equipped with the cutting-edge technologies that impact on students' success in a technology-driven learning situation. In addition, it underlines emerging new trends of pedagogies and 'new learning spaces' to facilitate learners' needs as citizens in an increasingly globalized and digitalized world.

## Keywords

Digital Literacy, Asynchronous/ Synchronous, Digital Natives, Learners' Autonomy, Using Technology to Enhance Learning

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## 1. Introduction

With the booming proliferation of media technology in all sections of society, 'digital literacy' (*the ability to handle information by using digital tools*) seems to be an inseparable part of students' day-to-day life at and outside school. Recently, learning technologies in teaching/learning scenario have brought a shifting change to education paradigms in the forms of online learning, blended and hybrid learning, and collaborative models of learning. Institutions that embrace face-to-face, online, social, 'personalized' and hybrid

learning models have the potential to leverage the skilled learners by equipping them with stronger digital skills. Students already spend much of their free time on the Internet, learning and exchanging new information and communicating. So, if technology is integrated successfully for English teaching-learning purposes, students will be benefited by developing into more self-directed and collaborative learners with effective motivation instead of merely surfing the Net for communication and entertainment. That's why, to get such benefits, stakeholders need a positive 'perception' and 'stance' towards technology driven practical and career oriented learning platform.

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Behind this 'practical axioms' of learning prospect, this study aims at:

- exploring EFL students' 'perception' about technology application in learning process and its effectiveness in their career driven language learning;
- examining students' expectations of technology use in English language learning;
- developing an up-to-date technology mediated EFL curricula; and
- preparing & equipping learners as workers and citizens in an information centric society.

## 2. Background

The most up-to-date technologies and state-of-the-art learning design theories and practical applications are ensuing new paradigms of learning/teaching and 'new spaces' towards preparing 21<sup>st</sup> century digitally-skilled professionals. Globally, ELT teachers, professionals and policy makers receive a strong and constant urge and call to integrate new technologies into their teaching from the media, government, school administrators, colleagues, parents, and learners. It is indeed, educational technology that has already added effectiveness to teaching-learning. However, it is not possible until teachers and students develop positive discernment in using technology into their teaching/learning. Actually, bringing technology into the classroom largely depends on the positive willingness and perception of teachers, students and administration. Behind such a standpoint, this paper examines the students' perception of technology use in EFL classroom and its effectiveness in real life and career.

New technologies and growth of *digital media* are profoundly affecting today's university students. Information technology is interwoven throughout their lives. They have never known life without the *Internet* and grow up amidst technology as 'Digital natives' (Prensky, 2001), since their early boyhood. Actually, today's students are hardwired for multimedia and have developed "*hyperlinked minds*" (Liton, 2014, p. 4). So, in view of the pervasiveness of technology in today's life and learning, it is essential to lead the instructional process with integrating technology in developing students' professional careers and educational effectiveness. In so doing successfully, it is imperative to know the perception of students who are the real and prime users and beneficiary of such approach. Henceforth, the centre of attention of this paper is to investigate students' perception and effectiveness of technology-enhanced teaching/learning.

Emerging learning technology (e.g., iPod, mobile, Smart Tab, web 2.0 etc) brings driving change to the traditional landscape of learning and challenging the educators to keep pace with innovative technologies, towards creating effective new models of learning design, and today's learners. In reality, "Today's generation of students have been coined *Millennial learners or the Net Generation*, because they have been raised in a *media-rich* environment and live in an information-centric world. Many of these students have surfed the Internet since early adolescence, purchase clothing and concert tickets on the Internet, and communicate with peers via multiple Instant Messaging windows" (Windham, 2005). Emerging 3D (Third-generation) technologies allow students to learn informally while being away from their computers and classrooms. Innovative technology is changing students' and teachers' expectations of learning and workplace hub. Therefore, as a result of the implementation of technological applications in instructional design, EFL learners and educators would be benefited from multi-dimensional accessible sources that advance new instructional models and impact on students' learning as citizens of mediatised connected world.

With the booming proliferation of instructional technology, digital literacy and technology-enhanced web-based educational discourses reflect massive advances in synchronous/asynchronous communication, pedagogy, learning style, and exchange of information. Teachers and students can launch educational blogs, wikis and group discussion forum where they can circulate classroom-related materials and initiate academic talks. This new form of educational discourses and paradigms facilitate collaborative and learner-centred autonomous responsible learning platform. Technology-enhanced pedagogy and learning domain are in a variety of forms and shapes. Internationally, technology supported interaction can both be synchronous (*taking place at the same time, e.g. chat rooms, messengers, Skype, etc.*) and asynchronous (*taking place at different times, e.g. wikis, e-libraries, e-books, email, social networks, blogs, etc.*) (as cited in Bonk, 2011; Borden, 2011). Obviously, this aspect of technology-supported teaching/learning paradigm highlights a contributing and motivating appliance if EFL students have positive perception to become active learner participant at this age of information technology.

## 3. Literature Review

### 3.1. Technology-Facilitated Learning Paradigm

Emerging educational technologies and evolving new pedagogies leverage the potential relevance to teaching, learning, and creative inquiry in higher education. Due to

technology mediated teaching/learning availability, professionals, teachers, educators and institutional leaders are experiencing students as active learners rather than passive consumers of knowledge. This section reviews the literature related to 'perception' factors in integrating innovative technology in classroom and its efficacy to the users.

### 3.1.1. Language Skills

The use of technology in foreign language learning happens to influence the development of linguistic skills. Several researchers have reported an improvement in student writing skills through the use of networked computers (Beauvois, 1998). According to Beauvois, students in the networked writing project displayed more fluidity of conversation, more use of complex sentences, and more self-disclosure. She believes that the elimination of strong teacher dominance freed students to express them, resulting in a larger quantity and better quality of communication.

Technology enhanced teaching/learning is an emerging form of innovative approach. A variety of technology-mediated teaching/learning programs is enhancing modes of learning and pedagogical efficacy. Use of technology in education opens up new avenues of learning enabling us to access ideas and information from diverse sources through processing, manipulating and analysing material in different multimedia forms across local, national, and international arena. CALL (*Computer-Assisted Language Learning*) is an important example of teaching/learning modality. To be benefited by it, three main apparatus in CALL (*Computer-Assisted Language Learning*) classroom: *the learner, the teacher, and the computer* are complementary to each other. So, "For the effective use of CALL in the classroom, the teacher needs to have a leading role in the team work and encourage other players (students) in the team to do their best" (Son, 2002).

### 3.1.2. Students' Affective Perception

Students' positive perception is essentially important for technology adoption in education and its effectiveness and implementation. According to Pelgrum (2001) technology is "*not only the backbone of the Information Age, but also an important catalyst and tool for inducing educational reforms that change our students into productive knowledge workers*" (p. 2). So, to "become successful members of the global marketplace, all the countries globally must produce competent persons who are highly qualified in the realm of information and communication technology" (Gonzenbach & Davis, 1999). Many researchers have pointed out that a school's ICT vision is essential to effective ICT integration (Anderson & Dexter, 2000). This aspect reflects the possibility and efficacy of students' need to adopt technology as a tool of their career driven learning.

All teaching-learning efforts filter through students' effective motivation. Of course, there are some other factors affecting students' beliefs and perceptions towards adopting technology as a tool for learning progression, namely motivation, instructional techniques and abilities to use technology in education, computer competence, and cultural perception of ICT and attribution to education. Fatemeh and Allameh, conducting a research on Iranian EFL context regarding students' perception of ICT, found that "...the participants possessed a positive attitude towards ICT" (Alipanahi & Iran, 2013).

Another study on computer-mediated instruction for English writing skills by Hartman, Neuwirth, Kiesler, Sproull, Cochran, Palmquist, and Zabrow (1995) concluded that the use of technology redistributes teacher and classmate attentions so that less able students become more active participants in the class. In this study, networked sections showed more student-teacher communication than traditional classes. Additionally, Beauvois (1998) found more student-to-student interaction in networked classes than in traditional classes.

## 3.2. Efficacy of Technology Mediated Teaching/Learning

At this turn of digital age, technology and other social media are playing the vital role in education sector as a means of learning, exchanging information, research and training. The use of Internet search engines, i.e., Google, Yahoo, MSN among adult learners likewise- TESOL, TESL, TEFL, TESP along with other areas of research and training students is greater in number across the globe. In a survey among trainee students undergoing a 5-year Bachelor's Degree in Malaysia, Lau Teck-Chai, et al., found "...TESL and PPISMP trainee(s)...use of the Internet search engines as a tool in information seeking when approaching research for their academic learning activities" (Chai, Hong, & Ching, 2010). It reflects researchers and students' stance to use technology in research and training as an instrument of learning effectiveness.

Using World Wide Web (www) & new technologies in language education, arguably the Internet has widened students' learning choices and enables them to discover learning materials themselves having easy access to online applications and learning resources. A research conducted by OCLC (Online Computer Library Center) in 2002 revealed that the "... majority of college students used search engines rather than library resources for seeking information" (as cited in Chai, Hong, & Ching, 2010).

Seemingly, students and teachers' beliefs and perceptions to teaching and learning with technology are central issues to

integration. Students' lack of knowledge and skills is one of the main impediments to the integration of technology in education. The success of educational innovations depends largely on the skills and knowledge of teachers and students. So, to be successful in using technology in teaching, students need "to engage in conceptual change regarding their beliefs about the nature of learning, the role of the student, and their role as teachers" (Niederhauser, Salem, & Fields, 1999, p. 157). To possess positive beliefs to the use of technology in the classes, Students and teachers should have technical ideas and skills. Referring to this, Khan et al., points out that "Such attitudes are developed when teachers are sufficiently comfortable with technology and are knowledgeable about its use" (Khan, Hasan, & Clement, 2012).

Apparently and presumably, the diverse literature review related to students' perceptions to technology-enhanced language learning into classroom teaching and its effectiveness in real life underpins urgency and necessity of integration of technology-supported pedagogic portfolio and heightens the effective learning process as well as the significance of the current study at this turn of digital era.

## 4. Methodology

### 4.1. Research Context and Participants

The study was conducted in universities like ASA University of Bangladesh, Dhaka; University of Bahrain, Bahrain; Punjab University, Pakistan; Taief University and Jazan University, Saudi Arabia.

The participants of this study were EFL students. They were chosen on random basis. A total of 33 students took part in this study.

### 4.2. Data Collection Procedure & Questionnaire

Survey methodology was facilitated through the use of a one page written research questionnaire for this study (See Appendix-1). The author sent questionnaire to EFL teachers of English Department of aforementioned universities via *e-mail*, *Facebook* and *Skype* in between June and July of 2014, and data of questionnaire were received from the respondents in the same way. Those teachers administered the survey among their students. There were multiple choice questions (MCQ) as well as question asking for short suggestions, offering the respondents a free reign. The goal of the survey was explained in the appendix. They responded to the questionnaire pretty willingly, and most of them made some admirable suggestions. The questionnaire for this survey was designed to determine students' self-reported perception and efficacy of technology supported learning for capturing the

ground reality as "personal reflections are integral to the emerging analysis of a cultural group, because they provide the researcher with new vantage points and with opportunities to make the strange familiar and the familiar strange" (Marshall & Rossman, 2006, p. 100).

Out of 42, a total of 33 questionnaires were returned representing a response rate of 79%.

## 5. Results

### 5.1. Data Analysis

This study administers quantitative and qualitative data analysis technique. From the collected data of questionnaire, the percentage of respondents offering the same answer was computed using MS Excel to produce research findings. The questionnaires were tabulated to record the responses from each participant for each option of the questions. Typically, throughout the data analysis processes, there was an attempt of the author "... to identify and describe patterns and themes from the perspective of the participant(s), then attempt to understand and explain these patterns and themes" (Creswell, 2003, p. 203). Results were reported both quantitatively and qualitatively. Figures are drawn below to sum up the frequency of responses. (See Figures below)

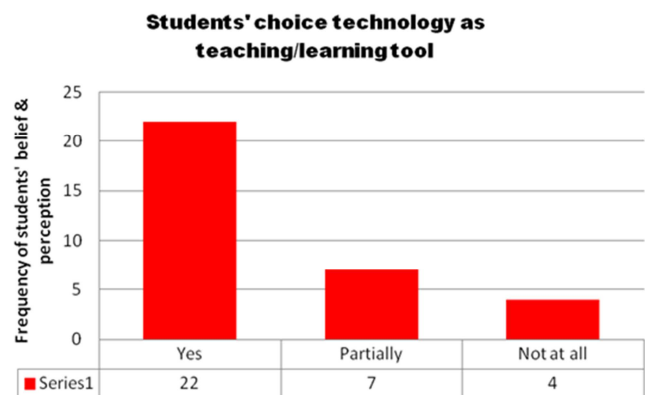
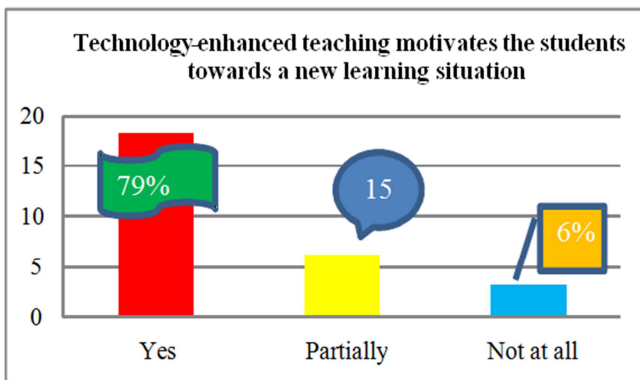


Figure 1. Do you like technology as a teaching-learning tool in your classroom?

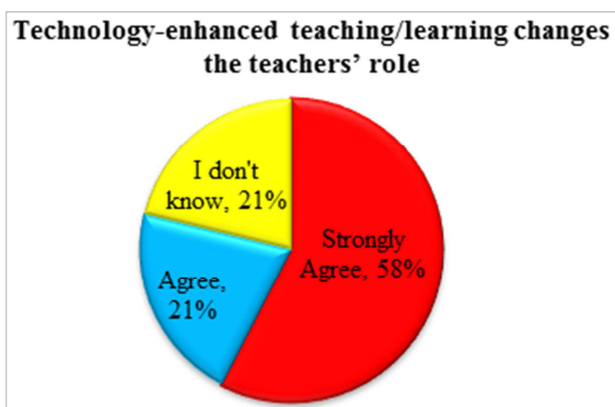
The 1<sup>st</sup> question was designed to determine the participants' perceptions about using technology as a teaching-learning tool in the classroom. The student respondents overwhelmingly answered (67+21) % underlining the strong support with reference to their ties and attitude to digital technology integration in the classroom teaching/learning. 12% of the students responded negatively due to lack of instructional technology skill and ignorance of technology application in learning process. In this respect, Harrison and Rainer (1992) point out those participants *with negative computer attitudes were less skilled in computer use and were therefore less likely to accept and adapt to technology*

than those with positive attitudes. Under such circumstances, it is suggestive to empower students' digital literacy as citizens of 21<sup>st</sup> century globe.



**Figure 2.** Does technology-mediated teaching-learning motivate you towards a new learning situation?

The 2<sup>nd</sup> question seeks to discern the range of efficacy and appropriateness of technology-mediated teaching-learning into EFL classroom driving students into a new teaching/learning situation. Here, according to students' opinion (79+15=94%), technology-enhanced teaching approach creates "new learning situation/space" which exposes their real perception and efficacy of the digital technology mediated teaching/learning portfolio. The result of this hypothesis infers EFL students' positive perceptions about technology-enhanced teaching practices. It assures that technology-supported learning situation captivates and motivates students' immersion in learning activities more than traditional pedagogy.



**Figure 3.** Do you notice "Technology-enhanced teaching/learning changes the teachers' mode of pedagogy?"

The 3<sup>rd</sup> question was designed to capture students' reflection regarding teachers' role in a technology-mediated mode of pedagogy. Data analysis reflects that technology-enhanced teaching drives the changing trajectory of the teachers' role from a *dominator of knowledge to a facilitator*. The student participants (58% + 21%= 79%) agreed that technology-integration in EFL classes facilitates higher degree of

teacher-student interaction and collaboration. Consequently, it develops learners' ample chances to work and reflect more than what they did in traditional lesson. So, technology-enhanced teaching practice enhances learners' autonomy of study and at the same time, reduces teacher-dominated lesson practices. On the other, presence of 21% students' unintelligibility of technology use in learning process draws a subtle line of attention to the education managers to mitigate students' concern to enhance 'digital literacy' as 21<sup>st</sup> century skills.

The 4<sup>th</sup> question explores students' self-reported assertion and perception about *technology-mediated language learning into English Language classroom*. Responses to this question are cited in the table below.

**Table 1.** What's your perception about technology-mediated language learning into English Language classroom?

Choices	Answer	Percentage (%)
a) Technology-enhanced EFL classes ensures higher degree of interaction	21	78
b) Technology-enhanced language teaching/learning strategies develop student-centred approach	20	74
c) Technology in teaching/learning is troublesome and time consuming	3	11
d) Technology use in classroom promotes students' learning autonomy and self-directed learning	24	89
e) I'm not sure as to integrate technology in my classes	4	15
f) Web-based materials expand students' knowledge while they are confined in the shell of textbooks	19	70

Participating students (average approx. 80%) as *digital migrants* avow that technology assisted classroom teaching practices contribute in perceptively to the EFL learners' autonomy catering to their real life career. Technology-integrated teaching accelerates learner-centred practices underlining: students' self-directed learning autonomy, promoting higher degree of teacher-student interaction as well as Web-based materials expand students' knowledge rescuing from the cell of merely textbooks. Apart from this, some students show their nuances of effectiveness of technology-integrated classes and they term it as a troublesome and time consuming technique. The stakeholders should take keen interest in the negative concern of the respondents to implement technology in EFL teaching/learning practices.

Finally, the 5<sup>th</sup> question offered the participants a free reign to spell out their own favourable or disfavourable perception or reflections regarding technology application in teaching. The responses reflect the real perceptions of the students representing an average rate of 77%. Most importantly, a contributing number of participants 85% suggested that EFL students training needs on "Instructional *technology & its*

uses in learning/teaching” and 81% of them expressed ennu that all classrooms are not wired with internet and cutting-age technology. Here, the author of this paper designed

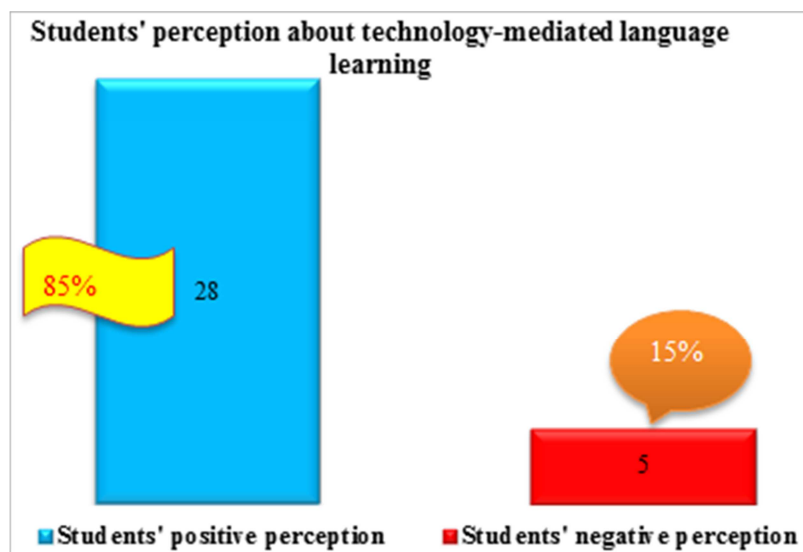
participants’ self-reported reflections into structured answers. These are delineated in the table below.

**Table 2.** Suggestions & Nuances from data analyses

Sl. No	Suggestions/Nuances	Respondents	Percentage (%)
1.	All classrooms are not wired with internet and cutting-age technology	22	81
2.	Sometimes technical problems hamper lesson progress.	17	63
3.	Classroom needs to be facilitated with smart technology for presenting and demonstrating lessons.	19	70
4.	Strong Internet facility needs in the classroom.	21	78
5.	EFL students training needs on “instructional technology & Its uses in learning/teaching”.	23	85

Source: data analysis of questionnaires

### 5.2. General Picture of Students’ Self-Reported Perceptions Based on Data Analysis in Graphical Representation



Source: Result of data analysis

**Figure 4.** Research survey data analysis summation

## 6. Discussion and Recommendations

This study through data analysis tried to sort out convergent and divergent issues concerning students’ perceptions and efficacy of technology application into EFL classroom. Research analysis highlights that 85% (average, Fig: 4) students show positive attitude confirming the strong support to technology-enhanced language teaching/learning and effectiveness of technology-mediated learning. Virtually, technology-supported learning portfolio has vitally altered the landscape of education engineering and the way of knowledge transmission from teaching staff to students. Surprisingly, data analytical findings bring to light that technology-enhanced teaching-learning situation captivates and motivates students’ immersion in learning more than traditional pedagogy. Importantly, data analysis demonstrated

that more or less, lack of digital literacy affects students’ belief and perception towards bringing technology into classroom. Additionally, the data analysis showed the following vital points of hypotheses:

### 6.1. Issues of Concern and Challenges

Some realistic problems exacerbate the challenge of integrating digital technology in teaching/learning and baffle the effectiveness of emerging new mode of learning. The issues of challenges are:

I. *Students’ Lack of Digital Literacy:*

15% (average, Fig: 4) students show negative perception towards technology-mediated teaching/learning due to lack of *digital literacy* as well as ignorance of technology application in classroom & their private learning scenario.

II. *Technical hazards:*

Technical problems baffle the technology-supported classroom portfolio and affect students' belief and perception adversely.

### III. *Inadequacy of Classroom tools:*

81% of the participants expressed *ennui* that all language classrooms are not wired with internet and cutting-age technology (Students' Table-2). It also requires classroom to be facilitated with *Smart technology* for presenting and demonstrating lessons. Obviously, inadequate technology-supported tools in the classroom can seriously limit the use of it by teachers and students. Limited resources definitely result adversely in technology-enhanced activity.

### IV. *Cost expensive machinery:*

Technology-supported hardware, software, Net connectivity, audio visual aids, teaching aids and other accessories are highly expensive and demand huge funds. It increases challenges to the administration and government so far as the financial affairs are concerned.

## 6.2. Issues of Viable Suggestion

### I. *Needs Digital literacy training:*

To empower students' digital literacy skill and knowledge needs training on technology application in learning/teaching. If students are skilled in technology mediated learning, they will be motivated and it will enhance their 21<sup>st</sup> century qualifications.

### II. *Learning-technology installed classroom:*

Immediately, language classrooms are to be wired with internet and cutting-age technologies like computers, interactive white board, internet connectivity, TV and so on. Moreover, university administration should develop a full-fledged instructional technology based lab with Internet facility.

### III. *Imparting Technology skill to change Students' perception:*

Participants with negative perceptions were less skilled in technology use. The successful use and integration of technology into classroom largely depends on students' attitudes and beliefs. Changing individuals' negative perceptions into positive is an essential need to increase literacy skills. Accordingly, "Such attitudes are developed when (they) are sufficiently comfortable with technology and are knowledgeable about its use" (as cited in Khan, Hasan, & Clement, 2012).

### IV. *Troubleshooting management:*

Technical hazards and problems can be overcome through troubleshooting management by providing technical expert/support. Nobody can get benefit from technology if they don't have the skills to apply it properly.

### V. *Cost effective technology:*

It is vitally suggestive to manage cost effective technologies with a view to reducing the expenses. It will enhance the smooth process of technology-mediated teaching/learning in education.

## 7. Conclusion

This article contributes significantly to the effective and successful language learning enhancement program by investigating students' perception and efficacy of technology-enhanced learning management based on data analysis and research findings. The findings reflected that EFL students demonstrated positive perception of technology adoption into their learning practices and it affects their learning situation through captivating and motivating into learning engagement more than traditional pedagogy. Interestingly, 80% of the participants believe mediated teaching accelerates task-based learner-centric practices enhancing self-directed autonomy of study; facilitating higher degree of teacher-student interaction promoting collaborative learning.

Technology-regulated pedagogy affects the teachers' role from a dominator of knowledge to a facilitator. It replaces teacher-dominated lesson practices to learner-centric class activities. The students identified technology as an effective educational tool that motivates them into a new situation and maximizes language learning acquisition.

To orient and maximize the effectiveness of cutting-age technologies in classroom cautiously draws some important points and issues that impact on students' perception and efficacy of technology-facilitated teaching/learning. These are:

I). It is essential to install adequate Learning-technology in the classroom with Internet facility because inadequate classroom technologies affect students' perception adversely. Students need technical training on how to apply technology into their teaching/learning practices. In this regard Hall and Elliott point out "The rate at which most institutions are able to integrate new technology into teaching process is primarily dependant on resources and willingness ... to adopt new technology" (Hall & Elliott, 2003). In fact, the effectiveness of technology-mediated teaching/learning enhances if the proper infrastructure or connectivity is readily available.

II). Cost-effective cutting-age technologies are to be set up with a view to reducing financial expenses. To enhance technology-mediated classroom learning, technical hazards and disturbances need to be resolved by providing expert technician.

It is, after all, expected that by adapting the recommendations aforementioned, an effective technologically driven teaching model can create a new horizon in technology-enhanced learning domain to facilitate students to learn and to operate technology in the light of their needs. In addition, the findings of the present paper will shed useful light on the ELT experts, ESL/EFL teachers, students, curriculum designers and researchers who dream of a successful technology-mediated teaching/learning podium.

## Acknowledgement

The author of this study expresses his thanks and gratitude to the participants who attended the research survey and rendered their voluntary suggestions and opinions. He also extended his special thanks to Jazan University, Jazan, Saudi Arabia for co-operation to administer this investigation.

## Appendix-1

Dear Participant, *this survey is designed to "Examine Students' Perception & Efficacy of using Technology in Teaching English". Students' perceptions and reflections are vital for academic innovations, and effectiveness. Sincerity of your answers is highly important for accuracy of the research. I appreciate your cooperation with thanks.*

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### Students' Questionnaire

*Put a tick (√) mark against the options that reflect best your opinion.*

1. *Do you like technology as a teaching-learning tool in your classroom?*

a) Yes                      b) Partially                      c) Not at all

2. *Does technology-mediated teaching-learning motivate you towards a new learning situation?*

a) Yes                      b) Partially                      c) Not at all

3. *Do you notice "Technology-enhanced teaching/learning changes the teachers' mode of pedagogy?"*

a) Strongly agree      b) Partially agree      c) I don't know

4. *What's your perception about technology-enhanced English Language classroom? (Put √ (tick) mark)*

- 
- a) Technology-supported teaching-learning classes ensures higher degree of interaction  
 b) Technology-integration strategies develop student-centred approach  
 c) Technology-integrated teaching-learning is a
- 

troublesome and time consuming

d) Technology-integrated teaching-learning promotes students' learning autonomy and self-directed learning

e) I'm not sure as to integrate technology in my classes

f) Web-based materials expand students' knowledge while they are confined in the shell of textbooks

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5. Please write down here additional suggestion(s) and reflections if you have.

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