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Integration of ICT in English Language Teaching and Learning: A Comprehensive Literature Review

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Abstract

The study undertaken on the Use of Information and Communication Technology (ICT) in English Language Teaching and Learning- a comprehensive literature review examines several areas of ICT integration, including ICT tools, impediments and difficulties to ICT integration, teacher opinions and perspectives on ICT, and the advantages and benefits of ICT integration in teaching and learning. The elements influencing pre-service and in-service teachers' attitudes, perspectives, and confidence in integrating ICT are also examined and studied. This study goes on to analyse the gaps in the studies and proposes a theoretical framework for future research in Mithila.

Keywords: ICT, CALL, ICT usage, hurdles and solutions, instructors' attitudes and ideas about using ICT

1. Introduction

Around the world, information and communication technology has taken over teaching and learning (Selinger, 2001c). To improve teaching and learning possibilities, ICT tools and techniques are deployed, particularly remote learning resources. Integration of ICT equips students for real-world issues (Lowther et al., 2008, Weert & Tatnall, 2005). Technological advancements have ushered in an information revolution that has revolutionised people's lives

(Pachler, 2001, p. 15). Castro Sánchez & Alemán (2011) claim that the incorporation of ICT has made the classroom environment more learner-centered.

The goal of this review is to find well-documented sources in published material. The following research issues, concentrating primarily on the higher education system, are discussed in several papers utilised in this review:

1. How well is ICT included into English language teaching?
2. What are the major hurdles and impediments to ICT integration?
3. What are the advantages and advantages of integrating ICT?

To assess the ideas and research approaches studying ICT integration into English language teaching and learning, a comprehensive literature review was undertaken. The majority of the research examined used qualitative approach. In the investigations under consideration, many conceptual and theoretical frameworks were used. This study covers a wide range of topics connected to English language teaching and learning.

2. Methodology for the Review of Literature

Researchers examined prior findings to understand the procedures used in a complete literature study. The foundation for furthering research and knowledge is an effective review. It aided in the development of theoretical research in the field of study. The writings relating to ICT integration were searched, selected, scanned, read, and analysed using a structured technique recommended by Webster and Watson. Published papers and books were used as sources of information. For this review, a total of 23 published papers were used. The papers were chosen in the first stage following a read of the abstract and introduction of each and every work under consideration. A thorough examination of all papers and books has helped in the classification of publications that answered the research issues. All of the works in this review were released in the previous two decades, from 2003 to 2022.

The study procedures and designs used in all of the publications included in the literature review are discussed in this document. The researchers used a combination of qualitative approach and methodology.

The content analysis study design was employed to perform the research in seven articles. Five separate research publications used survey analysis as their study design. A descriptive-interpretive technique was used by one researcher, whereas a hypothetical study was used by another.

3. Teachers' Perceptions of ICT and Their Impact

ICT has three types of influence, according to Albirini (2006): emotion, cognition, and behaviour. Although ICT deployment is slower in Asian nations, it is anticipated to assist learners in preparing for future high-tech workplaces (Huong Thi Bao Dinh, 2015). Teachers' willingness to use ICT is dependent on their willingness (BECTA, 2004; Ertmer et al., 1999; Groff & Mouza, 2008; Hew & Brush, 2007; Mumtaz, 2000; Zhao et al., 2002), whereas Huong Thi Bao Dinh (2015) believes that teachers' beliefs and attitudes, as well as their knowledge and skills, are the most important factors in using ICT in EL teaching (Saye, 1998). Lessons become more fascinating and motivational for students when they use ICT. It allows instructors and students to communicate more easily (Huong Thi Bao Dinh, 2015).

Houng's research confirmed that EL teachers' pre-knowledge in the second decade of the twentieth century, as compared to their knowledge a decade earlier, aided them in integrating ICT with a positive attitude, and that there is less need to persuade EL teachers to use ICT; rather, we must find ways to apply their knowledge in ICT integration. Science instructors find ICT valuable in their teaching, according to Steiner and Mendelovitch (2016), notably in improving students' focus and active learning.

ICT integration also meets the demands of all students at the same time since these tools may be modified to the learners' speed, skill level, and needs. However, these researchers believe that they must employ these technologies on a regular basis. These two studies also discovered that the majority of scientific instructors utilise ICT to help them improve their teaching. It is necessary to include ICT into instructional paradigms in order to improve them (Graham et al., 2009; Guzey & Roehrig, 2009; McCrory, 2008). The majority of teachers only utilise ICT tools in restricted ways to concretize specific representations and simulations.

The goal of this project is for instructors to use ICT to guide and support students. Most instructors embrace ICT integration because it increases relevance and simulates learning, according to Steiner and Mendelovitch (2016) and Huong Thi Bao Dinh (2015). It is extremely beneficial in creating relationships between the teacher and the pupils. Teaching and learning have benefited from the use of audio-visual aids. Steiner and Mendelovitch discovered that virtual learning for scientific students saves time and is more dependable (2016). The use of ICT as a frontal teaching tool, the integration of ICT with frontal education, and ICT as the centre of pedagogy are all discussed in this paper.

This study looked at three areas: institutional strategic e-learning implementation, faculty members and e-learning, and the influence of e-learning on students. The researchers discovered that faculty members utilised ICT seldom and that their use was confined to online browsing, search engines, and word processing. According to this survey, the most significant barriers to incorporating ICT were a lack of confidence and a lack of expertise.

English language teachers utilise ICT in general for powerpoint and word processing, as well as language dictionaries and internet movies, according to Huong Thi Bao Dinh (2015). ICT was used sparingly for lectures and exercises, as well as web-based activities. Another issue they discovered was that the majority of the faculty had never used any online communication tool or channel to aid their teaching or students' learning, despite using ICT for email communication. Furthermore, according to Huong Thi Bao Dinh, most EFL instructors had strong understanding of how to modify ICT tools to their needs, but they were picky about which programmes they used (Jordan, 2011, p. 16).

Teachers had the most possessions, according to the study, but students had relatively restricted access to ICT equipment at the institution. Unlike prior studies (BECTA, 2004; Ertmer et al., 1999; Groff & Mouza, 2008; Hew & Brush, 2007; Mumtaz, 2000; Zhao et al., 2002), this study revealed that the teacher is the most essential component in incorporating ICT in education. This research also discovered that EL instructors' views on the benefits of ICT in the classroom differ from Lam's (2000) and Ma and Yuen's (2002) findings, but are comparable to Dinh's (2009), Dang's (2014), Li and Ni's (2011), Park and Son's (2009), and Saglam and Sert's (2012) studies. Teachers' Technological and Pedagogical Content Knowledge (TPACK) was also shown to have a favourable link with their usage of ICT in this study. Huong Thi Bao Dinh (2015) also discovered that the TPACK was more essential for conceptualising the teachers' abilities and knowledge, whereas the technical competencies of the instructors were given less weight.

According to Md. Shah and Empungan (2015), attitudes regarding ICT use reflect instructors' and students' overall emotions towards ICT and related activities (Smith, Caputi, & Rawstone, 2000; Abedalaziz, Sharir & Chin, 2013). According to the researchers, teachers should be encouraged to use ICT in their classes (Joseph, 2013). This study, like others before it, found that instructors had favourable attitudes about ICT integration. There is a need to relate ICT use to instructors' abilities as well as their preferred method of use.

Gilakjani (2012) discovered that giving teachers easy access to ICT in the classroom boosts their confidence by giving them additional chances (Hogaboam-Gray & Hannay, 1999). Before forcing teachers to adopt ICT, it is necessary to persuade as well as adequately train them. According to the researcher, instructors' primary attention should be on students, and teachers should be well aware of the influence of ICT on students' learning (Higgins & Moseley, 2001). Abbas agrees with Lam (2002) that instructors should utilise ICT as an educational tool, not just for drill and practise, to help students learn more effectively. ICT use was linked by some instructors to the integration of content needed to understand cultural difficulties.

Abbas agrees with Saye (1998) that the amount and manner of ICT integration are determined by teachers' views. Teachers' training and desire to change, according to Abbas and Vannatta and Fordham (2004), characterise their usage of ICT in the classroom. In Shulham's (1987) concept

of curricular knowledge, Abbas sees a necessity to add ICT influence. He claims that instructors must have a thorough understanding of ICT in order to modify ICT tools to match the demands of their students. He also expresses worry when he discovers that despite the rising number of technologies, Cuban (2001); Ertmer, (2005); Hew and Brush (2007) have identified a severe lack in ICT integration (Vrasidas & McIsaac, 2001).

He relates this flaw to pre-service teacher preparation programmes that are either irrelevant or inadequate. According to his findings, well-designed and technology-oriented teacher training programmes are needed (Hasselbring et al., 2000; Howard, McGee, Schwartz, & Purcell, 2000; Vannatta & Beyerbach, 2000). According to his findings, teacher preparation programmes must adapt to future requirements and expectations, which will likely increase the relationship between technology integration and educational changes.

Qureshi, Nawaz, and Khan discovered that users' views were the most important element in shaping instructors' beliefs and attitudes about ICT integration. User satisfaction is determined by their views on educational technology and how they are used. The chi square test was used by Yadollahi and Rahimi (2011) to determine teachers' opinions of ICT and its influence on teaching and learning. This study discovered a link between the type of ICT tool used to teach language skills and the type of language skills being taught. For teaching oral skills, the majority of the instructors employed ICT resources (Yang & Huang, 2008).

This study discovered a link between technology use and the number of years a teacher has been in the classroom, but no link between gender and ICT use. Prensky found that experienced instructors are less inclined to incorporate ICT, but new teachers are more eager to do so (2001). Teachers who had their own computers were more hesitant to include ICT.

The study also discovered a conflict between the current educational environment and the demand for ICT integration. This conflict was blamed on an out-of-date EL curriculum that needs to be updated right now. Another essential element that EL instructors consider when it comes to ICT integration is the time limitation, since teachers must complete the course on time. This makes it difficult for them to integrate ICT effectively and for a variety of purposes. Teachers in some institutions had restricted access to the internet, thus the researchers suggested raising teacher knowledge of new ICT tools, professional development, and the use of ICT tools in teaching various language skills.

Kreutz and Rhodin (2015) investigated the influence of ICT on students. They discovered that computers enliven learning by fostering learners' interest and drive, as well as fostering independent and individualised learning (Jedeskogs, 1998; Frydrychova Klimova, & Poulova, 2014). Teachers and parents both motivate students, according to the research (Dörnyei, 2001; Pintrich et al., 1991; Willian & Burden, 1997). They discovered that ICT aids learning by

allowing for differentiation and individualization (Volman, Admiraal, & ten Dam, 2011). When teachers utilise ICT, students love learning more, but they enjoy learning even more when they have greater independence in their usage of ICT. According to their findings, ICT integration is triggered by students' motivation.

When students were taught writing using online blogs and wikis, Kilickaya and Seferoglu discovered that CALL-based resources piqued their interest. This encouraged students to participate actively in the learning process. Pre-service teachers used a variety of CALL-based tools to supplement their learning, including listening websites (Elllo and esl-lab), videos (YouTube), digital story-telling Dokeos, blogs and wikis (Blogger and PBworks), WiziQ, Concordance (COCA and Jukuu), online dictionaries (Cambridge, Macmillan, and Longman Dictionary of Contemporary English), authoring tools (Hot Potatoes, QuizFaber These internet materials were utilised for examinations by some of the lecturers. These tools aided students in honing their language abilities.

The learners' restricted access to these tools was the only issue with ICT integration. Continuous online learning courses were used to encourage students to develop their ICT abilities. Alev (2013) discovered three types of ICT integration attitudes: fear, appreciation and interest, and usefulness. In his research, he discovered apprehension about ICT among student-teachers, which led to a phobia of technology. However, continual use of technology sparked considerable interest in ICT usage, with many students and teachers seeing it as a vital resource for improving teaching and learning, even if ICT use was a waste of teaching and learning time for a small number of students and instructors. Student-teachers were inspired to use ICT in their classrooms via ongoing teacher training programmes and peer inspections.

4. Challenges and Barriers to ICT Integration

Pre-service and in-service instructors must integrate ICT into their teaching and learning in order to keep up with rapidly changing educational technology. Institutions are implementing ongoing professional development programmes to help instructors enhance their ICT abilities, but there are still certain issues that require effective planning and improvement tactics. External barriers, such as a lack of time and resources, limited technical support, and unattended technical problems, are cited by Al-Senaidi, Lin, and Poirot (2009), while internal barriers, such as a lack of confidence, a conservative attitude, and a lack of knowledge of the benefits of technology, are cited by Ertmer (1999); Snoeyink and Ertmer (2001).

ICT integration and potential obstacles in pre-service teacher training programmes were explored by Alev (2013). Poor access to ICT tools, big classrooms, and a lack of pedagogical and technical assistance were among the key issues discovered. Class management, technical issues, insufficient ICT skills of instructors and learners, and teachers' conservative attitudes toward ICT

use were identified as additional hurdles in the successful application of ICT in his study. The survey discovered a shocking lack of ICT integration in teacher education programmes (Maddux, 1994). Another key impediment to ICT integration was the limited usage of ICT tools, which was confined to web surfing and word processing. Lack of time to study the course and utilise ICT effectively was one of the most difficult obstacles for ICT integration.

Another hurdle to integrating ICT into teacher training programmes was discovered to be disagreements between teachers and student-teachers. The majority of the students had no choice but to follow the trainer, which was a rare usage of ICT.

Teachers' confidence, access to ICT, incorrect training, a lack of time to correctly utilise technology, and technical problems were identified as important drivers of ICT integration by Al-Senaidi, Lin, and Poirot (2009) in their research "Barriers to embracing technology for teaching and learning" (Becta, 2004). These researchers also discovered that instructors who were least prepared to accept change frequently failed to incorporate ICT to address the difficulties. These teachers were unable to incorporate technology into their lessons because they were unaware of the benefits of doing so. Gender concerns also impede ICT integration, according to Al-Senaidi, Lin, and Poirot (2009), who concur with Becta (2004), who found that male instructors were more willing to employ technology than female teachers. Becta (2004) also found that female instructors were more anxious than male teachers.

The researchers discovered specific hurdles at two separate levels, individual and institutional, using Veen's (1993) classification of ICT barriers. Individual impediments such as a lack of time and access to technology, technical issues, and low quality ICT training affect teachers on a personal level. When they watched instructors at the institutional level, they found that a lack of time and confidence, a conventional approach to teaching, and a lack of awareness of the benefits of technology were all prevalent impediments (Veen, 1993). Time constraints are a typical stumbling block at both the individual and institutional levels.

Al-Senaidi, Lin, and Poirot (2009) discovered a direct and tight association between several obstacles, which Ermter had first seen (1999). Teachers, for example, are likely to lose faith in ICT integration if they have restricted access to technology, suffer technical issues, or are not adequately taught in technology. Though ICT integration is yielding encouraging outcomes in higher education (Al Khawaldi, 2000), adequate implementation and extensive teacher training are still needed. Poorly designed software, uncertainty about the beneficial impact and advantages of technology, fear of technology, and bad staff professional development are all reasons for teachers' aversion to using technology in the classroom.

Huong Thi Bao Dinh (2015) investigated the challenges to ICT integration identified by Ertmer, Addison, Lane, Ross, and Woods (Ertmer, Addison, Lane, Ross, and Woods, 1999; BECTA,

2004). The majority of the impediments, according to the study, were external to the professors. Dinh discovered a lack of I.T. instructors' resources, obsolete software, a lack of time for ICT-based lesson preparation, and insufficient technical and administrative support (Ertmer et al., 1999, p. 54). Dinh went on to look at the inherent hurdles that instructors face, as discovered by Ertmer et al (1999). Attitudes and views about technology, ICT-integrated education, and a lack of motivation to adapt are all examples of these hurdles (Semple, 2000; Yocum, 1996). The inherent hurdles were more difficult to overcome than the external ones (BECTA, 2004; Ertmer el al., 1999; Park & Son, 2009). Teachers' use of technology is frequently hampered by inadequate classroom management. This influence differed depending on instructors' attitudes toward technology, i.e., whether they used technology to complement or enhance their instruction.

BECTA (2004) investigated ICT integration hurdles at a deep level. Lack of access to resources is further broken down into hardware, poor resource use, obsolete software, and instructors' personal computer access (Shin & Son, 2007; Yutdhana, 2004). Teachers' resistance to change is said to be owing to unfamiliar equipment and inadequate teacher preparation. Huong Thi Bao Dinh agreed with BECTA (2004) that teachers' lack of confidence was due to poor access to technology both in the classroom and at home (Parilah Md. Shah, 2015); poor knowledge of how to deal with technical problems; fear of making mistakes; and poor ICT skills of teachers caused by a lack of training for both technology and pedagogy, time constraints, negative attitudes of colleagues toward ICT integration, time required to learn ICT use and I.T. certificate (Salehi & Salehi, 2013). Poor access to technology is caused by a lack of hardware and improper software (BECTA, 2004, p. 22; Sanders & Morrison, 2001).

In their study, Hew and Brush (2007) discovered the same barriers and causes, categorising them into six categories: resources, institution, subject culture, attitudes and beliefs, knowledge and skills, and assessment. However, they believe that lack of time is not a barrier because teachers' ability to use technology in the classroom is (Mumtaz, 2000; Nyambane and Nzuki, 2014). In his results, Huong Thi Bao Dinh (2015) mentions Hew and Brush (2007), who link teachers' views and attitudes to a lack of technology integration in the classroom.

Yildiz (2007) came to similar conclusions about barriers to ICT integration, but he divided them into three categories: physical (poor hardware and software, limited infrastructure resources, and poor internet connection), educational (teacher resistance and doubts about the benefits of ICT integration), and philosophical (administration misconceptions about ICT integration and its outcomes). He goes on to say that purchasing computers is not a guarantee of effective ICT-integrated teaching and learning since the institution must also spend in teacher training, technological personnel, and ongoing I.T. support and upgrades. A lack of investment in these areas results in a failure to meet the targeted goals.

Another study divided ICT inhibitors into four categories: the school context, the teacher innovator, the project innovator, and the student operator (Groff & Mouza, 2008). The researchers found that if teachers were adequately taught and practical steps were implemented by administration, instructors could immediately overcome these impediments. Another significant stumbling block is a lack of peer support (Groff & Mouza, 2008). Hew and Brush (2007) concurred with Groff and Mouza (2008) that students' attitudes and views, as well as a lack of technological expertise and engagement, were hurdles to ICT integration. Mumtaz (200) argued that if the institution does not provide adequate time for instructors to study and utilise ICT, teachers would have a negative attitude toward ICT-integrated instruction. Teachers' excitement for ICT use was shown to be a barrier to their interest in studying technology, according to the study.

All obstacles, according to Nyambane and Nzuki (2014), are interrelated. Lack of time, for example, limits ICT use (Abu Jaber & Osman, 1996; Al Khawaldi, 2000; Al Musawi, 2002; Bialo & Soloman, 1997; Boyd, 1997; Gibson & Oberg, 2004; Kook, 1997; Wood et al., 2005; Vrasidas & Glass, 2005); and lack of proper teacher training limits teachers' use of available resources (Abu Jaber & Osman, 1996; Al Khawald Teachers may be unable to adapt to change if they lack confidence, competence, and access to technology, according to these researchers. Teachers' age and seniority, according to Steiner and Mendelovitch (2016), are severe impediments (Hung & Hsu, 2007). They discovered that older instructors are less ready to adapt to change by incorporating ICT into their classrooms. Teachers who did not have access to the internet were less receptive to ICT inclusion (Beck, 1999). ICT integration might cause dread in teachers' thoughts, according to Steiner and Mendelovitch (2016). (Magen-Nagar & Peled, 2012).

Many researchers (e.g., Wood et al., 2005) have identified inadequate access to technology and the internet as a significant impediment. In their research, Leliani, Agustiani, and Maryani (2005) agreed with Robinson (2003) that instructors' personal factors such as age, gender, and teaching experience obstruct ICT integration. They also discovered that female instructors are less willing to utilise ICT due to a lack of access, abilities, and desire (Volman & van Eck, 2001). According to certain research on teacher experience and age, more experienced and older instructors were not hesitant to incorporate ICT in their teaching (Van Braak et al., 2004), but favoured conventional methods of instruction.

Teachers' lack of computer skills (Bingimals, 2009), lack of confidence (Robinson, 2003; Snoeyink & Ertmer, 2001), and readiness to incorporate ICT into their classrooms (Inan & Lowther, 2010) were also identified to be major barriers. Many teacher preparation programmes, according to Leliani, Agustiani, and Maryani (2005), do not prepare instructors for effective use of ICT in the classroom. Fahad Salim Al-Adi discovered in his research that instructors were

overworked and under pressure to finish the book within a certain time frame, preventing them from using ICT in their classrooms. According to Watson (2006), the majority of instructors are not hesitant to develop their ICT abilities.

Some barriers to ICT integration include a lack of infrastructure (Gibson & Oberg, 2004; Hill et al., 2005; Martins et al., 2004; Yutdhana, 2004), a lack of time (Gibson & Oberg, 2004), insufficient and unsatisfactory pre-service and in-service teacher training (Al-Huneini, 2006), and motivational support from management (Martins et al., 2004).

According to Opati (2013), the uneven ratio of students to pupils hampered appropriate ICT utilisation. Only those instructors who had no other choice but to include ICT into their curriculum employed technology. The researcher discovered no usage of ICT in teaching and learning in specific topics' curriculum. The pupils who were utilising technology said they utilised it for their homework at home. Opati agrees with Clark (1983) and Weick (2000) that ICT integration was hampered by a lack of inter-faculty collaboration and assistance. Students' lack of accessibility, according to Kreutz and Rhodin (2016), leads to a lack of confidence, low self-esteem, and anxiety when using ICT (Dörnyei, 2001; Pintrich et al., 1991).

5. Benefits and Advantages of ICT Integration

Education is being shaped in novel ways by technology. Teachers and students may use the internet to improve their language abilities in a variety of ways (Houcine, 2011). Learning and teaching have been made much easier thanks to a variety of software and programmes. Teachers no longer have authority over the classroom; instead, the focus has shifted to the students. Virtual reality and artificial intelligence technology have just recently been applied into teaching and learning.

In his research, Isisag (2012) discovered that technology serves as a repository of knowledge and information for both instructors and students. It assists students and instructors in utilising internet content and aligning it with their academic requirements. Another significant benefit of technology is that it allows students and teachers to combine fundamental abilities and apply them to their individual teachings. For example, to educate reading and/or writing, images and text can be combined (Padurean & Margan, 2009). Houcine (2011) found that incorporating ICT into classrooms increases instructors' enthusiasm in teaching and increases student engagement. Korkut also discovered that using technology allows teachers to concentrate on certain areas of a course, such as vocabulary, grammar, and translation. Unlike textbooks, where teachers are obligated to follow the written content material, technology allows teachers to use a variety of materials (Padurean & Margan, 2009).

The function of technology in the feedback process was investigated by Korkut (2012). According to the study, technology has aided teachers in adapting their classes to match the requirements of their students. Web technology allows students to learn from one another. Korkut (2012) concurs with Kumar (2008) that technology has enabled instructors to provide customised feedback and advice to students. It has improved teaching and learning in a variety of ways. Kumar also discovered that integrating ICT is the most effective technique to develop language communication skills (McLuhan, 2012).

Korkut (2012) goes on to say that the internet has made language learning feasible without the need for travel. Learners may now learn from the comfort of their own homes. In the past, time constraints have always been a key learning obstacle. The situation has improved as a result of technological advancements. Learners may now access any lesson at any time and from any location. Learners may now repeat any subject until they have mastered it thanks to online technology. Unlike traditional learning systems, ICT integrated education systems are available 24 hours a day, seven days a week. By removing time and location barriers, ICT integration has improved teaching and learning methods.

With the assistance of technological integration, knowledge, information, audio, video, and even greater data may now be shared. Collaborative writing is another another technological marvel in education. In this approach, technology has aided in the creation of an academic atmosphere in which authentic content is integrated into course materials (Padurean & Margan, 2009). Padurean & Margan, 2009; Rozgiene, Medvedeva, & Straková, 2008; Padurean & Margan, 2009; Rozgiene, Medvedeva, & Straková, 2008; Rozgiene, Medvedeva, & Straková, 2008; Rozgiene, Medvedeva, & Straková, 2008; Rozgiene, Medvedeva, & Straková, 2008; Rozg Isisag (2012) summarises Houcine (2011)'s findings and explains the benefits of ICT.

Learners are motivated and engaged when they use technology. ICT integration gives students a sense of independence in their study. Above all, ICT integration aids students in achieving their course objectives (Kirubahar, Subashini, & Santhi, 2011). The educational environment has been transformed by technology, and collaborative learning has become a reality (Kumar & Tammelin, 2008).

Isisag (2012) concurs with Salehi & Salehi (2012) that participating in online workshops, seminars, and symposiums, as well as training sessions, has aided instructors in improving their abilities. Blended learning encourages students and instructors to work together to learn. Teachers can develop their talents in a variety of ways. Mullamaa (2010) discovered that incorporating technology into the classroom has enhanced students' motivation as they learn through diverse instructional styles and teachers use a variety of genuine assessment methods (Houcine, 2011). Korkut agrees with Ramirez (2012) that Web 2.0 tools have enabled free access to online libraries and sources for students (Houcine, 2011). They may use web 2.0 technologies

to generate and create new content, which they can then share with their peers (Luan et al., 2005).

Leliani, Agustiani, and Maryani (2014) conducted study on a variety of online technologies, including YouTube, Facebook, the internet, cellphones, and other portable devices. They found the majority of them to be really valuable for both teachers and learners. Some tools assist teachers in the development and design of a variety of language-learning activities. Encouragement and motivation are instilled in learners through these actions (Davis, 2006). ICT technologies, according to the researchers, provide material that meets the demands of current learners. Both teachers and students benefit from current information and news (Bell, 2005).

According to Houcine (2011), technology has enabled teachers to include fundamental skills such as photos, video and audio clips, texts, and other media into their classes. This has aided learners in obtaining current information in an entertaining manner. Pronunciation has always been a problem for second language learners, but owing to technology, several online soft goods and programmes, such as Google Translation, have remedied the problem.

Al-Adi agrees with Godwin-Jones (2003) and Salaberry (2001) that technology improves student-to-student and student-to-teacher relations. By allowing for quick learning and rapid sharing, technology has removed the old limits of limited access to content and inadequate sharing (Luan et al., 2005). Learner motivation and engagement have increased as a result of online teaching and learning, resulting in higher knowledge (Suh, 2005). Fahad discovered that technology exposes instructors and students to a variety of cultures and backgrounds, broadening their knowledge of faraway civilizations (Lock & Redmond, 2006). ICT integration has raised the importance of electronic literacy abilities, and as a result, instructors and students are using the internet for more knowledge and relevant content.

In the sphere of study, the use of the internet has enhanced critical thinking and knowledge. Prior to the invention of technology, finding dependable and legitimate information was a difficult task (Shetzer & Warschauer, 2000). Teachers and students can use the internet to get their work published in digital format (Lee, 2000; Singhal, 1997). Plagiarism tools, according to Fahad Salim Al-Adi, have boosted creativity and innovation in material development and invention. Archival technology has created a platform for documenting, reflecting on, and improving one's work. It has improved the precision and clarity of written and spoken communication (Greenfield, 2003; Jepson, 2005). Some of the most significant difficulties of race, gender, disability, accent, and social class have been reduced to a bare minimum thanks to technological advancements (Shetzer & Warschauer, 2000). Fahad Salim Al-Adi agrees with Coppola (2004) that educational changes require the use of technology.

6. Future Research Directions and the Scope for ICT Integration in Teaching and Learning

ICT integration alters traditional teaching and learning methods. It encourages instructors and students to use technology to change instructional materials and practises to match the demands of the day (Reid, 2002). Learners will be able to accomplish learning goals if ICT is linked with a variety of teaching and learning methods and strategies, particularly constructive ways. Future scholars will need to investigate the challenges to ICT integration and devise practical solutions that will lead to the use of technology in teaching and learning.

To concentrate teachers' attitudes, hurdles to ICT integration, and advantages of this integration, extensive study is necessary. It is necessary to investigate the function of ICT at the national level. Higher education institutions have been the topic of very limited study. Vocational training institutes, both public and private, private colleges, public Applied Sciences and Technology colleges, and others are using cutting-edge educational technology such as smart boards, Moodle, and other tools, but no noteworthy research has been conducted to examine how these institutions use technology. This study will undoubtedly increase the effect and understanding of technology in the educational system.

The outcomes of the study are expected to give concrete recommendations and instructions for future scholars. These findings are almost certain to aid institutions and concerned bodies in developing curriculum for teachers that incorporates the most ICT possible. It will also assist institutions in preparing instructors with a broad understanding of the use of technology in teaching and learning. This study might also look into the correlation between instructors' views and practises when it comes to employing technology in their student-teacher programmes.

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