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MUTHMAINNAH

FIXELS AND PEDAGOGY FROM CHALKBOARD TO SMARTBOARDS

TRACING THE IMPACT OF TECHNOLOGY ON LANGUAGE EDUCATION

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FOREWORD

In the ever-evolving landscape of education, the integration of technology has become more than a mere augmentation—it's a transformative force shaping the very essence of pedagogy. "Fixels and Pedagogy: From Chalkboard to Smartboards" embarks on a compelling journey, tracing the profound impact of technology on language education.

Language, as the cornerstone of human interaction and understanding, holds a pivotal role in our societies. Its mastery is not only instrumental for communication but also for cultural exchange, cognitive development, and global citizenship. Thus, the methods by which we teach language are of paramount importance, influencing not just individual learners, but the fabric of our interconnected world.

The transition from the traditional chalkboard to the dynamic smartboard marks a seismic shift in educational paradigms. The chalkboard, with its simplicity and tangible immediacy, has long been an emblem of classrooms worldwide. It represented a space where knowledge was imparted through the rhythmic symphony of chalk meeting slate, fostering an intimate connection between teacher and learner.

Enter the smartboard—a digital canvas that revolutionized the way we engage with content, interact with information, and collaborate in learning environments. With its touch-sensitive surface and multimedia capabilities, the smartboard transcends the constraints of the physical classroom, ushering in an era of interactive and immersive

learning experiences.

Yet, amidst this technological revolution, educators face a myriad of challenges and opportunities. The integration of smartboards into language education necessitates a reimagining of traditional teaching methodologies. Educators must navigate the delicate balance between leveraging technology to enhance learning outcomes and preserving the human element of education—the nuanced interactions, the personalized feedback, and the empathetic understanding that fosters genuine growth.

"Fixels and Pedagogy: From Chalkboard to Smartboards" serves as a beacon of insight and inspiration in this ever-changing landscape. Through meticulous research and illuminating case studies, this book traces the trajectory of technology's impact on language education, offering practical strategies for harnessing its potential while mitigating its pitfalls.

As we delve into the pages of this book, we are reminded of the profound responsibility we bear as educators—to cultivate not just linguistic proficiency, but also critical thinking skills, cultural empathy, and digital literacy. "Fixels and Pedagogy" invites us to embrace technology as a catalyst for innovation, to reimagine the possibilities of language education in the digital age, and to empower learners to thrive in an increasingly interconnected world.

Curup, February 12, 2024

Authors

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A. INTRODUCTION

ICT (Data and Communication Innovation) is presently utilized in nearly all zones of life, counting instruction. Computer innovation has gotten to be exceptionally vital in instruction and the government has consolidated ICT into one of the instructive educational module in Indonesia. His utilize of ICT in instruction has as of late started to address potential and critical propels in dialect learning. It has ended up an critical point within the world of instruction and is utilized from preschool to college to encourage the educating and learning prepare of understudies and instructors. ICT has been advanced as a possibly capable apparatus for instructive alter and change. Computers play an vital part within the learning prepare, particularly dialect learning. As Hartoyo (2008) states in his book, computers are apparatuses and mediums that encourage people's dialect learning, in spite of the fact that the viability of learning is completely user-dependent. The innovation of this period progressed not as it were in quality but too in productivity. For each item, we'll react rapidly without limitations. The require for mechanical development has started a communications insurgency and quickly created innovation applications in instructing and learning. This innovation made a difference improve voice communication in Indonesia. Each school employments ICT for instructors to instruct understudies within the classroom. The diverse sorts of applications we utilize in our classrooms have moved forward and driven to superior instruction.

Hartoyo (2008) too declares that English dialect instructing has been shaped by the look for the 'one best method' of educating the dialect. besides of whether the center of command has been perusing, the linguistic rules and lexicon of the target dialect (e.g. Linguistic use Interpretation approach, talking (how to communicate the target dialect such as Coordinate Strategy, Audio-Lingual Strategy, The Quiet Way, Suggestopedia, Community Dialect, Communicative Approach), or other issues (e.g. The Whole Physical Reaction Strategy), the endeavors of the instructing calling have been molded by a desire to discover 'a' superior way of instructing than the existing strategy. The most recent strategy that's creating is Computer Helped Dialect Learning (CALL). A few specialists and professionals of instruction learning dialect in CALL, unequivocally bolsters the utilization of ICT in dialect learning to progress effectiveness and adequacy of learning that can improve the quality of understanding and dominance of the dialect considered. In other words, the integration of ICT within the field of dialect learning is inescapable known that the ICT and dialect learning are two angles which bolster each other like two sides of the coin indivisible (Hartoyo, 2010). Luckily, there has been a critical increment within the utilize of Computer Helped Learning (CALL) dialects among English instructors. Computer-assisted dialect learning is considered through the use of computers. This device is adaptable, broad, and intuitively. We are adaptable with time and put. It is additionally accepted to encourage students' dialect learning more than other media. Typically due to the capacity of computers to show fabric in more assorted ways than books or recordings. In expansion, CALL can make exchange and make strides communication abilities, counting giving true materials for classroom and self-

study. This strategy centers on utilizing computers to improve dialect learning.

The utilize of ICT in instruction is fundamental. Joining ICT into instructing and learning forms could be a subject of intrigued to numerous analysts, counting those in instruction. Based on the utilize of ICT, it can be utilized in three distinctive areas:

Educational programs, Subjects, Guidelines Viewpoints. ICT is additionally recognized for finding learning materials from unique sources. When searching for articles in worldwide diaries, understudies can essentially sit before an Internet-connected computer and discover the article. All logical data can be given in a brief time as it were through the Web. You'll moreover specifically print the educating materials that have been gotten, replicated, and exchanged to a USB memory and utilized as educating materials. In later a long time, there has been a request for encouraging computer-based instruction and learning.

This exposition proposes a clarification that appears instructive teach, instructors, and understudies the part of innovation is being utilized to assist them accomplish their instructive objectives. In addition, teachers and learners ought to ended up more recognizable with the affect of innovation on dialect educating and learning. Innovation has gotten to be the foremost imperative thing in later decades, and numerous individuals think that innovation is the result of science. Innovation makes it simpler for individuals to illuminate complex and troublesome issues. The reason of this essay is to clarify the preferences of ICT and ICT, and the significance of utilizing his ICT to create troublesome things simpler in educating and learning English, so that individuals can offer assistance unravel the issue. In spite of the fact that English may be a need for

most individuals in today's world, technological developments have continuously been of incredible significance and have contributed to the advancement of English instruction in specific. English is one of the troublesome classes, so instructors have to be make intuitively educating and learning that locks in understudies. Within the history of the advancement of instruction, data innovation has been portion of the medium that passes on the message of science to a huge number of individuals, from printing innovation such as printed books centuries back, through broadcast communications, to the media in which dialect is recorded. It is It got to be tape, video, TV and CD. Agreeing to Kent, "ICT from an instructive point of view" refers to "data and communication innovation (ICT) such as computers, communication gadgets, and capacities that back diverse exercises in teaching, learning, and instructing in several ways. (QCA Plans of Work for Education)" ICT in Kent). Prefectural gathering. 2004). Data and communication innovation moreover incorporates advances in which computers play a central part. H. Computer-assisted dialect learning (CALL), the Web, and different general-purpose computer applications (Fitzparick and Davies, 2002).

The development of the Internet as an information technology takes the history of educational technology in a new direction. Online graduate education services are basically providing educational services to users through the Internet. Online Services comprise different phases of the educational program process, including:

Registration, Exam Entry, Payment, Learning, Case Assignment, Case Review, Testing, Assessment, Discussion, and Presentation. Apart from the positive effects of various studies on the use of ICTs to support learning in schools, it is possible to use ICTs to support

learning if the schools in this country are not excessive. We must also have a vision of the future. they are:

1. **Electronic Books**

Electronic books (electronic books) are books that utilize computer innovation to provide mixed media data in a compact and energetic shape. "E-books" can coordinated impressions, sounds, illustrations, pictures, activitys and "motion pictures", so the data they give is wealthier than conventional books. The best sort of e-book is basically a interpretation of a conventional book into an electronic organize that can be seen on a computer. With this innovation, you'll store hundreds of books on a single difficult disk/CD or compact circle (roughly 700 MB capacity), DVD or computerized flexible circle (4.7-8.5 GB capacity), and streak. (Right now accessible capacity is up to 16 GB). For case, more complex and thorough plans require the mixed media formats Encyclopedia Britannica and Reference book Microsoft Encarta. Interactive media designs permit e-books to supply not as it were composed data, but too mixed media components such as sound, pictures, and motion pictures. For illustration, a portrayal of a sort of music can be supplemented with a recording of a melodic sound so that the client encompasses a clear understanding of what the renderer implies.

2. E-learning

The term "e-learning" has different definitions. For case, Victoria L. Tinio states that "e-learning" incorporates learning at all levels, formal and casual, utilizing computer systems (intranets and extranets) for the conveyance, interaction, and/or assistance of instructive materials. said to incorporate. Since most of the learning handle that takes put with the assistance of the web is frequently alluded to as online learning. A broader definition proposed within the SEAMOLEC working paper states that e-learning implies learning through electronic administrations. In spite of the fact that definitions shift, the common agreement is that e-learning is learning that employments electronic innovation as a implies of showing and disseminating data. Portion of the definition of instructive tv and radio broadcasting incorporates a few form of e-learning. In spite of the fact that radio and television education could be a shape of e-learning, there's common assention that e-learning will reach its top after synergies with Web innovations.

Internet-based learning, or web-based learning in its least complex shape, may be a "site" utilized to show learning materials. This strategy permits learners to get to learning assets given by moderators and mediators at any time. In case wanted, learning site-specific mailing records can too be given as discourse gatherings. "Total" e-learning usefulness given by devoted computer program called computer program or learning administration LMS (Learning Administration Framework). The most recent in her LMS-based web innovation permits get to from anyplace with web get to. The capacities given incorporate overseeing understudies or learners,

overseeing learning materials, overseeing learning counting overseeing learning evaluations, and overseeing communication between learners and facilitators.

This highlight permits learning exercises to be overseen without coordinate contact between the parties included (chairmen, mediators, learners or learners). “Presence”: Members are spoken to by mail, chat channel, or video conference. In today's world where data and communication advances are progressing quickly and getting to be a way of life for individuals of all times and places, education is without a doubt a beat need. A affectability to innovation makes a difference you center on more imperative assignments and accomplish higher levels of accomplishment in instruction, careers and social connections where education may be a key prerequisite. ICT stands for Data, Communication, and Innovation, and is clarified as takes after.

ICT refers to any device that can electronically store, retrieve, alter, send, or receive data in a digital format. Robots, email, digital television, and PCs are a few examples. ICT, meanwhile, deals with digital data storage, retrieval, modification, transmission, and receiving. Crucially, it also addresses how these various applications could complement one another.

a) Information

According to Shore in Hartoyo (2012:2), information is the processed data in a meaningful and purposeful form.

b) Communication

Potts defines communication as the process by which we try to establish a shared understanding by assigning and conveying

meaning. According to Brown (2011), communication is the exchange of information between individuals, regardless of whether it inspires trust. However, the recipient must be able to grasp the information that is delivered.

c) Technology

The words "logos," which means science, and "techno," which means method, art, or talent, are the roots of the term "technology." As a result, one definition of technology is the scientific understanding of art or talent.

ICT as a whole may be defined as the use of technology to assist the endeavor of information and communication conveyance, especially in the field of education, based on the definitions of the three components. The method uses digital technologies, primarily those related to electronic information processing, including networks, broadband, computers, smartphones, and the internet.

ICT is found to be beneficial in a number of ways, as Herington (2002) noted: (1) technology makes it easier for people to interact with real-world language speakers; (2) it gives them access to a wider range of information sources and language varieties; (3) it allows them to communicate with the outside world; (4) it permits a learner-centered approach; and (5) it fosters learner autonomy. ICT help people in order to get information and to communicate each other in wider range.

3. ICT Tools in Language Context

Certain types of technologies fall under the category of information and communication

technology and are frequently utilized in linguistic contexts, including:

a) Interactive multimedia

The combining of electronic text, graphics, moving pictures, and sound with other digital media to create an organized digital computer environment that enables users to engage with the data for relevant purposes is known as interactive media. The Internet, telephony, and interactive digital television are examples of the digital environment. (Finney, 2011:2)

b) Computer

A computer can be used as a stand-alone device, similar to a regular PC, or it can be integrated with other multimedia learning tools to fulfill its primary function as an electronic language learning tool. (Hartoyo, 2012:29).

According to the Oxford Dictionary, a computer is an electronic device that can process data and produce information or signals by following a set of logical operations that are predetermined but may vary. These operations are carried out in accordance with a program. It is made up of a CPU, a keyboard, a display, and other devices.

c) Audio devices

When combined with other material, audio devices may create interactive multimedia. It may, however, also be used independently as a distinct tool. Audio equipment consist of CDs, speakers, headphones, and more.

d) Internet

The internet may be utilized for language learning through text, audio, video, email, and the www (world wide web).

e) Television

Television, according to the Oxford Dictionary, is a device that electronically displays visual pictures (together with sound) on a screen after being converted into electrical impulses and sent by radio or another medium.

f) Telephone

Due to the low quality of analogue transmissions, this telephone medium has not been employed much for language instruction. On the other hand, conference calls may be possible with the new invention of digital quality and cheaper connection costs.

g) Mobile gadget

Mobile devices, including smartphones and mobile phones, that can function as a little personal computer thanks to apps installed on them. With the use of this device and its internet connection, more people may engage in more in-depth discussions, surfing, and talking. The size and cost of those devices are becoming more affordable and accessible due to advances in science and technology.

h) Social interface

This medium provides a facility or example that allows humans to connect with computers. People may communicate with computers more intuitively and with less effort by writing, speaking, touching, moving their eyes, and making other gestures. (Hartoyo,2012:34) This technology

represents a watershed moment in the recent development of interactive multimedia, audio-graphic computer teleconferencing, and interactive satellite television (National Broadband of Employment, Education, and Training, 1993:5).

i) Interactive whiteboard

An interactive whiteboard, or IWB, is a big interactive display (often a touch screen monitor) that is linked to a computer and projector. A projector shows the computer's desktop onto the board's surface, allowing users to manage the computer using a pen, finger, or other devices.

We can utilize ICT tools to help people acquire and strengthen their literacy and language skills. It is usually arranged around computers in partnership with other youngsters, and the discussions may be pretty interesting.

There are several ICT technologies available to support literacy and language development in early childhood education:

- Word processors
- Computers
- Internet
- Developmentally appropriate programs

a) **Word Processors:** These provide opportunities for children to compose and write without having to master letter production by hand. The learning tools of ICT for childhood education provide many such methods for children and photographs. With the help of the video, we can develop the skills of literacy and language. It is a number one activity because it enables children to weave pictures and words together.

b) **Computers:** Computers provide your children the benefit of a 'print-rich' learning environment. We will most likely notice a greater attention to detail in their interactions than in other settings. Some individuals feel that using a computer might force youngsters to talk more and undertake less physical activity.
c) **Internet:** Children may easily learn reading skills in their own language as well as the language of their friends thanks to the internet.
d) **Developmentally Appropriate Programs:** When selecting the most appropriate development programs, we must keep several factors in mind. We must seek out programs that promote reading, writing, speaking, and listening. Various apps, including the Gruffalo App, may record children's voices. The Gruffalo App allows youngsters to record their voice along with the narrative. They can hear their own voice as the narrative is being recounted.

There are various ICT tools for primary schools:

- Spreadsheets
- Presentation software
- Blogging
- Information literacy skills
- Animation
- Publishing programs
- Web 2.0
- Making a video

a) **Spreadsheets:** Spreadsheets is just like a word processor, through which we can save the documents and have an adequate typing skill. Primary exit abilities comprise the ability to set

columns, use basic formulas, insert and delete rows, modify font size, etc.

b) **Presentation Software:** We can use PowerPoint or Prezi, regardless of which, one we like and most familiar with. Make sure that by the end of elementary school, students leave with skills like creating handouts and notes pages, setting up animations, designing their own slide designs, images and inserting tables, and smart art graphics.

c) **Blogging:** Blogging is a part of a website or a kind of website which can be updated from time to time with new content. Most of the blogging is interactive and enables students with a controlled online presence.

d) **Information Literacy Skills:** In information skill, web searching is an important skill. Students have to understand the critical skills as well as practical skills, like understanding domain names and its meaning, to understand which is more reliable; to know what information and research are more useful.

e) **Animation:** Stop motion is an excellent practice tool for children, allowing them to create a tale while developing higher-order abilities such as planning, monitoring, and assessing their work.

f) **Publishing Programs:** The most well-known of them is MS Publisher, which is ideal for teaching reading skills, making it particularly useful in basic school.

g) **Web 2.0:** One of the most effective strategies for kids to improve higher-order skills. It includes Facebook, Twitter (where we may construct a class page), and Tumblr, which is ideal for short-titled digital photographs.

h) **Making a Video:** Students may create, edit, and assess videos using the recording camera on most iPads. Students can transfer the video so that their work can continue to be combined together.

ICT Tool for Quizzing/Testing/Gaming

There are various ICT tools for Quizzing/Testing/Gaming:

- BookWidgets
- Gimkit
- Classtools
- Genial.ly
- Google forms
- Classmarker
- Flipgrid
- Deck.toys
- Formative
- Educaplay
- Flubaroo
- Gynzy
- Plickerss
- MasteryConnect
- Lightsail
- H5P
- Kahoot
- JeopardyLabs

No	Name of the Tool	Description of the Tool
1.	BookWigdgets	BookWidgets is used for games, stimulation, workbooks, and multi-touch books in classrooms.
2.	Gimkit	Gimkit is a gaming-oriented ICT application in which students may earn points by accurately answering questions. They may invest their money while playing an interactive game.
3.	Classtools	ICT classtools provides a variety of classtools.
4.	Genial.ly	Genial.This tool is used to create interactive content that your audience enjoys. Bring your material to life, educate, and entice.
5.	Google forms	Evaluations may be completed quickly and conveniently using Google form quizzes.
6.	Classmarker	Classmarker makes online testing simple.
8.	Flipgrid	The Flipgrid ICT program creates a grid representing your classroom.
9.	Deck.Toys	Add a subject to start a debate. To spark a conversation, have your students contribute a short video answer. Very straightforward. Super-strong.
10.	Formative	H5P is used to create, reuse and share interactive HTML content in your browser.
11.	Educaplay	Educaplay is used to create engaging games that provide rapid feedback.
12.	Flubaroo	The Flubaroo application allows us to examine and evaluate students' work/progress online.
14.	Plickers	Plickers is an ICT application that enables teachers to collect data from real-time formative evaluations without the need of student

		equipment.
15.	MasteryConnect	We may use the MasteryConnect to assess understanding levels, track learning and instruction progress, and identify kids who need support.
16.	Lightsail	Lightsail is utilized for formal testing; by employing this instrument, we can improve literacy development and foster a love of reading.
17.	H5P	H5P allows you to create, reuse, and share interactive HTML content in your browser.
18.	Kahoot	It is used to create motivating and engaging quizzes.
19.	JeopardyLabs	This application allows us to design a customized Jeopardy template without using PowerPoint.

ICT Tool for Presentation

There are various types of an ICT tool for presentation:

- SlideShare
- Buncee
- Prezi
- Prowise
- Google slides
- Nearpod
- Peardeck
- Sutori
- Lesson up
- Mentimeter

No	Name of the Tool	Description of the Tool
1.	SlideShare	Slideshare is used to share everything you should know and enjoy, including presentations, papers, infographics, and more.
2.	Buncee	It's fun to learn your building and presentation tools.
3.	Prezi	Using Prezi, we can construct an online slideshow.
4.	Prowise	Using Prowise, we can create a more inspirational and engaging learning environment in our classrooms while also promoting cooperation.
5.	Google Slides	We may collaborate on the same presentation using Google Slides.
6.	Nearpod	Create interactive slideshows with quizzes, photos, text, and questions.
7.	Peardeck	Using Peardeck, we can design interactive presentations, classes, and exams that will interest each learner.
8.	Sutori	With the Sutori, we may create a presentation for the classroom in a unique chronological arrangement.
9.	Lesson up	Lesson up is used to make digital lessons that are fun and engaging.
10.	Mentimeter	Using students' input to create graphics in an instant.

ICT Tools for Creative Creations

There are various tools for creative creations:Infogram

- Storybird
- BlendedPlay
- Pixton
- Vizualize
- Wordle
- ScribbleMap
- Canva
- Visme.co
- Easel.ly
- Venngage

Piktochart No	Name of the Tool	Description of the Tool
1.	Infogram	The Infogram tool is used to create and share an excellent picture of your data via the use of charts and infographics. Responsive, dynamic, and engaging.
2.	Storybird	We may use the storybird tool to build our book.
3.	BlendedPlay	Use your own material in the classroom blended games.
4.	Pixton	Pixton is an excellent tool for creating comics.
5.	Vizualize	With the visualization tool, we may see our resume in one click.
6.	Wordle	The Wordle tool is used to create posters (word clouds).
7.	ScrbbleMap	ScrbbleMap is the simplest method to create and share maps.
8.	Canva	Canva makes design easier for everyone. Create print or online designs such as blog

		graphics, invites, flyers, presentations, posters, and Facebook covers.
9.	Visme.co	Visme.co is an ICT platform that is mostly utilized for visual communication.
10.	Easel.ly	With Easel.ly, we can create a multimedia infographic.
11.	Venngage	Venngage provides everything we need to create and distribute infographics.
12.	Piktochart	Using Piktochart, we can make a multimedia infographic.

ICT Tools for Online Collaboration

There are various ICT tools for online collaboration:Asana

- Google spreadsheets
- MeisterTask
- Stoodle
- Edmodo
- Seesaw
- Google Docs
- Talky
- Google Slide

No	Name of the Tool	Description of the Tool
1.	Asana	Asana is the simplest way for teams to track their progress and achieve goals.
2.	Google Spreadsheets	Google Spreadsheets allows us to work on the same spreadsheet at the same time.
3.	MeisterTask	MeisterTask is the most user-friendly task management solution available online. Combine it with MindMeister to create a comprehensive process from first concept to

		final project.
4.	Stoodle	Stoodle makes it simple to learn and teach online with a partner.
5.	Edmodo	Edmodo allows teachers to interact and collaborate with parents, students, and one other in the most convenient and secure manner possible.
6.	Seesaw	Seesaw is a digital portfolio tool for kids. We make it easier for students to find employment in one area and share them with their parents.
7.	Google Docs	Google Docs allows you to work on the same document simultaneously.
8.	Talky	Talky is used for video chat and screen sharing in groups.
9.	Google Slides	We may collaborate on the same presentation using Google Slides.

ICT Tools for Brainstorm/Organizing

There are various types of ICT tools for Brainstorm/Organizing:

- Coggle
- Mindomo
- Answer garden
- Postermywall
- Popplet
- Tagxedo
- Huzzaz
- Lino it
- ChartGo
- Xmind
- Timetoast
- Thinglink
- Timeglinder

- Note App
- Trello

No	Name of the Tool	Description of the Tool
1.	Coggle	Coggle is the most effective technique to transmit complicated knowledge. Coggle is a collaborative mind-mapping application that helps you make sense of complex situations.
2.	Mindomo	To create and share a mind map, outline, task map, and concept map. Mind mapping software for the PC, web, Android, and iOS.
3.	Answer garden	Answer Garden allows kids to offer answers.
4.	Postermywall	Students may use Postermywall to make interactive posters.
5.	Popplet	Popplet is used to organize and record thoughts.
6.	Tagxedo	Tagxedo is a word cloud with several unique forms.
7.	Huzzaz	Huzzaz is a platform for showcasing, collecting, and discovering the most significant videos.
8.	Lino it	We may construct and share the canvas with you using the linoleum and other internet resources.
9.	ChartGo	ChartGo is a tool for creating web charts. Using it, we can make a complex and colorful chart.
10.	Xmind	Xmind is an excellent tool for mind mapping and brainstorming.
11.	Timetoast	Timetoast is an excellent way to share the past as well as the future.
12.	Thinglink	Thinglink allows students to create interactive posters.
13.	Timeglinder	Timglinder is a web-based timeline program that allows you to create and share project histories and plans.

14.	Note App	Note App allows your team to access sticky notes in real time.
15.	Trello	It collaborates on a brainstorming session by using decks of lists and cards.

B. CURRENT APPLICATION OF ICT IN ENGLISH LANGUAGE TEACHING AND LEARNING

ICT is a technology whose functions support the process of information transfer and communication. The method of communication of information need not be directly between the communicator and the communicator. The development of ICT has made it easier to mediate the communication process between the sender and the receiver. You can communicate via telephone, internet, email, satellite, television, video conferencing, and more. This process of communication also applies to language learning. Communication is necessary between teacher and student when learning a language. The learning process does not necessarily take place directly with teachers and students in specific rooms or locations. For example, teachers may use the Internet as a medium to provide instructions, assignments, or other information to their students.

In the context of language learning, ICT is used as a 'medium' to bridge or enable learning processes, or to enable direct communication between students and teachers, even if they are not in the same room or place at a particular time. play an important role. You can create a language learning program that allows students to study lessons while receiving instruction, guidance, information, or explanations. ICT in language learning as a reference. Store unlimited lessons and reference materials on your computer for accurate access anytime, anywhere.

Fitzpatrick and Davies (2002) describe in Hartoyo (2012) his seven uses of ICT in language learning.

a) Presentation

Some language learning resources, such as text-based and audio-visual materials, must be presented to students. Presentations assist students in better grasping the learning content.

b) Practice

Some sorts of exercises may be offered via ICT, with presenting stimuli in a variety of text, audio, and video formats. ICT also provides the opportunity to analyze learners' replies and provide suitable feedback.(Hartoyo, 2012: 40).

c) Authoring

When utilizing ICT in language learning, teachers can either purchase pre-made resources or build their own exercise materials using a range of writing tools based on Hartoyo (2012:40).

d) Computer-Aided Assessment (CAA)

Computer-aided assessment (CAA) is becoming increasingly significant in foreign language teaching and learning. This material is used to test and assess students' knowledge after they have completed various courses.

e) Publishing

Teachers and students can use ICT technologies to publish or link their work in a local area network. Teachers and students may utilize ICT to help them publish their work in the following ways:

f) Communications

Technology may help learners and teachers interact with one another. Some ICT technologies that may be used as a channel of information

include: 1) email, which allows language learners to contact with 'online buddies' in various countries; 2) Tandem learning; 3) computer-mediated conversation; 4) online learning environment; 5) audio conferencing; and 6) video conferencing.

g) Simulations

The computer may serve as a stimulant for analysis, critical thinking, conversation, and writing. Simulation-based programs work particularly well as stimuli. Examples of language learning exercises that'simulate' real world tasks include: 1) Web Quest; 2) Action Mazes; 3) Adventure games; 4) Sunpower; 5) Expodisc; 6) "Real-life" simulations; and 7) video conferences.

ICT has both advantages and disadvantages. ICT in language learning can reduce the student-teacher relationship and negatively affect students' emotions during the learning process. However, ICT bridges the distance and emerges as a 'bridge' to 'survive' learning. For remote locations, teachers can use her ICT through video conferencing to teach and monitor students' learning processes. Therefore, ICT development is considered to be a better way to teach and learn a specific language compared to existing methods. The Internet allows teachers and learners to obtain as many sources of information relevant to the language they are learning as possible. B. A text, song, story, etc. These sources serve as models for using the learned language appropriately in real-world contexts. Additionally, computers can be used as more interactive tools to support language learning than tape recorders or chalk and blackboards. However, they recognize that many of the technology solutions available in the world of education can confuse teachers on how to choose the right ICT technology solution. Explore the pros

and cons of educational ICT tools and find the right ICT education solution for your school's needs.

C. ADVANTAGES OF ICT IN ENGLISH LANGUAGE TEACHING AND LEARNING

1. Enhancing motivation and engagement in the language classroom

Since it depends on a number of psychological and linguistic elements, achieving student motivation in language instruction is not always simple (Dornyei, 1998). The majority of linguists agree that motivation plays a critical role in achieving intended results and optimizing language acquisition. So how much can information technology motivate students and boost their engagement with the material? (Warschauer, 1996; Kassim et al., 2007; Reksten, 2000; Jay, 2006; Ilter, 2009). Positive attitudes are more prevalent among students when computers are utilized in the classroom. Speaking with native speakers from various nations has increased their motivation and interest (Warschauer, 1996). It is feasible to establish a learning environment that both sustains and increases motivation by utilizing ICT. According to a research on the effects of technology use in EFL classrooms, technology might improve her successful EFL exercises. Pupils demanded that technology be used in the classroom by the instructors. Students were able to participate more fully in the learning process as a result of this sustained improvement in their motivation and engagement (Ilter, 2009).

Incorporating blogs, podcasts, and digital videos into language instruction boosts student enthusiasm and engagement. Jay (2006) looked into the usage of blogs as a writing incentive for pupils.

Additionally, he gave them real-world writing experience and illustrated the value of writing for a worldwide audience. The Hong Kong University of Science and Technology's His McMinn (2008) made the decision to look at how podcasting affected students' motivation in language teaching. According to him, instructors may optimize their class time by integrating authentic resources and virtual settings into their foreign language learning curricula through podcasting, which is the practice of posting audio and video files online. finished. Podcasts offer real, honest, and inspirational learning content. He continued by saying that podcasts allow students to hear the speeches of particular social groups they are interested in learning about and maybe can relate to. Kassim et al.'s study from 2007 is another that looks at how well ICT may be used to boost motivation in language instruction. She has discovered that by integrating ICT into her language instruction, she can foster in her students a positive outlook on language acquisition.

The majority of the students who are taking part think that using ICT makes them more interested in what they are learning. Teachers may promote meaningful connection and engage students' interests by providing more genuine materials (blogs, podcasts, and digital movies) in the classroom and training students in the necessary skills to use them. Encourage. increases student involvement and participation in the classroom. Considering these assertions, there doesn't appear to be any discussion over the advantages of her use ICT to encourage motivation and involvement in language instruction. Nevertheless, the adoption of sophisticated cognitive processes is necessary for the introduction of ICT teaching materials as educational

content. This can, in contrast to anticipated outcomes, result in subpar student performance and learning styles that are not well-suited to teacher-led instruction. It might be discouraging.

2. Promoting learners' autonomy and centeredness

The utilize of computers within the classroom by instructors has too changed the part of the educator, moving from teacher to learning facilitator. This makes a difference understudies gotten to be more autonomous and self-sufficient (Murray et al., 2005). Current approaches and strategies to outside dialect instructing are portion of a comprehensive change that underpins and extends understudy support and guarantees more prominent engagement in learning. Data innovation and computers in specific have been utilized to execute a assortment of imaginative instructing hones in dialect educating. Standards-based, competency-based, project-based, and task-based learning have profited broadly from web advances, empowering understudies to advance independent learning and enabling them for more personalized learning. It makes a difference create distinctive learning techniques and styles that give a stage. Advocates and defenders of ICT in dialect instruction contend that, in differentiate to routine instruction, computer-assisted dialect learning (CALL) advances learner independence and makes a difference create person learning techniques. (Murray et al. 2005). This advantage requires a part inversion in dialect instructing.

A key figure in making this involvement effective is the social move among understudies, instructors and guardians. Instructors are not

anticipated to be the only mediators of information within the classroom, and understudies are anticipated to play unused parts. They must take duty for their learning and contribute to its creation and organization (Lee, C., 2005). Instructive innovation has been presented to encourage this part trade and as a commonsense device that numerous understudies utilize to gotten to be independent learners. Lee, C. (2005) found that "the more instructors utilize guidelines innovation, the less teacher-centered and student-centered the classroom becomes" (p. 81). Technology-enabled classrooms have been appeared to cultivate discovery-based learning, learner independence, and learner center. In numerous parts of the world, English instructors allot understudies project work to upgrade and progress their learning within the classroom. Most understudies utilize the Web as a investigate and asset instrument. This permits you to personalize your learning by taking part in genuine ventures (Reksten, 2000).

Interactive media applications and programs empower understudies to total perusing assignments within the target dialect, utilize word references, learn language structure and elocution related to perusing substance, and take perusing comprehension tests for immediate input. You'll be able get and you'll do all these things inside the same. program. This can be sufficient to maximize aiming results and give more openings and offices for independent learning. A energetic classroom environment makes educating more adaptable and versatile, making classes with exercises and challenges such as extend work, collaborative learning, and peer mentoring to assist understudies create and control their learning. , coming

about in less teacher-led learning situations and upgraded individual development. Activity and more individualized learning (Kassim et al., 2007). Web-based educating, particularly Web Journeys, is accepted to advance self-directed learning and offer assistance understudies create viable think about aptitudes and methodologies. The term "WebQuest" was coined by Barney Avoid (1995). He defines this as a research-oriented movement in which most or all of the data utilized by the learner comes from the Web. WebHis Journey is outlined to form savvy utilize of the learner's time, center on utilizing data instead of inquiring for it, and back the learner's considering at the level of investigation, union, and assessment (Smith and Baber, 2005). The result of such assignments is as a rule a introduction or report. This requires a awesome bargain of individual exertion on the portion of the understudy and the use of as of now procured skills and information. This progresses execution conjointly enhances autonomous learning.

Numerous empirical research conducted in different institutions and schools have come to the same conclusion: using ICT to teach English enhances students' ability to study on their own (Kassim et al., 2007). The utilization of hypermedia in the classroom has been extremely beneficial to the students. They had more control over their learning since they could pace themselves and finish tasks on their own (Padurean and Margan, 2009). ICT-enabled settings, however, shouldn't be seen as miraculous medical cures that help language learners develop very independent learning capacities. Each student's learning style is different and some students feel more comfortable and comfortable in a teacher-led classroom.

3. Boosting interaction and communication

Technology-enabled engagement and genuine communication between English language learners and users has been made easier. There is currently no other strategy or method that can offer the simplicity and speed of communication that ICT provides. Even though in-person interactions are incomparable, students lack the resources and time to fly across the globe to pick up knowledge from their teachers. Language users may engage in genuine discussions, share content, and communicate ideas and information with each other over a straightforward Internet video or audio link (Rank, 2011). In addition to having the ability to raise educational standards, technological innovation—particularly the Internet—may also be used to establish new learning environments and promote collaboration (Lee, C. 2005). Computer-mediated communication, according to Chapelle (2003), "provides a kind of virtual immersion environment for those who choose to participate" (p. 35). Many websites that facilitate contact amongst English learners offer possibilities for discussion and engagement with other English speakers, in line with the widely held view that those who wish to learn the language should reside in an area where English is spoken. extends.

Additionally, task-based language instruction might become active learning with the help of new technology, bringing students together to engage in conversation and exchange information (Thomas, M., 2010). There are several benefits to both synchronous and asynchronous computer-based communication systems. Lessening the social pressure that comes with participating in person might improve group learning

opportunities. B. Fear of substitution, dominant arguments, retaliation and cognitive blunting (Cohen, E. 2002). Language learners don't feel the need to provide immediate feedback and spend time crafting appropriate responses. De Ramirez (2010) argues that "Web-based platforms can also provide a more secure and anonymous space to practice English." "(page 3). In particular he has web technologies and internet video links that also allow access to non-verbal communication. Culturally-loaded facial expressions, gestures, and postures enable learners to appropriately interpret various speech acts and develop a sense of commonality in communication (Lee, L., 2009). This eliminates the need for mixers that can jam communications.

Additionally, computer-assisted communication provides an educational environment that supports learning situations and supports meaningful communication. Learners will develop cross-cultural communication skills to successfully engage in authentic conversations and interactions with native speakers while maintaining a balance between fluency and accuracy. This makes text-based chat a powerful and efficient delivery and learning tool (Lee, L., 2009). However, synchronous communication and interactions also have limitations and drawbacks. Online chatting, like face-to-face communication, is a fast-paced exchange that puts pressure on learners to speak a foreign language in a timely manner (less waiting time, quicker responses and reactions). Because of the spontaneity and truthfulness of the situation, learners tend to write short and informal, using abbreviations, unconventional punctuation, and unusual spelling errors (Lee, L., 2009). Computer-

mediated communication does not allow users to take advantage of the social aspects of verbal interaction, such as body language and prosodic features. Learners rely on using emojis and emoticons to express their feelings and emotions. These electronic illustrations help users express themselves and exchange messages, but they have no value in developing language learning or improving performance in written assessments. It can also lead to inappropriate and careless language usage.

4. Enhancing multisensory delivery and authenticity

Another potential advantage of the use of ICT in English teaching is the abundance of authentic teaching materials. Evans, C. (2009) states that ``The Internet provides a wealth of information that can support and enhance student knowledge and skills in the English classroom'' (p. 43). CALL software stimulates the natural language learning process and focuses on listening, reading, speaking and writing, all of which deliver authentic and authentic content. These provide learners with real images, written text, and native-speaker audio (Reksten, 2000). Using blogs, wikis, and podcasts to expose student assignments and course achievements to potential real readers increases student motivation and interest in learning. When learners understand that their posts have a purpose and are meant to be read, they are more likely to participate and produce. De Ramirez (2010) notes that ``Publishing student work on the World Wide Web is a means of bringing instructional work to a genuine audience around the world.'' When writing or speaking to a formal audience, they focus on refining their ideas. work" (page 1).

Teachers of English as a foreign language (EFL) encourage their students to use blogs, videos, wikis, podcasts, and social media to share their class work. This improves the focus and motivation of studying English. Additionally, when teachers employ signals like sounds, visuals, and videos, or when real things are used to promote learning, students feel more motivated and engaged. There are a lot of potential advantages to blogs. Because blogs are regarded as reliable communication tools and valuable resources for text reading, students can benefit from appropriate language learning environments and engage in real-world language experiences (Richardson 2008). An additional benefit of using ICT in English lessons is multisensory mediation. Applications that are well-designed allow students to take advantage of their individual learning styles, present material in a range of media forms, and include text, images, sound, and video (Reksten, 2000). Teachers who wish to accommodate their students' diverse learning styles can do it extremely well with multimedia. A mix of text, music, video, and graphic animation is called multimedia. This guarantees that the resources utilized in the EFL classroom will always be beneficial to students, regardless of their preferred learning style—visual, aural, tactile, or kinesthetic (Reksten, 2000). Through visual multimedia forms seen on most websites, multisensory education not only has the ability to meet the needs of a wide range of learning styles, but it also facilitates students' understanding of complex topics (Reksten, 2000). A simple interactive video link brings real objects into the classroom and reduces the burden of dealing with useless descriptions and illustrations of intangible verbal input. Multimedia

teaching offers a high degree of flexibility when learning.

Traditional instructional methods cannot match the visual and acoustic attraction of multimedia settings (Rajeshwar, 2001). In support of his Rajeshwar claim, Shailaja (2001) says: "Learning a language is made easier by hypertext. It blends real-world observation with listening, and the ease with which skills may be integrated makes for a more genuine learning environment." Multimedia computer programs also assist in monitoring student development and provide prompt feedback (Rajeshwa, Shailaja, & Damodar, 2001). On the other hand, time and effort are sometimes wasted when ICT is used without thorough planning and defined goals. Specifically, there are restrictions on the use of multimodal media and ICT in English education. Cultural elements of teaching materials can be difficult. Evans, M. (2009) notes that ``the wide availability of original, authentic texts enables immediate contact and stimulation of language learners.'' Such material prepared for speakers can be used by many people. Language learners and their teachers are considered "difficult"...and the subject matter may relate to cultures with which the learner has little or no experience. ”

5. Boosting students’ performance on written class assessment

There has been much debate regarding the existence of research on the topic of "Is there research on how ICT-enabled English teaching environments can improve language learning and performance in written assessment assessments?" Numerous academic disciplines have investigated the efficacy of her ICT-

based approach in teaching foreign languages. The findings indicate that students' language learning outcomes, interest in learning, and proficiency in the language were all enhanced by the use of ICT-enabled English teaching settings. Hussain (2010) looked into how students' performance in English was affected by learning settings that incorporated technology. This study sought to ascertain whether there were any appreciable variations in students' English proficiency as a result of information technology-enhanced teaching settings in performance between students who received ICT-assisted instruction and those who did not. It was a decision. Performance-based instruction was given before and after the test.

The experimental group's high and low performers had mean scores that differed significantly, according to the data. This suggests that her use of ICT in language instruction benefitted even lower performing pupils. Information technology should be taught in schools, according to research, and the use of technology in the classroom should enhance student learning. The same grammatical issue was examined by Abu Naba'h (2009) as a particular target language element. The goal of the research was to ascertain if the average performance scores of students in two distinct teaching and learning environments—traditional and computer-enhanced environments—showed statistically significant differences. The experimental group, which learnt grammar passively on a computer, and the control group, which acquired grammar passively through traditional instruction, showed a statistically significant difference in average performance. The variations in ratings are probably the result of trial and error. The ability to study at one's

own speed and the CALL program's consideration of individual variations were the researchers' two probable explanations for why computers improved student progress.

Among the recommendations were suggestions to alter the way EFL teachers are trained as well as requests for more study to confirm and generalize results from other regions of Jordan. Joyce (1998) looked at how well children learned English using computer-based training. Based on the method of education (computer-based versus teacher-led), researchers examined how well children learned English structures. The aim of the research was to ascertain if students educated in a computer-based learning environment or in a teacher-led classroom significantly differed in their acquisition of particular grammatical structures. The findings demonstrate that computer-assisted grammar training is at least as successful as teacher-assisted grammar instruction, and in certain situations much more so. Significant differences were found between the fill-in-the-blank test groups and the public test immediately after the analysis. However, no significant differences were found between groups in the multiple-choice post-test.

The study's conclusion was that some linguistic structures and functions are supported by computer-based instruction. Hui-Fang (2007) looked into how using email may enhance writing abilities while taking word density, grammatical correctness, and syntactic complexity into account. The study's goals were to evaluate the overall impact of email use on students' writing abilities, pinpoint any noteworthy correlations between the frequency of email exchanges and writing output, and gauge students' perceptions of the email

exchange survey's impact on EFL writing. was to ascertain whether any notable differences existed. The complexity and precision of the kids' grammar have improved, according to the results. This significant difference can be attributed to exploiting the remediation and transmission potential of email activity. However, vocabulary density decreased as students used excessive corrective feedback. The results also showed that more email exchanges had a greater overall positive impact on writing performance, with most students having a positive attitude toward using email to improve their writing performance. It also shows what it shows. Greenfield (2003) used a qualitative case study to compare her ESL student's expectations of a high school student and her ESL student's expectations for a cooperative e-mail exchange between her ESL course student in Hong Kong and a student in Iowa. I researched awareness.

This email conversation was founded on a teaching model created by the researcher, which made use of well-established theories and practices in the teaching of second languages, including project-based learning, collaborative learning, communicative language learning, and process writing. The findings demonstrated that the participants had a great time interacting with each other, were more comfortable using computers and studying English, and believed they had made substantial progress in their language learning. Nevertheless, it was unclear from our pre-experimental research if writing abilities connected to class grading, such the use of syntax and distinguishing language traits, increased. Students strongly disagreed with the idea that the project enhanced their test-related abilities in a follow-up research, pointing out that

computer use and email exchanges in particular were linked to better performance. I lowered my expectations of contributing. Standardized exam. In order to perform hybrid language learning courses, Seiltad (2012) then looked at the usage of personalized YouTube videos as a pre-education technique for English learners in Morocco. A study topic that helped shape the research was whether academic success in a hybrid setting would be comparable to that in a standard classroom. This experiment showed that creating pertinent lesson content from YouTube videos is an effective way to educate.

The pre-class YouTube video and final grades were compared to see if there was a statistically significant difference between the groups. There is an impact, although it is not statistically significant, according to the t-test P-value of 0.20. However, as students' final grades increased somewhat, the usage of web-based pre-tutoring tactics is recommended. Investigating and evaluating the effect of information technology use on students' English learning performance (written assessment performance) was the main goal of Azmi's (2014) research study. A three-semester field study including his two intact classes—G1 as the experimental group and her G2 as the control group—was the research tool employed. The objective was to see how trends evolve over time and how his application of ICT in language instruction maximizes student learning and aids in performance evaluation through written assignments. Its purpose was to ascertain whether scientific evidence existed.

There were slight variations across the groups on the pretest, according to the patterns shown in every comparison. Posttests 1 and 2 are available. On the

other hand, the experimental and control groups' performance at posttest 2 differs statistically significantly ($p=0.009<0.05$), according to the findings of the t-test for equality of mean outcomes. The study's key finding is that, only for high-achieving students, ICT may be effectively employed to optimize learning outcomes and enhance student performance on written examinations. This shows that significant efforts are required to modify ICT use to meet the requirements and demands of courses with lower student performance. While it is true that most students can benefit from ICT in improving their oral and receptive abilities, the students who do better are likely to profit more from the digitalization of classroom content when it comes to their productive writing skills. more probable. They could have the self-directed and independent learning techniques and abilities required to take use of the opportunities provided by ICT.

The majority of reviewed studies show and prove through research that using information technology in the language classroom appropriately fosters learning, improves interaction and communication, increases autonomous learning, maximizes desired outcomes, inspires students, and aids in their improvement in the EFL classroom. The EFL classroom may then benefit from the use of suitable pedagogies and techniques, which can also transform classrooms into transparent digital learning spaces. However, it is more likely to be a waste of time and effort to use ICT without proper preparation and well stated objectives. There are drawbacks to using ICT for multimodal English language instruction in particular. The cultural element of instructional materials can be perplexing and difficult. Moreover,

proper training and pedagogical preparation are necessary for the optimal use of ICT in English language instruction, particularly in multimodal delivery. According to Blake (2008), "Teachers who are not accustomed to using technology frequently hold the misconception that simply converting an activity into a web or CALL format will ensure its success for students." Again, any activity without sufficient pedagogical design, whether digitally enhanced or not, will create disappointing outcomes with students, even if it appears appealing from a multimedia standpoint" (p.11). Poor pedagogical planning is likely to impede the use of ICT in EFL classrooms.

a) Improved accessibility to instructional information.
b) E-learning advances enhance the educational process.
c) Advancements in ICT will enable virtual classrooms or teleconferences, eliminating the need for educators and students to be present in the same room.
d) Implementing ICT systems simplifies and streamlines system administration in institutions.

D. DISADVANTAGES OF ICT IN ENGLISH LANGUAGE TEACHING AND LEARNING

We live in a world where technology has almost overtaken humans, as "Albert Einstein" stated. It goes without saying that technology is increasingly vital in all aspects of life. But don't believe it's slowly turning you into a stupid.

Some education professionals believe that technology has significantly improved the school system in the United States. Many others, however, argue that the employment of high-tech automation actually impedes the

learning process. They are more reliant on technology for their tasks rather than employing their cerebrum for mental processes.

As a teacher, I encountered several negative concerns around the usage of technology in education. I'm going to outline 15 drawbacks of technology in schooling.

1. **Immense expenditures**

Gone are the days when students had to rely on paper and pen. This is an advanced period of technology in which devices such as computers have replaced the use of paper with its hi-tech characteristics, and in order to maintain them, schools and colleges must spend a large number of money that would otherwise be spent on resources. In addition, you must invest thousands of dollars to upgrade outdated software that is incompatible with current technologies.

2. **Insufficient methods of teaching-**

With the rise of automation, instructors are not equally trained in its correct use. Thus, learners are just utilizing technology rather than gaining information from it. Using applied science to gain adequate education is beneficial, but transforming it into an active set of abilities takes time.

Inquiry-based learning is the most effective technique to teach students since it allows them to conduct independent research on many topics. As a result, technology should be combined with this type of instruction in order to keep the learner's brain functioning rather than relying only on them.

3. Transforming learners into inefficient learners-

It is difficult to locate the word "diligent" in today's learners because most of their teachings can be easily accessed online through various websites on their computers, making them inattentive in classes or causing them to regularly skip school.

Relying solely on computers promotes bad study habits. Many students continue to browse websites in search of the shortest possible approach to complete Mathematics issues rather than tackling them in the conventional manner, which really helps them obtain in-depth understanding of the topics. Spell-checkers hinder them from learning accurate spelling, resulting in an unending number of spelling mistakes on paper.

4. Waste of valuable time-

Technology was made by humans, not the other way around. Technology, like humans, is not error-free. There are several issues, including as server errors and network issues, that take a long time to resolve, stifling the learning process and occasionally frustrating both students and instructors. Wasting time on irrelevant matters is not encouraged in schools or other learning institutions because every second counts for the students.

5. Misguided by the wrong information-

With the rapid advancement of technology, website owners are eager to rank their websites higher in search engines, so they focus solely on rankings rather than the information that they upload. Many websites include incorrect material that has been copied and pasted from other sources without verifying its

legitimacy. As a result, the learners are misled by the inaccurate information provided on the websites. These factors may provide significant challenges to their growth.

6. Majorsources of distractions-

According to data, about 60% of schools in the United States give laptops and tablets. As you are aware, social networking sites are literally ruling the world with their appealing innovations in the current generation, so students and learners are preoccupied with checking their posts and updates, counting the number of likes, checking the status that they or any of their friends and family members have updated, commenting on social sites, and so on, all of which create a significant distance between them and their education.

7. Creating enough room for cheating

The mechanical environment makes you increasingly lethargic by offering you the ability to control everything with a single click of the mouse. Cheating is an unlawful crime, yet technology has made it more potent and accessible through its strong wings. It has become quite difficult to manage this behavior, particularly in the examination setting. Smartphones are accessible with all of their advanced capabilities and rapid internet connectivity, allowing them to utilize them without difficulty.

8. Increase rate of cyber bullying

Cyberbullying is a criminal behavior in which children, in particular, are duped into committing illegal acts. The young learners have easy access to

several accounts, which leads them down a dark tunnel of harassment with an entry but no escape at times. They became lost in its darkness, along with their bright future, which might have yielded remarkable results if properly nourished, but with cyberbullying, everything is washed away all at once.

9. Makes learners disconnected from the real world-

To keep up with technology, educators are increasingly instructing students using online education tools rather than talking verbally, which prevents students from interacting with their teachers and freely sharing their issues in order to solve them. Teachers fail to capture students' attention. To prevent these issues, instructors should constantly employ verbal communications in conjunction with online education platforms so that their students may study the topics in a dynamic manner while also interacting appropriately.

10. Major challenges for teachers

Every day, scientists make new discoveries and face new problems, which keeps technology moving forward. Software is always evolving, and if a teacher lacks technical abilities, it becomes difficult for him to implement it effectively. As a result, educators must be technological specialists, or the school must hire technical experts, incurring additional costs.

11. A major drawback of losing assignment for students

Computers are machines that occasionally malfunction due to wear and tear. Imagine you have to submit your assignment tomorrow, which is your last

deadline, and you have worked tirelessly to complete it and save it on your laptop in order to receive the best mark in class, but your laptop suddenly stops working the night before submission. How will you react? Will you be able to exert the same effort in that restricted time? Your efforts were in futile since your laptop malfunctioned. You cannot rely only on these gadgets for critical jobs and assignments.

12. Difficult to deal with online courses

You keep discovering the globe every day, yet there are still many facts that remain unknown. Knowledge has no age or limitations. Many students or learners want to continue their education, but it can be difficult for them to attend regular classes due to work or other obligations. However, thanks to advances in science, we now have the wonderful option of perusing online courses alongside our regular activities, but problems such as slow internet speed and network issues continue to plague us. The other issue is that these online classes sometimes fail to instill desire or self-discipline, resulting in boring experiences and dissatisfaction.

13. Extinct of good handwriting

Smartphones, computers, desktops, and tablets have completely supplanted the usage of paper and pen, so finding someone with fine handwriting is like finding a needle in a haystack. All of your critical papers are now typed and saved in the little folder icon on your laptop. According to experts, individuals are compromising their handwriting in order to accept technology for faster learning. Using technology

instead of handwriting slows down your thought process by making your synapses sleepy.

14. Partial to the low-income group-

Some low-income institutions in the United States may not have access to a large number of computers to make them available to all pupils, therefore those kids may be uninformed of the fundamental computer skills that other students mastered at a young age. Technology demands a considerable volume of money to rain its blessings on educational institutions, particularly universities, which require a great number of computers to teach their pupils in sophisticated science.

15. Replacing books with e-books-

The world is decreasing by the day, and all of your critical possessions are now compressed in your favorite devices, including books, which have evolved into e-books, also known as electronic books. Books are your most valuable possessions, and they will never be replaced by e-books, which can be expensive at times and cause eye strain. E-books are not compatible with all devices, therefore your laptop or tablet needs an e-book reader to access electronic books. The worst aspect is that hackers may simply hijack your e-book.

Where there is light, there is darkness. Technology may help you fly higher and higher in the sky, but it can also wreck your life with its bad aspects. Technology can help you learn more while also hurting your academic performance.

a) Advancements in ICT may lead to violations of Intellectual Property Rights (IPR) due to simple

access to data, potentially leading to plagiarism and fraud.

b) While an educational institution's administration system appears to be flawless, irresponsibility in its operation might be disastrous.
c) Television has a detrimental influence on children's ability to think quickly and focus for short periods of time.

E. SUMMARY

ICT is a sort of advanced science technology that must be optimized for function, particularly in the application of learning. ICT gives chances for pupils in an era of global competitiveness to receive necessary supplies. Innovative ICT-based learning can give several chances for students to refine and market their competencies on a global scale. On the other hand, mental attitude and self-reliance in obtaining any information required for learning independently impact the value of teaching a student's character, which is not always dependent on others. Mastering the present tick is essential for every human being of any age. as well as in education, creative learning, especially learning, may be done by leveraging the Internet to produce device-based learning.

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COMPUTER ASSISTED LEARNING LANGUAGE (CALL)

A. INTRODUCTION

Technology has had a significant influence on schooling recently. It not only offers a variety of programs for instructors, but it also suggests practical techniques to make the teaching and learning process more engaging. Shafaei (2012) argued that computers are one of the most effective and useful instruments for learning. Many instructors throughout the world have utilized computers to help their pupils learn. Computer-assisted language learning (CALL) has been widely utilized to track improvements in teaching methodologies. It comprises simulations and interactive tools to improve the quality of language learning.

According Bancheri, S. (2006), Teacher still used traditional teaching styles to teach. They still believe in LKS-based teaching and explain everything to the students In fact, CALL is still mostly unutilized by junior secondary educators in the teaching and learning process. They are still uncertain about how to use technology in the classroom. They devote a lot of time in getting ready to use technology-based material, which is another cause .Actually, a lot of junior secondary school teachers are still using CALL as part of their instruction. With regard to using technology in the classroom, they are still perplexed. Another justification is the significant amount of time they have invested in becoming ready to use technology-based stuff.

B. DEFINITION

Technology has had a significant influence on schooling recently. It not only offers a variety of programs

for instructors, but it also suggests practical techniques to make the teaching and learning process more engaging. Shafaei (2012) argued that computers are one of the most effective and useful instruments for learning. Many instructors throughout the world have utilized computers to help their pupils learn. Computer-assisted language learning (CALL) has been widely utilized to track improvements in teaching methodologies. It comprises simulations and interactive tools to improve the quality of language learning.

The field is the same, but CALL has also been referred to as technology-enhanced language learning, computer-assisted linguistic instruction Davies G. (2007) in "Computer Assisted Language Learning: Where are we now and where are we headed:

1. Technologies used in CALL instruction

Software and Internet-based activities are the two main categories of technologies employed in CALL training.

a) Software

Software used in a CALL environment can be designed specifically for learning a foreign or second language or adapted for that purpose. The majority of language textbook publishers provide instructional software, either to supplement a paper textbook or to function as a standalone resource for self-study.

Tutorials make up the vast bulk of language learning packages. These are often drill programs that begin with a brief introduction and progress through a series of questions that the learner must answer before the computer delivers feedback. These systems enable the instructor to program the

subject to be learnt, or, more commonly, the publisher will have the material coded in.

It is feasible to tailor non-language learning programs to meet this demand. These are usually task-based activities with a stated goal other than language learning, albeit speaking the target language is required to perform the work. For example, using the Face Maker application, children may create a variety of looks by training the computer with English sentences. This also applies to role-playing games, in which the player creates and governs a character in a fanciful setting.

Using authoring software, a teacher can program all or part of the information to be learned, as well as the process for learning it. Examples of such programs are Cloze Master, Choice Master, and Multicenter. With these, the format is preset, and the teacher enters the content. Although general authoring tools like Macromedia Director can be used to create a whole course, most teachers lack the time or technical know-how to do so.

b) Internet-based

The World Wide Web was created in 1992, and the entire public had access to it by 1993, opening up new potential for CALL.

Online software (in which the student interacts with a networked computer), computer-mediated communication (in which the learner interacts with other people through the computer), and applications that combine these two aspects are just a few examples of the wide spectrum of online activities.

Nowadays, there are so many websites aimed toward foreign language learners,

particularly those studying English, that it can be difficult to know where to begin.

LLRC Recommended Sources (http://llrc.itesm.mx/webresources) are devoted to trying to provide a starting point. Some of these websites also have games like Hangman, but many of them are built on the drill-exercise structure.

Computer-mediated communication (CMC) has existed since the 1960s in some capacity, but it wasn't until the early 2000s that it was made broadly accessible to the general public. Asynchronous CMC (like email and forums) and synchronous CMC (like text and voice chat) are the two main types of CMC. With this, students can have affordable, 24-hour communication in the target language with native speakers. Students can share audio and video files while also speaking one to one or one to many. CMC has had the most influence on language instruction as a result of all of this.

2. The history of CALL is often divided into three phases:

Warschauer, 2013 Say that Each stage corresponds to a certain level of technology as well as a certain pedagogical approach. Table 1 below shows the three stages of CALL.

a) Structural/Behaviorist CALL

We have what Warschauer called Structural/Behaviorist CALL, which began in the 1950s and evolved through the 1970s. The Stimulus and Response era began at this point. The learner responds to a question that is posed by the

computer by either filling in the gaps or making a choice from a list of options.

The Grammar-Translation and Audio-lingual approaches were the rage. Language was thought to consist of separate elements that were intricately interwoven and interacted according to a predetermined and understandable set of rules (grammar). Teachers repeatedly hammered their students on the various ways the rules can be applied correctly when teaching the various grammar rules.

At this time, computers were primarily used as tools that could provide stimuli repeatedly in the same way without ever becoming tired. The "listen-and-repeat" programs that were in use in language labs at the time are an illustration of this.

b) Communicative CALL

During the 1980s and 1990s, Communicative CALL emerged. The Grammar-Translation and Audio-lingual approaches to language teaching gave rise to the Communicative Approach. This time, teachers discovered ways to provide pupils opportunity to really use the language rather than simply teaching the rules, grammar, phonemes, and morphemes of the language. Students were given assignments that required simply the use of words. Interaction and communication were crucial.

Computers were utilized to reflect these concepts because linguistic paradigms are always served by such technology. Language exercises were increasingly used as part of a communicative job, like in shows with a cartoon character that needs help getting home. With exercises like accelerated reading and sentence reconstruction,

computer systems have been developed to test comprehension.

Additionally, changes in computer technology had an impact on more than just the "testing" portion of CALL. It actually improved the vividness of language instruction. For instance, the ongoing advancement of computer technology has led to clearer audio and video. Students can therefore study in addition to the drill formats by viewing recordings of native speakers interacting. They can observe how language is used in various contexts, such as when meeting new people or requesting directions. Language learners now have a more vivid understanding of what language is than just subject-verb agreement rules and a never-ending list of vocabulary terms to acquire.

c) Integrative CALL

The Integrative Phase of CALL is the following stage and has been in charge from the year 2000. The structural approach's drills came first, then the communicative approach's skills. According to the second phase's detractors, the amount and variety of circumstances that can be presented to pupils may limit the skills that can be taught. (We don't continuously ask for directions or place meal orders at the restaurant.)

Both the conversational abilities from the second phase and the (general language) knowledge offered in the first phase need to be integrated. As a result, we now have the integrative phase, which combined the positive aspects of earlier decades into a technology that, for its part, has matured.

Learning has been redesigned as a result of the emergence of the internet and hypermedia, which can incorporate video and audio streaming, graphic-interactive information, and virtual worlds. With today's technology, you may simultaneously improve your speaking, listening, reading, and writing skills in the convenience of your own home and schedule.

C. ADVANTAGES OF CALL

The advantages of using computer assisted language learning by Farahin Misnam (2011):

1. Individualized

The flexibility of CALL in its current form to accommodate individual variances is one of its benefits. It is simple to adjust for differences in learning styles, desired language abilities, tempo, and learning timetables.

Computer applications used to provide generic, cookie-cutter content that was only accessible after signing the computer lab log book at your institution. Today, the process of learning a language is both democratized and customized.

What exactly is computer-mediated language learning? For example, you may begin your own autonomous learning process without outside interference by registering a free account on any of the popular language learning websites, such as Busuu or Babbel. There are no peers, no lectures delivered in groups, and no chorus of students echoing the teacher. You decide how much time you invest and when you want to have access. There is no absence schedule for classes in which your absence will be recorded.

What is language learning with computers? The resources are available to you whenever and wherever you desire. In fact, one way to examine the development of CALL is to consider how technology has individualized language study. Previously, the university's mainframes and language labs held the exclusive usage of some cumbersome software. Then the PC appeared in the 1990s, when nearly every home had a computer. With today's mobile technology, language learning can be done anywhere, at any time—while standing in line at the Apple store, on the bus, or even in the shower.

2. Interactive

Since CALL has advanced so far, it may almost entirely replace a teacher asking the class, "So, what do you guys think? What are your plans for the future? What is language learning with computers? Well, not all teachers seek student feedback. Computers have the benefit of not requiring an input to function. They are therefore interactive by nature. The complexity of this connection has grown throughout the years. We now have CALL, which truly "learns" and "remembers" student preferences, moving away from the simple stimulus-response in the early computers where students are essentially passive learners. We now have gamified images like Mindsnacks, which evolved from a straightforward text display.

The second "I" resulted from CALL's emphasis on individualization. When you click on something, the computer reacts, which is referred to as interactive. The system has enough flexibility built in such that the majority of what happens in the session is up to you. Do you want to go in that way or this one? The

computer complies with the students' requests when they click forward or backward, allowing them to select which topics to study, skip, or tackle first.

D. DISADVANTAGES OF COMPUTER ASSISTED LEARNING

According to Dina, A. T., & Ciornei, S. I. (2013), CALL has a few drawbacks despite appearing to be a perfect technique. Here are a few drawbacks of incorporating computer assisted learning into your lectures.

1. It Can Be Expensive

The most significant barrier to CAL adoption in the classroom is likely cost. Software, electronics, and computers are all quite expensive. As a result, some classes simply cannot meet the goal of providing a computer for every student.

2. It Can Be Difficult for Teachers to Implement

Anything that involves electronics gets more complicated at first. Teachers must become expert users of technology before allowing their students to utilize it, and this training may take some time. Everyone has had that one instructor that wastes a lot of time during a presentation because they can't use the overhead projector or the computer. Nobody wants to be that instructor.

3. It Can Lead to Isolation Among Students

A tailored, one-on-one learning experience is beneficial, but the isolation it can cause is not. Just picture a room full of students sitting at their individual computers, not looking at one another and only using the computer in front of them for communication.

Social interaction is a crucial component of language use, and we pick up new language skills via engaging with others. Students need the assistance of other students in order to study, and CAL can prevent this. However, when used in the classroom, CAL may be a fantastic teaching tool. CAL can revolutionize the way children learn languages—or anything, for that matter—by supplementing your curriculum rather than dictating it.

E. HOW IS CALL USED

1. To Teach

From the earliest introduction of linguistic principles through the assignment of electronic homework, CALL applications can be used by teachers as technology partners in the management of their classes. In almost every other facet of their existence, from finding the closest coffee shop to buying new shoes, students use computers. So why not add taking a language class to the mix?

In addition to incorporating technology into the learning process, CALL also assists in resolving issues that are common among teachers, such as getting students' attention, keeping their interest, keeping them focused, and boosting participation. The wide range of interactive games, songs, stories, and activities that make learning languages enjoyable and painless are advantageous for teachers.

What is language learning with computers? Applications like the highly regarded Language Nut were created specifically for this function and appear to be a full solution and a curricular companion for language instructors. (After all, it was created by former language instructors.) The four language abilities it

supports—listening, reading, writing, and speaking—as well as its immersive interface make it easy to become addicted. In the realm of Language Nut, you can learn vocabulary all the way to fluency by singing songs, playing games, and listening to stories.

2. To Reinforce

Additionally, CALL can be utilized to support a teacher's in-class activities and lessons. Instead of sticking cutouts and visual aids on the board, teachers can use the multimedia lessons given by CALL to assist make their teachings more vibrant and help the concepts come to life.

Humans are constrained physically, but CALL is not. Because of this, it can fill in the gaps when human consistency and endurance require a boost. For instance, an instructor has a limited number of repetitions for each lesson. However, if any student in the class wants to catch up, repetition is essential. Without getting worn out or experiencing decreasing results, CALL apps, films, and programs can be used repeatedly, regardless of location or time. This means that lessons can be reviewed and studied by students long after the teacher has left for the day and fallen asleep.

3. To Test

CALL has gotten quite excellent at evaluating proficiency with specific subsets of a language, but there will probably never be a substitute for a teacher or a native speaker to decide whether a pupil has genuinely grown fluent with the language. It can quickly ascertain, for instance, whether a learner has

mastered particular subjects like grammar and vocabulary.

Beyond simple testing, CALL has really been able to combine teaching and testing in a single mouse click. The time between teaching and testing, or rather the difference between the two, is remarkably small with tools like Duolingo, Memrise, and Brainscape.

For instance, a slide or flashcard with images and audio might be used to demonstrate the translation of the French word for grin (sourire) in a straightforward translation exercise. A user may be presented with a slide asking, "What is French for smile?" by just clicking the "next" button. The student is encouraged to recognize and use the word in many circumstances as a result.

CALL can faithfully implement a predetermined set of algorithms and is free from subjective biases. That is, the program moves on to other, harder content if a user demonstrates mastery over particular concepts or terms. The information is repeated until it is determined that the user has demonstrated sufficient knowledge of the subject, if they haven't yet entrenched this knowledge. The program is kind of saying to the learner, "Hey, you haven't really learned this word yet, so I'm going to present it a couple more times so you can have it saved in your long-term memory."

4. To Practice

Even when there are no classes or when the teacher is not present, CALL can be used. Currently available language learning technology is student-driven and centered, offering pupils unlimited time and space to practice. One can practice their language whenever they want in the solitude of their own room.

The best part is that kids may do all of this without worrying about receiving unfavorable feedback from others.

Of course, CALL practice incorporates both learning and fun, as illustrated by Mindsnacks, a gamified tool for language acquisition. It includes a game called Dam Builder, in which you slide wooden logs around until you can match related words or sentences.

However, access to native speakers is widely regarded as the most significant technological benefit to language acquisition. Language learners no longer have to struggle with the language alone; instead, owing to technology such as Skype and Italki, they may work with native speakers, tutors, or teachers from their own homes halfway around the world. Previously, the only way to gain this type of experience was to go across seas.

Everything is made easy through CALL. CALL positions itself as a capable and reliable partner to both instructor and student from the teaching, reinforcing, assessing, and practicing. It altered the process of taming languages.

Despite all of its advantages, there is one thing that will always be the domain of humans. Motivation. Technology will never understand the passion for learning a new language. Drive is carved into the innermost parts of the human spirit, which technology cannot create out of thin air.

5. Role changes for teachers and students

According Egbert, J. Paulus, & Nakamichi, Y, (2002). The impact of CALL instruction on classroom computer use:

a) Teachers

Researchers frequently emphasize that CALL influences, often considerably, the function of the teacher but does not totally replace the need for a teacher, despite the fact that incorporating CALL into a foreign language program can create significant concern among language teachers. Teachers become guides by creating activities for students to participate in and assisting them in completing the specified tasks, rather than conveying knowledge and becoming the center of students' attention. In other words, the teacher primarily interacts with students to assist them with challenges in using the target language (grammar, vocabulary, etc.) when they use the language to communicate with the computer and/or other people, rather than actively participating in students' language creations.

It has been established that eliminating a strong instructor presence improves both the amount and quality of communication, including fluidity, use of complicated vocabulary, and student self-disclosure. However, students continue to place a high value on the teacher's presence during CALL activities. Teachers should be knowledgeable enough about the available resources to anticipate potential problems and restrictions. Students in CALL situations require the teacher's soothing and encouraging presence. They are required not just for the initial learning curve, but also to lead review

sessions to reinforce what has been learned. Students enjoy praise and encouragement to participate in class. The majority of students said that working in a lab with a teacher or tutor present is preferable to working entirely on their own.

b) Students

In order to use CALL effectively, students must also modify their expectations of their participation in the class. To negotiate meaning and assimilate new content, students must communicate and work with someone other than the instructor, whether that person is a classmate or someone from outside the classroom. Learners must be able to understand new information and experiences based on their own criteria. Less-abled students, on the other hand, can become more active participants in class since class involvement is not limited to what the teacher directs because the use of technology redistributes attention between teachers and classmates. Furthermore, more reticent children might feel at ease in an environment that is tailored to their needs. They'll feel better about themselves, and their knowledge will grow as a consequence. When students work together on a project, they will try their best to finish it within the allotted time.

c) Use of CALL for the four skills

A number of research have been conducted on how the usage of CALL impacts the development of language learners' four skills (listening, speaking, reading, and writing), according to Zhao, Y. (2003) in Recent advancements in technology and language learning. The majority of CALL programs are focused on these receptive skills because of the current state of

computer technology, and most participants report significant improvements in reading and listening. However, the majority of reading and listening programs are based on exercises. Gains in writing proficiency have not been as striking since computers are not very good at assessing this.

However, there has been a lot of interest in leveraging current CALL technology, despite its current drawbacks, to improve speaking talents. CALL, in particular computer-mediated communication, has shown some promise for improving speaking abilities that are closely related to "communicative competence" (the capacity to hold meaningful conversations in the target language) and for offering supervised interactive speaking practice outside of the classroom. It has been demonstrated that using chat can assist pupils in automatizing several frequently used expressions that support the growth of speaking abilities. Even if the chat is only text-based, this is still true. By using video conferencing, one may communicate with a real person instantly and with more authenticity thanks to visual clues like facial expressions.

The current state of computer technology's limitations, however, become most apparent when the computer is used directly for spoken communication rather than as a means of communication (with other people). There are now two pretty successful uses of automatic speech recognition (ASR) or speech processing technologies where the computer "understands" the learner's spoken words. Training in pronunciation comes first. The computer provides feedback on the

accuracy of the utterance while the student reads texts on the screen, typically in the form of visual sound waves. The second is software that allows users to speak commands to a computer. However, in order for the computer to "understand" the speakers in these systems, they are restricted to prepared texts.

d) Problems and Criticisms of CALL instruction

CALL has had a negligible effect on foreign language education. This can be explained by a number of factors. The first is the technology's limitations, both in terms of what it can and cannot do. First off, there is the issue of cost as well as the basic accessibility of technology resources like the Internet (which may be nonexistent in many underdeveloped nations or limited in bandwidth almost everywhere). However, modern computer technology's limits might also be an issue. Although computer technology has advanced much over the past three decades, demand for CALL has increased even more. However, technology is still far from being at the stage where students can connect with computers in a real-world, human-like way, especially for speaking practice. Not to mention that the computer is practically useless if it cannot precisely evaluate a learner's speech.

The majority of CALL-related issues, however, are more related to teacher expectations and concerns about what computers can achieve for language learners and teachers. Teachers and administrators frequently believe that computers are either useless or even hazardous, or that they are capable of far more than they actually are.

Teachers' resistance may result from a lack of knowledge or even from a fear of technology. Even when teachers are offered training in CALL, it is frequently not applied unless it is necessary. One explanation for this is because from the 1960s to the 1980s, computer technology was primarily reserved for the sciences, which put language teaching at a real and psychological disadvantage. Since they are accustomed to using textbooks, language teachers may feel more at ease using them. However, some people believe that the use of computers undermines conventional literacy abilities because they are so closely related to books. These are caused in part by the enormous generational divide between teachers and pupils, many of whom grew up with computers while others did not.

Teachers may also be resistant since CALL exercises might be more challenging to grade than more conventional ones. For instance, the majority of teachers in Mexico strongly believe that finishing a fill-in textbook "proves" learning. While activities like branching stories, adventures, riddles, or logic games may seem to engage pupils, they don't offer much in the way of systematic evaluation of progress.

The time and effort required to properly implement CALL may turn off even teachers who might otherwise perceive its advantages. Even still, those who only expect results by acquiring expensive equipment are likely to be dissatisfied, just as with the debut of the audio language lab in the 1960s. not with standing how "seductive" computing systems may be. First, there are the straightforward tasks of sorting through the many

resources available and preparing pupils to use computer tools. It can be very challenging to know where to start with just Internet sites, and if pupils don't know how to use the resource, the instructor will need to spend some time explaining it to them. Additionally, there is no unifying theoretical framework for developing and assess CALL systems, and there is no solid empirical support for the pedagogical advantages of computers in language learning. The majority of teachers lack the time or expertise to develop CALL-based tasks, which forces them to rely on commercially provided sources, regardless of how pedagogically sound they may be.

e) A few instances of how computer assisted learning can be utilized to aid students in learning languages are as follows:
   - Visual Learning: Many students learn better visually, so seeing an illustration or the application of the vocabulary presented in class is really beneficial. Computers are particularly useful in this aspect since they provide teachers access to the whole internet. To ensure that your children understand what you mean and have an example to link with the phrase you're expressing, you may easily search the internet for photos of fruits, animals, or even colors. To assist show a concept, you can utilize DVDs, YouTube, or your own personal endeavors. When a learner watches a video of something that is actually happening or being utilized, they will remember more knowledge.
   - Listening Practice: Listening is essential while learning a language. You may utilize CAL to

record conversations or play music so that your students can hear the language spoken in context and spontaneously. Once they have developed their own voice in their new language, they may mimic singers and speakers.

- Tests: Giving assessments to students is an excellent concept when utilizing computers. Pre-written tests and other exam materials are available online for use in your classes, or you may create your own test and have students take it on classroom computers. Students who take examinations online may feel less stressed and more in control of their testing experience than they would in a packed classroom.
- Games: Games are likely to be one of the most effective ways to include CAL in the classroom. Younger language learners like solving puzzles and playing computer games in their native tongue. They don't perceive it as learning; rather, it appears to be enjoyable. While attempting to advance to the next level or solve a difficult crossword puzzle, individuals will be unaware that they are growing smarter; in actuality, they are absorbing and remembering more knowledge than they would otherwise.
- Internet Searches: What is computer-assisted learning? Having students perform an online search in their target language is another enjoyable way to include that language into the classroom. Web Quest begins with the teacher assigning the students a search word to look up online. Following that, the students must solve the problem independently in their target

language, which may be a difficult (but delightful) endeavor.

- Online Courses: Last but not least, CAL may offer online courses. These courses can be performed individually at home, potentially as part of a full course load at a college, or in conjunction with a live language course in which the student is presently enrolled. There are hundreds of paid and free language lessons available online, many of which are quite efficient. Before we get into the benefits of CAL, let's look at some of its downsides.

F. TYPES OF CALL

According to Derakhshan ,Salehi, & Rahimzadeh, M. (2015). Computer-assisted language learning (CALL),Pedagogical pros and cons. International Journal of English Language and Literature Studies:

1. Pros of Assisted Learning

a) Students and Instructors Can Receive Real-Time Feedback

Analyzing performance metrics on a computer with the student. CALL provides answers right away and evaluates student achievement. As a result, it may give the learner quick feedback while not only cataloguing errors but also offering analytics that go above and beyond to aid in student improvement. This is also advantageous for teachers, who can use this information as a tool to improve both their own instruction and their evaluation of student performance.

b) The Learning Process Is More Interactive and Engaging

Each of the many shapes that CAL might take is intended to engage students. These innovative, engaging methods of learning and assimilation of material are likely to be well received by students – frequently much more so than regular classroom instruction. The likelihood of being bored is considerably diminished by the wide variety of CALL-related procedures.

Additionally, CALL is frequently interactive, which engages students and empowers them to take an active role in their own education.

c) Learning Can Be More Personalized

Numerous CAL programs adapt their approaches to each learner's developmental level. Whether it's a game, an interactive lesson, or a test, the application conforms to the student's learning style. Additionally, students may progress at their own pace, and the curriculum will adjust to meet their requirements. A more customized approach leads to increased engagement and better learning outcomes.

d) Technology Can Fill the Gaps for Students with Learning Differences

Additionally, CALL has consequences for students who exhibit a variety of learning disabilities, enhancing access for people with various curricular and learning requirements. The importance of accessibility is highlighted in this context, underscoring CAL's applicability. CAL tools can meet a variety of specific requirements through a customized adaptable approach.

2. Cons of Computer-Assisted Learning

a) CALL Can Become a Distraction

Students that utilize CAL tools in class may find it difficult to concentrate on the actual teaching that is taking place. Teachers of all levels frequently express frustration with getting their pupils to pay attention, and when technology is involved, distraction for kids is made even simpler.

b) It's Expensive

Technology is frequently pricey. The pricing barrier for CAL solutions may make it challenging to acquire and apply them. This is particularly true when the tools are specifically designed for a certain audience, but educators should be aware that there are some alternatives that are more affordable.

c) Software Can Become Outdated Quickly

There is a risk of utilizing technologies that will become fast obsolete or out of date as a result of constant technical advancements as well as reevaluations and reconceptualizations of information. Given the high cost of CAL, teachers who are considering utilizing these tools should look into alternatives or speak extensively with the authors to ensure the technology can be modified to integrate new material.

d) There's a Risk of Over-Dependence on the Technology

CAL should not replace instructors, but rather assist their efforts. Although there are some cases where technology may be more useful, such as when an adult student is attempting to study a language on their own using a website like Duolingo, tools and live teaching commonly work together. With CAL, there is a risk that both

instructors and students may become unduly dependent on technology.

Additionally, some instructors could believe that they struggle to discover resources that support their lesson plans and try to change their lessons as a result, but in reality, they should look for technologies that complement and support their lesson plans.

In the best-case scenario, computer-assisted learning is beneficial and enhances education. However, this does not mean that it is perfect. In an ideal world, instructors will strike a balance between using technology to enhance and support their own education, which benefits both students and teachers.

Interactivity is the process by which the usage of multimedia engages the audience or user and creates dialogue between that user and other users as well as that user and the multimedia. As an illustration, consider a learner who uses a video-based language learning software. From his computer, he can observe how the instructor teaches a certain subject. Then, in a section of the video, the teacher asks a question and lets the pupils respond in the chat box or comment section. There are a ton of interactive multimedia options available that you can choose to use for free or pay for. There is no second wave of feedback that can be provided by a teacher's presence to function as backup when the student is normally working alone, therefore the computer must consistently offer the student with the appropriate help and advise every time the software is utilized. As a result, the computer's performance in the tutorial

function is determined by how consistently the software controls students' learning and how timely, accurate, and appropriate feedback, help, and guidance is delivered.

When students work alone on the computer, they might not receive feedback from the teacher, according to Levin 1998:90. When they are alone and unable to seek assistance, they may become frustrated when they are unable to understand a particular section of the multimedia being used. The biggest risk associated with language learning through CALL is that students become less motivated to study because they don't receive a second opinion from the multimedia they used in addition to their teacher's. The'real-visual' student may find it challenging to pick up the language, which is another hazard. Multimedia merely allows us to view images and not actual objects. Therefore, it is challenging for them to picture the thing. To avoid these risks, I believe teachers should incorporate a variety of multimedia into the classroom and provide each student with individualized attention until their language skills improve.

G. TIPS IN USING CALL

Torat, B. (2000) say that in Computer-assisted language learning: An overview. There are tips for effective use of call for ELT teacher:

a) Employ CALL for educational purposes. Just because other people have done something doesn't mean that teachers should follow suit. Like the language lab was roughly 30 years ago, CALL is a new technology that many teachers utilize without

thinking about whether it truly serves or adds value to educational objectives.

b) Keep CALL integrated with the rest of the program. Make an effort to incorporate CALL into other curriculum subjects or disciplines. CALL will become more integrated if it is used in all areas of the curriculum.

c) Think of CALL as only one of many educational options. Teachers should make an effort to incorporate other learning tools into their lessons, such as books, periodicals, videos, and audio tapes.

d) It's crucial to select CALL software that is appropriate for the learner's age, needs, and interests. Teachers can use software evaluation guides as crucial aids when deciding on the best software.

e) Utilizing CALL is not a goal in and of itself. Additionally crucial are the follow-up actions. When CALL concludes in class, many lessons come to an end. In reality, it's also crucial to do follow-up exercises like group discussions, writing assignments, and research into additional information from various sources of knowledge, such interviews and surveys.

f) Don't assume that everyone in the class will love using the computer. Many students would rather engage with people in person than with a computer, such as students-teacher or students-students. For children who favor traditional activities, teachers should offer alternatives. Surveys are also crucial.

g) Don't assume that everyone in the class will enjoy using the computer. Many students would rather communicate with people in person than with a computer, such as student-teacher or students'

interactions. The teacher should offer conventional teaching methods.

h) Don't assume that every pupil will be able to use a computer without difficulty. While some students find it easier to learn specific abilities, including utilizing the keyboard or mouse, others find it much more difficult. Teachers need to have patience and be ready to assist slow groups.

i) Make an effort to include a range of CALL activities, such as word processing, chats, MOOs, email correspondence, web publishing (such as home page newspapers), and web-based evaluation.

j) Don't anticipate that all teachers will find using computers to teach students to be simple. It can be demanding and may call for extensive preparation, such as setting up the computer lab, creating the necessary software and resources (both printed and digital), and planning out follow-up activities. The greatest method for introducing CALL in schools appears to be teamwork.

H. COMPUTER-ASSISTED ENGLISH LEARNING EFFICIENCY IMPROVEMENT

The teacher who was trained to use a computer for learning as well as a collaborator teacher in this study provided interview responses that revealed the learning effectiveness with computer assistance. According to an interview, learning English on a computer is quite effective when taking into account the time and energy that are available. Teachers do not have to spend a lot of time explaining the learning material to the students because the collaborative teacher simply displays it on the computer screen with images and sound. By eliminating the need for

writing on the board and lengthy explanations, teachers can focus more on engaging the students in the learning process. Students had the opportunity to investigate their English proficiency, particularly their vocabulary, through direct computer interaction by working on activities that were provided individually, in pairs, or in groups. their inability to choose the content that can be delivered electronically and the fact that they were unfamiliar with the program to be used for English learning. They believed that software, such as cue cards and programs, were very useful and appropriate for use in vocabulary development. This is brought on by the fact that the program offers students and teachers alike materials that are simple to create.

I. BARRIERS AND BENEFITS OF COMPUTER ASSISTED LANGUAGE LEARNING OR CALL COMPUTERS HAVE BEEN USED FOR TEACHING

According Hani, N. A. B. (2014) Computers have been used for teaching languages since the 1960s.The World Wide Web, often known as the WWW, and the personal computer, or PC, were both invented in the 1980s, and as a result, the use of computers in language acquisition has increased significantly. There have been several discussions and disagreements over the course of the time about the advantages and disadvantages of its use, the use of technology in general for language learning, and the integration of CALL into modern language teaching.

The use of CALL in language acquisition is hampered by a number of factors, including cost, availability of hardware and software, technical expertise, and technological acceptance. It may be difficult for institutions and students to afford the tools and programs needed to use or adopt CALL in an efficient manner. Even

if the financial obstacles are removed, learning may frequently take place in isolated areas where there is uncertainty about the availability of the necessary hardware and software or a suitable setting in which to deploy or utilize a computer. Finally, there may still be problems and impediments preventing the technology from being successfully implemented even if the institution or student has the financial resources and the necessary gear and software.

There are a number of areas where the usage of a CALL system has clear advantages and may even outperform conventional teaching methods when a school or student makes the commitment to implement or use one. Computers were primarily used as drill and practice instruments in the early days of CALL. This is still accurate today, and it works. Computers were first created to carry out repeated operations, which perfectly satisfies the needs of drill and practice. The repetition of the drill and practice exercise on the computer also has the benefit of preventing boredom or frustration.

Utilizing hypermedia on a basic computer is another advantage of using CALL. The needed content can be delivered using text, audio, video, or any mix of the three by using the CALL program. This cutting-edge method of presenting information and grabbing students' attention keeps them engaged and often makes for a more effective learning environment. The learners' experience can be further tailored and improved, offering a more comprehensive learning experience, through the use of increasingly sophisticated technologies like hypertext, linkages, and the internet. Existing software has the capacity to provide information that is frequently not practicable or possible in a typical classroom setting, such

as a picture, audio pronunciation, usage details, or extra information.

J. THE NEED FOR CALL

One of the hardest areas to learn is vocabulary. It is the skill that requires the most time and effort to master. Similar to this, mastering grammar takes a lot of practice. It might be tedious and tiresome to practice grammar and vocabulary because it gets boring after a while. Therefore, a fresh and creative approach is required to make learning these important abilities simpler and more enjoyable. It shouldn't be considered when studying it. CALL is useful in this situation. Nowadays, technology permeates every aspect of life. Every child in the present era is addicted to technology, and everything of today's technology is web-connected. Everyone has easy access to the resources on the internet from any worldwide location. Thus, the internet can be used for more than just amusement; it can also be utilized to share knowledge. People now find it more interesting to learn using their devices than books. Additionally, CALL offers engaging sessions with the advantage of self-paced learning. Stress and pressure are not necessary for learning. Additionally, since a machine won't make mistakes or act carelessly, teaching won't be impacted by either. Additionally, it becomes simpler to effectively and efficiently disseminate knowledge to a larger audience. For instance, a CD-ROM that comes with an English grammar book may have questions about vocabulary and grammar. Grammar and vocabulary lessons may be included. Additionally, it may have a computerized voice that gives the words the proper pronunciation. Additionally, such material can be distributed without a CD-ROM using methods like the Internet.

1. Limitations However, nothing is perfect There are some limitations of CALL:
    a) The gear and software used for CALL are pricey.
    b) Teachers lack the necessary training to use CALL equipment. Money is also spent on training.
    c) Installing and maintaining computer hardware can be challenging.
    d) The programs might not be able to run on the hardware.
    e) There is a limited selection of exercise kinds, including MCQs, fill-in-the-blank, match-the-columns, etc.
    f) The Internet is filled with useless information. Before the students may access the data, the teacher must first screen them.
2. The communicative CALL approach are listed below. This approach :
    a) Encourages students to be creative and innovative.
    b) Teaches grammar indirectly and contextually.
    c) Focuses more on using forms than on the forms themselves .
    d) Never rewards pupils with messages, audio, or bright symbols. The answers are not up for scrutiny or criticism, and they do not explicitly point out the pupils' errors. The majority of student responses are acceptable.
    e) Employs natural-feeling attention on the target.
    f) Avoids using any print-based materials.

K. DIFFERENT EFFECTS OF CALL ON STUDENTS' LEARNING

The goal of many educational programs is to ensure that students learn everything possible. The use of computer-assisted language learning can have a variety of effects on students' learning across a range of educational contexts, and specifically in contexts where language is being learned. Technology can create a learning environment that fosters both autonomy and relatedness, self-regulation through the development of skills and attitudes, and the learner's propensity to engage in purposeful learning processes (Neri, A., Cucchiarini, C., Strik, H., & Boves, L. (2002). CALL has a lot of possibilities for teaching English. When correctly implemented and coupled with specific educational goals, CALL can engage and inspire English language learners, improve student access to material, offer flexibility in the delivery of instruction, and thus better support each student's learning style, pace, and tactics. It gives students the ability to direct their own learning and development. The learning of various language skills and components can benefit via CALL. Additionally, CALL training could enhance the vocabulary skills of EFL students. Computer-assisted language learning may also increase teachers' understanding of the significance of psychological constructs like ambiguity tolerance, whose significance has been emphasized in several studies. This would allow teachers to modify their lesson plans and other instructional strategies to better support their students in overcoming psychological barriers (Ghashghaei, T. B., Kashefian-Naeeini, S., & Marzban, A. (2020).

When it comes to teaching second languages, computers are unquestionably helpful, according to the vast majority of teachers who give them a try. Computers

are great teaching tools, especially when it comes to teaching languages in all of their linguistic and pragmatic communicative facets, including vocabulary, grammar, writing, pronunciation, and others. And it appears that the main advantages provided by computers in improving language acquisition exceed their drawbacks. Understanding the benefits and constraints of technology integration is a vital step in successfully integrating technology into education. Lack of understanding could seriously hamper stakeholders' and educational institutions' ability to introduce and support teachers' broad use of technology in the classroom. According to related studies on CALL, adult EFL learners believed that prior knowledge and CALL may help them develop their emotional intelligence and language skills.

The variety of subjects covered by CALL has significantly increased thanks to the language learning settings made possible by Web 2.0 technologies. The most frequently cited benefit of Web 2.0 technologies is the welcoming settings they serve to establish for language learning, even if very few studies evaluated have actually examined students' progress and learning outcomes related with these tools. Wikis and blogs have received the most attention among Web 2.0 technologies so far. They only made up a small portion of the much larger Web 2.0 "iceberg" though. Technology shouldn't be seen as a panacea for all of education's issues, but rather as a potent tool that can have both beneficial and detrimental impacts and that needs to be handled with caution.

Computerized games and simulations are used in CALL to enhance learning and student motivation while also adding a fun factor to the current learning activities. The contemporary research on theories of language acquisition hypothesizes that simulations and games were

useful tools for assisting language learners in learning a second language (Nim Park, C., & Son, J. B. 2009)). Simulations and games also provided excellent possibilities for effective language learning. A lot of teachers are highly motivated to use CALL in their lessons. Teachers have a pleasant and positive attitude toward using technology.

According to Park and Son (2009), they saw computers as useful teaching tools that may enhance teaching strategies by giving students access to a variety of linguistic inputs and expanding their exposure to real-world situations. It has been shown that when it comes to the importance of computer knowledge in relation to commitment to learning, students who had taken computer courses or who owned a computer had significantly different attitudes than those of students who had no knowledge or experience with computers.

It has been shown that, even in computerized situations, learners' attitudes about reading English texts were negatively correlated with encounters with unfamiliar terminology, although learners' attitudes toward contextual differencing procedures had a favorable effect. Considering contextual differencing techniques and how EFL learners' reading attitudes have changed and how CALL might support these developments. Even though a mixed-method research can provide a more comprehensive picture of CALL, it was justifiable to use qualitative techniques because many studies have employed either of these approaches. Therefore, a mixed-method research might provide a holistic picture for a deeper understanding of the issues related to CALL.

The current study's goals are to determine the advantages of utilizing CALL and to examine some components that foreign language instructors in Shiraz City seem to find useful while using CALL. These

components include possessing the required skills and knowledge as well as having access to computers. To put it briefly, the purpose of this study is to ascertain whether or not teachers' usage of CALL in the classroom is correlated with their computer skills and expertise. It also aims to determine whether teachers using different computer facilities make different use of CALL. The authors of the current study wish to offer four research responses about the elements of CALL, computer knowledge and abilities, and computer facilities in light of the aforementioned data:

a. Is there a connection between using CALL in the classroom and instructors' computer knowledge and expertise in Shiraz's foreign language schools?
b. Is there a difference in how CALL is used by selected foreign language institute professors who have access to computers and those who don't?
c. What are the benefits of CALL, in the perspective of EFL teachers who work in Shiraz English language schools?

L. CALL RESEARCH TRENDS AND ISSUES

Today, CALL has made a name for itself as a significant topic of study in higher education. Early CALL research frequently focuses on making the case for why using computers to teach languages is better than doing so the old-fashioned way. The majority of studies now contrast different CALL activities, for instance using captions versus transcripts with online video.

M. CALL DESIGN AND EVALUATION

The most complex design framework to date is that of, which skillfully combines engineering ideas with pedagogical strategies and is targeted at the development of language course ware. Levy, who classified the uses of

the term design, not just the design of artifacts (such as software), online courses, and materials, but also design as a principled approach to CALL, including approaches to the design of CALL tasks, is another significant piece of work in this area. Evaluation and design go hand in hand. Checklists, methodological frameworks, and applications of SLA concepts are the three main strategies used here. To decide whether or not to utilize a specific program in their classes, they employ checklists. Methodological frameworks make an effort to outline the essential factors that go into choosing a candidate. Six research-based criteria for CALL task evaluation that may be applied to both subjective and empirical evaluation are identified by the SLA-based methodology.

N. CALL, LANGUAGE SKILLS, AND COMPONENTS

1. Listening, Speaking, and Pronunciation

In the 1980s, sound was added to computers, allowing users to listen to the blending of text and visuals on screens. Digital speech and video provide the listener with more control, enhancing both immediate comprehension and acquisition. Speaking practice has typically taken place in pairs or groups of students working on a task together in front of a computer, or it has taken place alone with students using the computer to record their voice. In a branching dialogue, learners can choose which lines to recite by using automatic speech recognition (ASR). Online audio chat forums are now used for more natural speaking practice. Wimba, etc, and podcasting. Skype and other VOIP (Voice Over Internet Protocol) programs enable low-cost or free audio and video connections between computers. There are three main categories of applications in the field of pronunciation. The first is a digital tape recorder, where

students utilize a computer to listen to models of native speakers before recording and comparing their own voices to that model. Speech visualization comes up at number two. In this situation, students try to match a model, but they see a graphic representation of it rather than just hearing it. The final application involves utilizing ASR to estimate how similar a learner's speech is to that of typical formative speakers. The student can receive feedback in the form of a numerical score.

2. Reading and Writing

Computer systems can help readers learn to read in at least three different ways: by regulating what they viewed and how long they saw it for to encourage automaticity and reading techniques; by offering comprehension and other activities; and by displaying glosses and other comprehension aids. The importance of reading through CALL is not only focused on learning vocabulary; it is also focused on encouraging extended reading, increasing reading fluency and speed, and creating an innate desire to read. The development of learners' word processing skills and the use of text-based and later graphic organizers to aid in the writing process are the next two areas where writing in CALL is concentrated. Grammar and spelling checkers are introduced to increase accuracy. Applications have been created to support online writing communities on the web, most recently Google Docs.

3. Grammar, Vocabulary and Data-driven Learning

Language teachers can now easily create their own grammar lessons utilizing multiple choice, gapped sentences, and matching forms thanks to authoring technologies like Hot Potatoes (Primani, P., & Agustrianti, S. 2017). When employed with specific structures, CALL (Intelligent CALL) systems have been found to be useful in improving grammar acquisition. This is because the range of errors may be anticipated and the feedback can be tailored accordingly.The next application that is still used frequently is vocabulary, partly because it has such a high face value for language learners and partly because it is simple to maintain and program.

Tom Cobb's Lex tutor website, which contains vocabulary level exams, frequency analyzers, etc., is one of the helpful sets. In addition, data-driven learning attempts to complement students' exploratory learning of grammar and vocabulary by employing computer programs to aid in their awareness of patterns in the target language. The most popular application type is Concordance Web, which enables users to choose an item, such as a word, phrase, or in some cases even a stem, and search for occurrences of it within a specific corpus.

O. WHY CALL?

Here are a few explanations for why ELT instructors use CALL.

a) computer can aid the learner much even when the teacher is not there by doing some of the teacher's duties.
b) Computers are now faster, smaller, and simpler for teachers to use thanks to new technology.

Currently, teachers can easily get well-designed CALL software.

c) Modern technology gives computers multimedia capabilities that combine video, sound, and text. These capabilities enable the learner to communicate with the programmer and other students.
d) The computer allows for flexible class scheduling and personalized learning by tailoring activities and information to each student's learning style.
e) Computers can create a communicative learning environment that aligns with communicative language teaching objectives.

P. COMPUTER-ASSISTED LANGUAGE LEARNING (CALL) IN EFL INSTRUCTIONS

English is not spoken outside of educational settings, hence some countries' language policies treat it as a foreign language. Compared to teaching English as a foreign language in English-speaking nations, teaching English as a foreign language in non-English-speaking nations is regarded as being more difficult. Students who study English in a nation where the language is widely spoken have exposure to a native English-speaking environment and are compelled to utilize the language in its most fundamental forms in order to get by. Authentic tasks and audiences, which are the fundamental challenges faced by the majority of EFL teachers in non-English speaking nations, are made accessible by CALL's engaging character.

Teachers in general can form their own opinions on the potential applications of CALL once they have been made aware of them. Their perception is based on how they view CALL's potential to improve their teaching

abilities, how confident they are, how well-prepared they were in college, and how well-versed they are in the new technology. Although the availability of technological tools does not directly influence how well students learn, it does influence teachers' decisions to use technology in the classroom (Kessler, 2007). Teachers' opinions of the use of CALL in language instruction have an impact on the students' academic results.

Q. EFFICIENCY IN ASSESSING STUDENT LEARNING

Different teachers view CALL in different ways. The "promise of efficiency" sparked instructors' initial enthusiasm in CALL (Kessler, 2005). Early CALL research suggested that using CALL could reduce the amount of time teachers spend grading and revising student work. Some of the time-consuming procedures in the review process can be expedited with CALL. It can also be used to develop, implement, and assess language lessons using particular language tests. It is simple for teachers to design relevant assessments and compute the results, saving them time and effort.

Additionally, a lot of students think it's more equitable if the exam is computer-based since they think the findings are more accurate than those from a paper-based exam. Additionally, students can receive feedback quickly because technology helps automate the time-consuming process of evaluating students' work.

R. PROMOTE INDEPENDENT LEARNING

Both competence and performance should be equally addressed by the nature of language learning . The more practice you have, the better—English competence is not fully achieved just through classroom contact. The availability of a CALL lab supports students' independent

study and gives them the chance to practice their language abilities. Blake, R. J. (2013) point to a growing corpus of research that shows CALL's efficiency in fostering target language fluency and accuracy as well as motivation and learner autonomy.

The use of technology not only encourages students' independence, but also helps them gain the confidence and competence to learn on their own in a variety of situations. Additionally, it helps the learning environment produce proper degrees of tension or anxiety. With the use of technology, EFL students can feel less anxious and comparatively free from peer pressure than they might in a typical EFL learning environment.

S. FACILITATE INDIVIDUAL DIFFERENCES

Studies have shown that a student's personality can affect how successful they are at learning a second language. Teachers need to be aware of the various demands of their students. This is challenging, especially with a big class. Differentiated instruction is necessary since it is impossible to accommodate all of a student's learning preferences and styles at once. Through the implementation of a well-designed CALL program, students who opted out of classroom interactions have the chance to explore and develop their talents. If their requirements are met, students are more motivated to learn, which in turn affects how well they acquire the language.

T. INTEGRATING CALL IN EFL CURRICULUM

Around the world, technology is fast becoming recognized and included into English curricula. As an alternative to some boring language instruction activities, teachers and curriculum specialists in the United States

started developing their programs in the 1980s and 1990s. Due to the quick evolution of the curriculum, teachers and curriculum writers were forced to create courseware to meet the needs of the students. their study suggests that teachers' perceptions of the incorporation of computer use in curriculum are incorrect. The majority of them believed that integration was simple because computers had always been used in classrooms, therefore they spread computer use out throughout the day. What they consider the employment of computers in the curriculum is as follows. In addition to discovering that teachers had an incorrect understanding of integration, their research revealed that teachers exclusively use computer activities connected to specific curricular areas with the primary goal of developing computer abilities.

The goal of integrating CALL in language instruction is not to overwhelm students with computer skills, but rather to achieve what refer to as traditional CALL, which "has been associated with self-contained, programmed applications such as tutorials, tools, simulations, instructional games, tests, and so on" (p. Therefore, the primary goal of incorporating CALL in language curriculum is the pedagogical component of language acquisition through the use of technology. It is crucial to think about how CALL can be utilized to improve language acquisition and include it into the curriculum.

However, the first step in integrating CALL in language instruction is making the technology devices accessible. Before selecting to construct a CALL lab, it is vital to do a requirement study. Underlines the significance of taking initial actions to assess the demands and put the best CALL solution into place. He makes the point that in order to create a CALL lab, we must first perform a needs

analysis, then have a better grasp of CALL, take into account manpower, space, and money, choose appropriate hardware, and finally look up information online. CALL may be properly included into language curriculum and education once a CALL lab is available.

The physical lack of hardware, such as computers, printers, scanners, and other equipment, is one of the primary barriers to integrating technology into the curriculum. lack of software, including operating systems, programs, and subject-specific software, like language learning software; a lack of resources for infrastructure, such as furniture, cables, room layouts, and long-term upkeep and system upgrades; Internet connection not available, or it is sluggish and unpredictable. Ironically, many schools around the world, especially those in developing nations, still do not have access to the internet even in this age of wireless Internet connectivity. Building an infrastructure to facilitate the incorporation of technology in the instructional activities is challenging due to the state of the school buildings.

Even though computer gear and software are readily available for instructors to employ, it still seems that educational issues remain the main obstacle to incorporating computer technology into the curriculum. Machmud, K. (2014) Contends that in order to successfully integrate computer technology into educational activities, one must possess both technical and pedagogical skills; however, many teachers lack the will to acquire these skills. The primary causes are their lack of experience and education in this area and their perceptions of the advantages of computer technology in a teaching environment. The benefits of employing technology in the classroom are not universally accepted by instructors.

U. CONCLUSION

Many teachers all around the world are forced to work in environments where the level of computer technology is below par. Lack of gear, software, infrastructure, and internet connection are variables that influence how they view the usefulness of integrating technology into the classroom.

When presented with difficult circumstances in an institutional context, teachers who have been trained in the CALL component occasionally give up. For some CALL-skilled teachers, it is regretful that the lack of computer technology in their workplace renders their expertise useless. The issue is made more worse in some nations by the absence or unpredictable availability of internet connectivity.

It is not necessary to have access to computers in order to enhance learning, despite this being a key condition for a successful integration of computers in language training. It seems that using technology rather than having it available is what is more significant.

The majority of studies that have examined how teachers feel about using CALL in language teaching and learning have used participants who have had experience with or have at least been exposed to CALL's many components. The question of whether some teachers who have never been formally introduced to CALL have the same perspective as those who have adequate preparation and knowledge towards the integration of CALL in teaching and learning English as a Foreign Language still remains in light of the use of technology that has been gradually believed to increase study achievement in learning language. Do they each have a unique viewpoint on CALL's role in language learning? The inclusion of CALL in the EFL curriculum is crucial.

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CMC (COMPUTER MEDIATED COMMUNICATION)

A. INTRODUCTION

Before entering the modern era, an era where humans live and interact without using sophisticated technology for them is a normal thing because they want or don't want to have to deal with it. But when in this modern era, humans will be overwhelmed without using technology. Most of them do not know about technology because they are new to it and are just about to learn to use it. In contrast to people who have entered the modern era, maybe they already know a lot, already know a lot about how to use technology and they even often teach people who don't understand technology. It is an honor for people who understand technology because they can be able to compete with other people wherever they are. In addition, understanding technology can be a place for prestige competition to others.

According to William & Sawyer (Abdul Kadir& Terra, 2003) information technology is a technology that connects computers with very high-speed communication lines that can transmit data, voice, and video along with them. The features provided are very complete so it will be easy and interesting to use.

One of the most popular communication tools today is the mobile phone. Almost everyone has it, from children to adults. Currently, whether in a crowded or public place, everyone is holding their own mobile phone whether they are watching videos, receiving calls from colleagues, replying to messages, and so on. not only in crowded places. When you eat, when you talk to other people, even when you wake up, what you usually look for

is a cell phone, as an introduction, you can even use it as a friend when you feel empty.

One of the keys for every individual to live a life that is increasingly very competitive today is by having communication skills.We cannot deny that in all fields there will definitely need communication.Therefore, to determine the good quality of each individual is to have a good communicator in the short and long term.

To be a good listener, it takes someone who has the ability to convey a message and is able to use some of the available media properly.This is an important component in a communication considering that communication is something that can be said to be very important in this life.

This is due to the rapid development of communication technology, so that we can communicate anytime and anywhere without having space and time limitations. In this modern era, people don't have to meet face to face with people who are far away, to find out news or circumstances one doesn't have to meet in person but can also use a cellphone.

Global technological advances have advanced very rapidly. This can be seen in terms of the influence of technology in all aspects of human life, aspects of economic life, art and culture, politics and even learning in the world of education. Nothing can escape the advancement of technology in human life. With the spread of technology in the current era of globalization, we can use it in the world of education as an increasingly tool to accelerate learning in schools. Here the importance of technology is always monitored its development. A very attractive display of technology can make the learning atmosphere very exciting and this can make children not feel bored when studying in class so this evidence can be said that the use of technology can increase children's learning interest. In Indonesia, most

schools still do not use technology in terms of learning. Schools that are located in cities or in strategic places will definitely know and apply technology in the classroom, students and even teachers will definitely use it. Unlike the case with schools in villages which do not have access to networks and lights, some will not use technology because it will not have any impact so they only use simple tools. Usually when they continue on to higher schools and continue in the city, they will be confused and will only start with what is called a technology.

For people in remote areas, new learning methods are no longer the cause of a new perspective.They still depend on and still can't let go of the character 'Teacher' who is in front of their class.The figure of someone who is perfect when teaching in front of the class is the teacher.Wearing uniforms, teaching face-to-face and being able to provide very detailed and complete explanations of material makes the learning process and communication in the classroom more effective (Febriyanto, et al. 2020).

Some parties view that our current national education system is no longer effective and is no longer able to provide provisions so that we are no longer able to prepare students to compete with other nations.therefore a fundamental change is needed in our national education system (Koswara: 2018)

The benefits of technology in the world of education are that it can add information, improve learning abilities, facilitate access to learning, make material more interesting, and can increase interesting in learning.

1. Can add information

The first benefit when using technology is as a tool that can support students and teachers in terms of finding more extensive information from books and print media

sources used in schools. Here students and teachers do not just focus on existing books to get information. They can see, know and find what they want to know more and more.

With various applications and features available, it will be very easy to get unknown information as long as they know how to use it.

2. Improve learning ability

Evidence that shows that the use of technology can improve learning abilities is that there is very complete information available on the internet that is more updated so that students can easily find information and lessons that students may find difficult to understand. Even so, it still requires supervision from the teacher so that the student is not wrong in using existing technology.

3. Easy access to learning

With the existence of technology, the teaching and learning process will be very easy. For example, if in the past teachers and students were only limited by paper and books, with the existence of technology, teachers can instruct students to send study materials and assignments via e-mail so that students can immediately complete and receive assignments that have been given. The teacher no longer needs to receive piles of books from students who collect assignments but the teacher will only read assignments from these students.

4. More interesting material

Before getting to know technology, students are usually only confronted with very thick textbooks and student worksheets. Apart from that, the way of learning from a teacher who only explains and then throws

questions at students will make students bored and bored in learning, sometimes making students sleepy in class and then always asking permission to leave class without a definite reason due to boredom and boredom. in learning which can result in the teacher not focusing on teaching. With the existence of technology, it can help students in learning so that it is not boring and monotonous. Why is that? Because the technology has been arranged in such a sophisticated way and the delivery of information in it is very varied and modern.

5. Increase interesting in learning

With the existence of sophisticated technology can increase students' interest in learning. This is because there is more complete information and knowledge that also has easy access in using it. In addition, the more students have a very high interest in learning; students may not want to stop learning and still want to continue to find out about the subjects they like. Even so, teachers and parents must remain vigilant and continue to supervise students and children because apart from having advantages, advantages, strengths in science, technology also has a negative impact.

Besides we are familiar with mobile phone technology, we also know what is called technology using computers. To make computers come alive, communication through computers is supported by the internet which provides many interesting features that make the computer come alive.

Yusuf (2010, 50) expressed his opinion that educational communication is an important form of educational development;from the point of view of communication in the world of education or communication in education.So the educational factor here

is the core of the discussion while communication tends to be the focus only as a 'tool' or just a point of view.Here it is said to be a tool because it is only used to solve educational problems.A very important element of its position in education is communication.Even this communication can determine whether the person doing the education is successful or not.Good communication can determine the level of educational attainment.

B. DEFINITON OF COMPUTER MEDIATED COMMUNICATION (CMC)

Nowadays, almost everyone uses computer-enabled communication every day. A simple example of CMC is sending messages via chat applications, replying to messages on online forums, and making friends on social media. This type of computer-mediated communication has been in use since World War II and since the advent of digital computers in the early 1960s. At that time, computer devices were only used to send information and process information. Then in the 1990s the internet was born which became a communication bridge between people separated by distance and time. With the availability of these new communication methods and technologies, it encourages experts to study in the field of CMC.

In theory, CMC is an interpersonal communication process that uses two or more computers that can involve people in a certain context. In CMC, you will study how humans can be formed by exchanging information via computers and the internet. With the help of the internet, communication can occur freely and people can communicate between people or even in groups.

McQuail& Golding (2005) also expressed the opinion that Computer Mediated Communication (CMC) is

communication that occurs between two or more people using a computer as a tool.

The application of CMC is no stranger to our daily lives, especially for the younger generation. Social media applications such as Facebook, Youtube, Twitter and Instagram are accessible and can be used to communicate with many people in various places. Apart from that, there are applications for chatting such as WhatsApp, Line, and Telegram which can also help us exchange news with loved ones intensively.

This type of CMC communication is different from other types of communication. CMC has its own uniqueness. CMC has features that are not found in other types of communication, such as emoticons, GIFs, and emojis. The symbols will only appear when someone starts to message. The available features will make existing messages more interesting, lively, and not boring. However, the impact that occurs when using or sending emotion incorrectly will cause miscommunication. Therefore CMC is a still new field that must be explored by experts. Not only that, CMC still has other uniqueness, such as pauses. When we send a message, we cannot know whether the message has been sent and the reader has read it or not. This can happen when you have connection problems, so CMC users have to be more careful when using it.

Hosseine (2015) states that Computer Mediated Communication (CMC) is an activity to learn read and write using the internet network. Schools that are in places that have a supporting internet network must use Computer Mediated Communication (CMC) at the school where they study so that they can complete in other schools, even internationally.

Computer Mediated Communication (CMC) is a communication that can we as a trend of communication technology transfer use of using a computer as a medium to process an idea/message and information axiomatic (The clearly true knowledge). That means that the use of computers in student and teacher learning can no longer be doubted for its success. It all depends on how effetive they are using the media (Darmawan, 2012: 134).

According to Lengel & Thurlow (2004), CMC is a term that people use to communicate between two or more people and it can be done through different computers.Lengel and Thurlow divide Computer Mediated Communication (CMC) into several core concept parts:

1. **Communications**
    a. Being dynamic is one thing in a communication. One thing to remember in communication is the idea of the sender, the message and the receiver. This style places more emphasis on simplifying the exchange of static information. In this concept it can be understood that communication is a more dynamic process because the importance of a message is not just a word, but will depend on the context from time to time.
    b. Communication can change at any time because when communicating, two or more people mutually interpret and are influenced by the words of others. it can be said that communication transactions occur between them.
    c. Being multifunctional is one thing in a communication as well. This is because communication can and is able to perform services in serving various functions and

different purposes. Some of the functions possessed by a communication are giving a report, influencing, seeking information, supervising, making friends and even seducing and many other functions.

d. Communication has a multimodal nature. In the process of meaning, humans make use of different semiotics. For example, to find out if someone is lying or not, then to be honest or not, we can find out the truth just by looking at them and looking into their eyes. When we try to persuade him to tell the truth in a loud tone, when he replies in the same tone then it means he is lying or dishonest.

2. Mediated

a. Psychologically it can be categorized into perceptions, mental maps and prototypes
b. Socially includes relationships, stereotypes and personal experiences
c. Culturally has the myths and ideology of a society.

3. Computer

We who live in modern times cannot deny that all human activities that want to communicate will definitely use what we are used to with computers as the medium. Features that exist in computers such as video conferencing media that we usually know as zoom and Google meet can prove that there is a change in technology that is able to encourage many people in our lives, even people we did not know before, can make us close,

and can even make people close to us. much closer to us.

Verbal and non-verbal communication is categorized into 5 things. They are:

a) Text.

In the media for communicating on a computer, help is prepared, which is usually called text. This text will make it easier for us to express what we want to convey in making text consisting of letters, numbers, punctuation and special controls according to our wishes.

b) Graphics

Graphics are lines, circles, squares, shadows and fills color etc. There is a saying that one picture is better than a thousand words why is that? because people will need a long time to read a message whereas if you use graphics people will only see and pay attention to the images sent. Does not require time to know the intent of the message conveyed.

c) Image

The image is still a color image. or from many small individual drawing elements (pixels), can be a photo or a painting. English usually people like to collect interesting colorful pictures to add to the attractiveness of a communication that is done.

d) Sound

It consists of sounds, including sounds, sounds, sic and special effects. Sometimes people are lazy to send messages via text, now it's made easy with audio media. On audio, we just talk and then send it to the person who wants to send the audio message. Audio

recipients can also resend or reply to messages via audio as well. 5. Video clips

It consists of images presented one after another fast enough to give that impression smooth movement. The media is considered quite interesting, does not require text messages and audio. But with video we can immediately present ourselves that includes the voice and message that we will express.

The five media above can be used in terms of support communications made via the Internet to be communicated verbally and nonverbally and capable of providing certain psychological effects according to the wishes of internet users

C. THEORI OF COMPUTER MEDIATED COMMUNICATION (CMC)

Computer Mediated Communication (CMC)'s new concept was able to attract the attention of many people in this industry. This communication can be devoted to exploring the difference between Computer Mediated Communication (CMC) and Face to Face communication. Social psychology telecomunications with a focus an conferences which in this case use voice and the conference describes predictions of non-verbal (cue) deprivation and the frequency of choices of early Computer Mediated Communication (CMC) researchers decisions about Computer Mediated Communication (CMC). Computer Mediated Communication (CMC) is a recent concept. This is what makes communication experts interested in studying the differences between Computer Mediated Communication (CMC) and face-to-face communication. Another Computer Mediated Communication (CMC)

study was also carried out by Culnan and Markus by showing that the depletion of non-verbal signaling systems due to Computer Mediated Communication (CMC) technological capabilities led to a lack of normative behavior, politeness, empathic coordination, friendliness and the inability to reduce uncertainty. Berger, Roloff& Roskos (2014) call it the Cues filtered out condition. This condition is a communication situation that reduces a person's ability to capture communication signals, including nonverbal signals related to communication.

Social information processing theory shows that in Computer Mediated Communication (CMC) theory there is a processing of social information or more often abbreviated as SIP (Social Information Process). In this theory the sender of the message or infrormation is described engage in socially beneficial ways attract and develop that attention of the recipient of the message future interactions if it reads messages that have been received by the sender. The recipient of the message then tries idealizing the sender's image and overvaluing prospects somewhat minimal text based.

In addition, the asynchronous nature of Computer Mediated Communication (CMC) just given time for sender and the recipient to editing and check their message again and then share to facilitate their communication, which intensifies the communication interaction in the use of Computer Mediated Communication (CMC). The use of this media of course can controllable and able to reduce pressure to provide feeback in direct personal interaction (FTF) so that there is no misundrestanding between the sender the recipient.

Budiargo (2015 :23) said that when we are talking about Computer Mediated Communication (CMC), what we mean of course is that it cannot be seperated from

talking about the internet. We all certainly know about it. The very rapid development of the internet is what causes this Computer Mediated Communication (CMC) model to develop as well. Internet that we know is defined as a patterns of connections or systems that can show relationships network to network or between multiple computer networks. A special term for a communications network interpreted as a connection betwwen different computers also called the internet. Therefore, if we want to use Computer Mediated Communication (CMC) it means that we must also have a good internet connection. Internet has six advantages, namely:

1. Portability of messages, words, pictures, sound and video are all together in number which is amost unlimited,
2. Time to send and receive messages between communication tools is very fast but this certainly requires a strong and stable internet network,
3. Live (online),
4. Effects or results (data) are instantly displayed in real time,
5. Transactions whose truth can be trusted,
6. Developing interactions, between sender and recipient, both in the form of people and machine people.

In ancient times the internet was not known to people. Before it was known to many people, internet users were people who were in certain circles, meaning that not everyone could get the internet. It can be found in large companies or institutions only. With the progress of the times at this time and because of the knowledge gained by a large number of people, everyone can use the internet so easily by using an internet connection. People can install it

in their own homes and put it an affordable place. This network connected to the telephone network or can be used with mobile phones via cellular network. People don not need to worry because to get the internet network it can be used at modern prices which are increasingly easy to get by the community. This online service can be provided by anyone, anytime, and its use can be anywhere. At this time internet users are very widespread. Business people, educational institutions and government institutions and military agencies around the world inform the public already using the internet in purposed.

When learning English is done through computer-mediated communication, the computer will work as a means of interaction in a communication. Therefore Computer Mediated Communication (CMC) and its approach must be very closely related. To create interactive communication. It is also necessary to understand the contribution of the communication approach - listening and reading - required for the entire process of mastering the English language. In terms of mastering English, understanding the input alone is not enough to learn. Students' output abilities in terms of writing and speaking are also an important part of mastering English. Use of computers in English communication Computer mediated provides input and output, both of which are critical to students' progress in learning English.

Hampel & Hauck (2004) concluded that language learning activities using online media must be able to make students exchange ideas with each other, of course they do not remain silent but must convey information to other students and respond to each other as well.

Therefore as a language learning goal, Communicative Language Teaching (CLT) emphasizes aspects of communication, interaction, as well as

development linguistic competence, as well as being skilled in language (listening, reading, writing, speaking). In the application of Communicative Language Teaching (CLT) there are important elements in it. Among others, more priority the true meaning rather than the grammatical order; there is activity functional communication and social interaction that are interrelated; learning oriented to the acquisition of competence communicative, not accuracy in grammatical use; learning is directed at student participation in discovering language rules through activities language (learning by doing); learning materials depart from analysis of language needs in learning.

D. SHIFT IN COMMUNICATION PATTERNS DUE TO USE COMPUTER MEDIATED COMMUNICATION (CMC)

We need to understand a technology, especially in the field of communication technology. We as humans don't just go with the flow but we also have to pay attention to and understand the development of communication itself. Our lives are surrounded by technology (what is meant is communication technology). We can find it in the world of economics, education, the world of entertainment and enter the life of our interpersonal relationships. The point is that communication technology is a system of modern society, moving and sharing sensors and managing information and connecting entities that are interconnected with dependency, changes in communication technology, have the potential to affect everything in society (Budiargo, 2015: 21). Like it or not, we have to accept every change that occurs in society caused by technology. Budiargo (2015) also expressed the opinion that "if people don't want to

experience extinction, then they must have an adaptive way".

1. Shifts in the Scope of Mass Communication

Currently Internet technology and the use of mobile phones are growing. Along with its development, causing social media to develop very rapidly. Accessing applications such as Facebook, Twitter, Instagram and other applications can be done whenever and wherever we want by using a mobile phone. The big phenomenon of the flow of information occurs due to social media which is very easy to access by anyone. This is not only happening in developed countries but also in Indonesia.

Because the ability of social media to provide news and information is very fast, this is starting to show that the existence of social media can replace the existence of the role of conventional mass media. Everyone can have their own media by using the internet network on a cell phone, while in traditional media such as television, radio and even newspapers one must have a large capital to get it and even need to work hard. Even though the use of internet access networks is sometimes slow and without a lot of costs, people will only do it themselves without expensive tools, but not with conventional media.

Using social media is not difficult. That's because we can freely make edits as we want, can add anything we want to add, edit text, images, videos, graphics and many other content templates available on social media.
https://www.facebook.com/notes/wisnu-iray/pengertian-social-media-social-networkperan-serta-fungsinya/10151963078035205

The technological developments described above have made people start to leave traditional media and switch to media that is able to present news that is faster, real, easily accessible and available anytime and anywhere. This is what causes a shift in the field of mass communication.

2. Shifts in the Scope of Interpersonal Communication

Interpersonal communication is also called personal communication. The pattern of using Computer Mediated Communication (CMC) has many implications for one's interpersonal communication. This is because the communication is carried out by two or more people who are used to exchange messages privately by having physical proximity between the communicator and the communicant (face to face).

Human interactions that are usually carried out physically and psychologically can turn into meetings in an unreal and virtual way through the use of Computer Mediated Communication (CMC) technology so that even distant people can meet regardless of distance.

The development of the internet and the development of Computer Mediated Communication (CMC) patterns are currently causing interpersonal communication within a family, fathers, mothers and children. In this case, two shifts in relations can be caused at once. The first is that they will just be busy, focused and take up their time just playing with their cell phones and usually even ignore someone who is talking to us. The second can provide convenience for members who are separated by distance because with the internet, they can share information with each other

and can find out where they are from each other as long as they want via chat or video messages. By using video calls, they face each other directly through the screen as if they were actually meeting in person (Budianto 2016).

In the learning process, interpersonal communication is important both in the personal and professional environment in education and in other jobs. if you don't have interpersonal communication, then someone will have difficulty connecting with other people. By mastering interpersonal communication, the communication that we build with someone can make our communication more effective and good relationships can be established with someone, even fellow students at school or at work. Good interpersonal communication is good communication if you are able to master personal communication and communication through electronic media (DeVito : 2007).

E. IMPACT OF COMPUTER MEDIATED COMMUNICATION (CMC)

Technology is currently progressing.This can be proven by us being able to view pictures, films, videos, information broadcast on television via cell phones that don't need it and connect them with cables whenever and wherever we are.Everything seems very easy.However, we cannot avoid that technological advances also have an impact caused by Computer Mediated Communication (CMC), especially the impact of using the internet and computers.

1. Socioeconomic Impact

The negative impact of using Computer Mediated Communication (CMC) is the reduced sense

of human social nature because they prefer to keep in touch via the internet as the main facility, instead of meeting in person or face to face. This can change the interaction between people. Humans who initially always met when they wanted to convey something turned into lazy to interact with the people around them. It cannot be denied that there are parents who forbid their children to go out to play with their friends and prefer that their children stay at home on the grounds that they are afraid that their children will be exposed to the sun, afraid that their children will get along wrong with their friends. Even though that's what causes children to be less concerned about other people and even their own environment.

Larassati (2010) argues that the world will be more sophisticated with the facilities owned by new media. This can be proven by anything that can be done while sitting still in place by only holding a cell phone without having to leave the place where we are sitting and leave the work being done. Everything will be younger, but this will also make humans become people who don't care about social feelings.

Although it has a negative impact, Computer Mediated Communication (CMC) also has a positive impact with the help of new media. New media communication can facilitate communication between people who are separated by distance because this communication model is relatively simple, fast and does not need to think about expensive costs.

The change in style that is currently happening in society is one of the impacts of using Computer Mediated Communication (CMC) in the economic field. As a result, an online shop is developed wherever we are and buyers do not have to come straight to the store

to buy the goods they want, they do not have to go far to get these goods, they do not have to leave the house but by cell phone these items can be ordered. Easily and can be sent directly to the buyer via the internet. This of course affects the profits of traditional traders selling in the market.

The existence of Computer Mediated Communication (CMC) will also have an impact on the mass media. The development of newspapers that are delivered online and news sites on the internet that circulate more quickly, this can make newspaper lovers start leaving newspapers because they definitely have to wait for the newspapers to circulate again. Of course this has a big impact on newspaper publishers which of course affects the fate of their employees. There is no other way than for newspaper publishing companies to be creative again by developing their media business by holding media conventions.

2. Psychological Impact

The lack of socialization by individuals in society is a psychological impact of the existence of a Computer Mediated Communication (CMC) pattern. This causes humans to worry if they don't hold their gadgets and makes them prefer to be alone and think that gadgets are their friends. Their work could be delayed or even not done at all because they always want to play gadgets. The impacts caused by Computer Mediated Communication (CMC) are as follows:

a) Antisocial behavior

This behavior is behavior that is contrary to social norms prevailing in society, such as violations of the law and deviant behavior.

b) Computer anxiety

Many people who have computers will experience their own fear which can cause vertigo and even cold sweats. This is often also called *cyberphobia* and *computerphobia*. Having poor math skills is a sufferer of this phobia. Most of them are women

c) Addiction

Sometimes the computer's ability to present audio-visual features varies according to the wishes of its users, and sometimes it doesn't turn out as desired. If we have virtual games on our gadgets, we will continue to feel curious and want to keep trying until we achieve what we expect. This leads to addictive behavior on computers and the internet so that they become less sociable and even have a less tolerant attitude (Larassati, 2010)

Ancok (2000) argues that Computer Mediated Communication (CMC) has a positive effect on the application of computer concepts Communication (CMC) in the world of education. Here are the positive effects of its use.

1. The existence of fast information. Everyone definitely needs fast information so that they immediately know what they want to know. So this Computer Mediated Communication (CMC) has the ability to provide fast information needed in an educational environment.
2. Learning innovation is increasing in e-learning. Learning that facilitates the educational process. We can say that before the advent of technology, students and teachers only used handbooks in the teaching and learning process. it can make it feel boring and what is in the book could be incomplete

information that makes students want to know more. Meanwhile, if using e-learning, students just have to look for what they want to know and in e-learning have complete facilities regarding lesson information.

3. The development of technology and information is also possible course development or virtual courses based on conference calls do not require teachers and students to be together room. When students are not in class with their friends but the teacher wants to start lessons immediately, they can use this feature to help them communicate without being in class too.
4. The administrative system of educational institutions becomes simpler and smoothly thanks to the application of communication information technology systems. We don't need to bother thinking about the administration needed at school because with the existence of technology, teachers only search the internet and can edit and change according to the teacher's needs and requirements.

The other impacts and benefits that we will experience if we use Computer Mediated Communication (CMC) are as follows;

1. **Status and self-esteem:** With Computer Mediated Communication (CMC) we will communicate with other people not only in the family environment, in the school environment and the world of work but the impact that occurs can affect anyone even outside the country. We will feel more confident in ourselves because we are able to operate it. We will think that other people can then I can too.

2. **Confidence, competence:** Computer Mediated Communication (CMC) can help us to find out what difficulties will be faced in education and even employment that way, we will appear more confident as a result of being able to use the CMC.
3. **Communion, comradeship:** Computer Mediated Communication (CMC) can help to overcome our feeling of loneliness when we are not working. By communicating other people are able to know our feelings and usually they want to hear what we say if they want to listen.
4. **Inspiration:** Computer Mediated Communication (CMC) can provide inspiration in the form of ideas New ideas are acquired through exchange information with other internet users. Through CMC we don't only have 1 idea but we can accommodate all existing ideas given by our communication partners and vice versa. People may ask us for ideas.
5. **Generosity:** Computer Mediated Communication (CMC) offers an opportunity to help others and vice versa we can also do it get help from online users other. This will be effective if people who need each other know each other thereby reducing fraud. For example, we shop online we'll get the goods without heading to his faraway place.

In teaching and learning Computer Mediated Communication (CMC) certainly has advantages and limitations. There are many benefits of Computer Mediated Communication (CMC) but there are also limitations to using Computer Mediated Communication (CMC) that we need to know. The biggest benefit of Computer Mediated Communication (CMC) is the ability to provide freedom of

information that is constrained by time and distance from schools. Providing the convenience of being accessible from home, school, or the office can allow many students and teachers to still be able to better fulfill their responsibilities in school, work, and family. Computer Mediated Communication (CMC) is able to discipline students and ask students to be more responsible for their own learning at school. The use of Computer Mediated Communication (CMC) can help teachers to design their creative learning in order to achieve their learning goals. Our goal should be to develop students to be self-motivated, but also to offer help if students need help. If designed properly, Computer Mediated Communication (CMC) applications can be used effectively to assist collaborative learning between students and teachers.

Computer Mediated Communication (CMC) uses lessons that use text as a tool. In a writing curriculum is very important. We need writing when we want to communicate on a computer network. Effective use of Computer Mediated Communication (CMC) can be a driving force and motivator for students to be involved in authentic project assignments, writing so that writing can be a motivation for everyone. So in a sense writing is not only making assignments given by the teacher. In this case the teacher must also pay attention that not all students are good at writing. in terms of writing it will still take a lot of time even if it is done for people who can write though.

The Computer Mediated Communication (CMC) feature is common for all users. As a result of Computer Mediated Communication (CMC) only in the form of text, the risk that must be faced is the occurrence of a reduction in social cues that lead to protective ignorance about whether the person is someone from among famous people or not. To see whether it took the author a few hours to

compose an on-screen response, or a few minutes was impossible. The lack of social cues and the asynchronous nature of the media allow those with physical limitations or personal aversions the possibility to participate fully and equally in communicative activities in the mainstream environment. The use of Computer Mediated Communication (CMC) can lead to a lack of face-to-face meetings in the classroom.

Another advantage of using CMC is that it can promote multicultural awareness. Because the demographic composition of many countries has changed so drastically and is able to carry out developments in communication skills for groups that have different cultures. CMC uses English text so that all countries can perpetuate cultural hegemony. Technically, using CMC includes things that help make it easier to circulate and archive files and documents (eg teacher messages, student assignments, assignments).

http://horizon.unc.edu/projects/monograph/CD/Technological_Tools/Berge.html

F. STRATEGYOF USING COMPUTER MEDIATED COMMUNICATION (CMC)

When people can use Computer Mediated Communication (CMC), they will be confronted by various new media, including: e-mail, instant messaging, newsgroups, web-based chat, and distance learning and e-learning. Teachers can use the new media to achieve learning objectives.

1. E-mail

This new media is well known enough to write a message. Teachers can instruct their students to make

assignments and then instruct students to send them to the teacher. To be able to connect with each other, each teacher and student must have an email account. After submitting student assignments, the teacher can immediately provide answers or responses to assignments sent by students.

2. Instant messaging

This new media is well known enough to write a message. Teachers can instruct their students to make assignments and then instruct students to send them to the teacher. To be able to connect with each other, each teacher and student must have an email account. After submitting student assignments, the teacher can immediately provide answers or responses to assignments sent by students.

3. Newsgroup

This new media is also called internet discussion group. This media is a form of discussion from a group that uses a computer network system. The way this system works is that students write down their messages or ideas and then other groups can respond to messages or ideas that have been written where other members are interested in the same topic of discussion.

4. Web-based chat

This new media is also known as chat, chat room. This program is used to be able to communicate with each other by sending direct messages to other people and must be connected to an internet network. In this chat room there can be two or more people. Along with the rapid development of communication, initially the chat function was used to communicate

informally via the internet. At this time chat can be used by teachers and students and of course the problems or discussions given are in accordance with the topic of learning.

5. Distance learning

This new media is a medium where people can communicate virtually with distant geographic locations. The use of this media can be done with students being able to read and looking for sources of educational information from their teachers and even being able to communicate textually and directly during the teaching and learning process. If the teacher concerned who will teach cannot be present at school and the task cannot be represented by the students, then the teaching and learning process with students will continue as it should by using the distance learning concept that has been provided.

6. E-learning

E-learning is a system in the process of teaching and learning using information technology. In order for the use of e-learning to be more effective to be able to repair quickly, store, retrieve, share learning and information, a network is needed (Yusuf, 2010: 231).

Liu and Ginther (2002) review that impression formation in the Face to Face (FtF) environment and the Computer Mediated Communication (CMC) area is the result of the influence of verbal and nonverbal factors. This teaching strategy research was conducted to determine the achievement of effective communication and give a positive impression by using distance learning.

Following; greetings, sorting, information, feedback and giving the right compliments; using standard discourse schemes between individual networks, rhetoric and narrative selectively according to the topic to be discussed, using selective pragmatic and syntactic codes, using intense language such as messages and straightforward words to process their own way of dealing with the topic discussed; using direct language, using lots of vocabulary and using appropriate language are the verbal strategies they discuss and review. While the nonverbal strategy is the use of paralinguistic signs including the use of appropriate symbols taking into account the chronic; maintenance of high-frequency news; storing messages over long periods of time, maintaining extra-fast reply responses, manipulating main effects; ensure that there will be no errors in typing the message to be conveyed.

Mahdi (2014) argues that in this era we can find lots of Computer Mediated Communication (CMC) programs or applications that have been activated. There are many ways that many people can communicate with each other, such as typing chats, which are also available in audio and video formats. Examples of software available on Computer Mediated Communication (CMC) that are used by various groups around the world to communicate are Skype, MSN, Facebook, Youtube, and Twitter.

In studying lessons in the field of English, we can use this software. This can really help the teacher to carry out the teaching-learning process for communicating lessons and can do it outside the classroom has its own uniqueness is a feature that is owned by the software in its use compared to other Computer Mediated Communication (CMC) software.

1. Skype

This service is an online service that offers text messaging and chat via audio and video. Users can organize conferences with two or more people at the same time at once. This software is very useful for lessons, especially for English lessons. Godwin (2005) argues that Skype offers great and interesting opportunities for students. That's because this software provides additional channels in communicating orally. In addition, Skype is very effective software for teachers.

Develotte, Guichon, & Vincent (2010) developed a way for teachers to teach English using synchronous multimodal rules on Skype, which focuses on the use of webcams during learning. The result is an intense interaction that adds to the feeling that they are really present together. This Skype can be used by students for dialogue in the language laboratory.

2. Facebook

In Amin's journal (2020), Kamarul, Norlida & Zainol argue that the Facebook service is a social networking service that was founded in February 2004. Facebook is also able to become a bridge for interaction between teachers and students and vice versa. They also conducted research that Facebook is a learning environment that has benefits and is very useful which can strengthen and improve students' abilities in learning, especially English. However, to make Facebook a student learning tool, the teacher must ensure that the material being studied must be in accordance with the existing material so that there is no misuse of Facebook usage. A good and mature lesson plan needs to be designed in order to achieve the

learning objectives and turn them into meaningful lessons.

Mitchell (2012) conducted research on students' reasons for joining the Facebook application. The reason for being social is the reason for the students in their research. As we know that on Facebook we can make friends, connect anytime and anywhere and can communicate with friends doing private chats. Materials can be used to study together with classmates, even people from abroad. That way students can learn to use Facebook without feeling great difficulty.

3. Youtube

In February 2005 the application of a website that can share videos we know is YouTube. Almost everyone knows this application. This application can also be used to learn, especially for English. Miller, Hafner & Fun (2012) presented a new approach to designing learning on learning objectives. Students are given assignments in the form of video activities and assignments given by the teacher and these videos can be uploaded and shared via Youtube. Videos that have been uploaded and shared will be watched by everyone by sharing a link on Youtube so that people who watch the videos they upload and share can write their comments on what students are doing regarding the assignments given by their teachers. Besides getting comments, they will also see how many people like the student's work. By looking at the comments from there the teacher will easily give students grades. A thriving learning environment must be rich in technology.

4. Wiki

In a study we also know a software called Wiki. In recent years, implementation by this software has received attention. Castaneda (2011) conducted research on differences in the performance levels of students who in the learning process used video/photo blocks and Wiki rather than the learning outcomes of students who studied using traditional text-based instructions. The results of his research were that there was no significant difference in the learning outcomes of students using video/photo blocks and learning using traditional texts plain traditional text. The results showed that the group using video/photo blogs performed better than the group using only traditional text. Stickler & Hampel (2010) hoped that students could take an intensive English course. Courses that do not require coming to the venue but can be done online. This course is specifically for students who are at the intermediate level. This course is a pilot using a Moodle-based learning environment and new online media tools available that are suitable for use in various types of language learning activities (collaborative learning using Wikis and reflective learning using blogs).

5. Blog

In language learning blog software has many benefits for students. We can see in the research of Hsu & Comac (2008). Their research results that the use of audio blogs can improve the quality of teaching. That way the blog can help relieve and meet the needs of teachers. This study also revealed that blogging is able to provide a very efficient and effective way of evaluating oral assignments given to students and

being able to provide feedback to students individually and orally as well.

G. CHARACTERISTIC OF COMPUTER MEDIATED COMMUNICATION (CMC)

Communication that occurs between humans through computer devices is the definition of Murray. Murray (2020) said that the characteristics of Computer Mediated Communication (CMC) are the most important thing in communication. Students should get information about what to expect to assist teachers in using Computer Mediated Communication (CMC) software features. In his research, Murray argued that Computer Mediated Communication (CMC) has simple features in the form of spoken and written language.

The use of abbreviations, simple syntax, acceptance of initial errors, use of symbols are the special norms of Computer Mediated Communication (CMC). Collaborative learning activities are characteristic of the use of Computer Mediated Communication (CMC) in language learning (Meskill & Mossop: 2003). Collaborative learning is learning which encourages students to play an active role and not just sit idly by in a communication. Computer Mediated Communication (CMC) is able to monitor the learning process of students in schools and help them to be aware of the language they use in a communication (Bikowski & Kessler: 2002).

H. CATEGORY IN COMPUTER MEDIATED COMMUNICATION (CMC)

In Amin's journal (2020:341), Warschauer explains 2 categories of Computer Mediated Communication (CMC):

1. Synchronous Computer Mediated Communication (SCMC)

This computer-mediated communication is direct communication (online). Discussions using this media are supported in real-time via voice or by typing. Yahoo Messenger, Google Talk, MIRc, and others are examples of Synchronous Computer Mediated Communication (SCMC).Lee (2001) stated that such discussions are the same as Face to Face (FtF) discussions, at the same time teachers can easily monitor students' use of language (Sykes, 2005). Some of the benefits of Synchronous Computer Mediated Communication (SCMC) are that students can feel face-to-face without being physically involved, for students who are shy this type of computer communication can make them more confident and students can follow developments in the course of a discussion without having to be around the place where the discussion is held. The problem that will arise when students use Synchronous Computer Mediated Communication (SCMC) is that it is difficult for students to make eye contact on the image display with their interlocutor and because it is not seen directly allows students to act as they please if the presentation is presented using an avatar.

2. Asynchronous Computer Mediated Communication (ACMC)

This computer mediated communication is delayed online communication and does not simultaneously use a computer. Taking place at different places and time is how this communication works. We can find examples of this communication in e-mail applications, video streaming, and others.

Heisler & Crabill (2006) revealed that Asynchronous Computer Mediated Communication

(ACMC) can provide opportunities for students in using language to consider, review, revise or stop the flow of communication before sending information to each other to recipients of information. Reflect on the content of what they are going to say and be critical about what they think every student should have when they want to tell others. Therefore, this Asynchronous Computer Mediated Communication (ACMC) technology can make students involved in the process of thinking critically and solving their problems by communicating to be more focused and more focused. Asynchronous Computer Mediated Communication (ACMC) is flexible, students can read whenever and wherever they want and can facilitate the teacher's task of giving assignments. In using Asynchronous Computer Mediated Communication (ACMC), we will encounter common problems, namely, it is difficult to predict when we will get the answers that have been given and if we rarely check our messages, it is feared that many messages will come in (Jonassen & Kwon, 2001).

CM C/Communication in time	Synchronous	Asynchronous
E-mail		X
WWW	X	X
Newsgroups		X
Computer conferencing		X
Audio conferencing	X	
Video conferencing	X	

Voice mail		X
IRC	X	
MUD/MOO	X	
Whiteboard environment	X	
Workflow		X

Internet communication, namely synchronicity or communication system Asynchronous has its drawbacks and advantages as well. we can see during the teaching and learning process between students and teachers. By using synchronous media, it can make it easier for teachers to provide teaching material and for their students it will be easier to understand the material provided. If students do not understand the material, at the same time and spontaneously they can ask directly. Students who use this synchronous media. Meanwhile, while not at the same time it will seem difficult for students who don't understand because students cannot do it directly question.

How to learn to use the communication system depends on the situation and conditions in student learning activities. In learning activities, not all can function for students. to find out whether this system can be used is by asking 3 questions. This method is expected to be able to answer whether the use is effective or not. The three questions made for the statement above are: Users, situations and learning devices (tool)

Several questions can be asked to see the situation of its users. The question is for example, do they have good reading skills? Likewise with writing,

are they good writers? How far is their ability to use new communication media? To know someone in communicating with new media, not only think about the situation and circumstances of the users, but also pay attention the learning situation of its users. There are several questions we can ask our users. That question is; what are the types of media itself? is the media necessary for human life? What forms of communication are needed? How do students control the media? Meanwhile in terms of equipment, there are several things that can be questioned; what types of Computer Mediated Communication (CMC) are owned at school that can be used by students in the learning process, do students have access to using these media? How much does it cost to get the media? How long is the development when using the media?

Each student has different abilities in the class. so it is very important for teachers to know their abilities before using the media. Students who have the ability to write and read, they can use E-mail and IRC services. For students who are lacking in terms of writing and reading can use audio and video connections. Internet media has advantages and disadvantages. So it is necessary to see the condition of the students before implementing it. However the advantages and disadvantages of the Computer Mediated Communication (CMC) system can be seen and reviewed again by paying attention to capabilities ownership using the internet.

I. THE TEACHER'S ROLE IN COMPUTER MEDIATED COMMUNICATION (CMC)

An instructive question that is often asked in online/online-based language learning is: Where do online

system teachers get their answers when asked questions? The answer we hear most often is "on the internet." The answer is not just how to learn by "learning". Doing/learning by acting and practicing directly, but also means learning others share information in virtual communities of online educators too. Literature About using the internet to learn languages online there are several of them and they are easy to use (Romiszowski & Mason: 2013).

Romiszowski and Mason explained that to achieve online/online-based communication success in learning English, supporting factors are needed. Although it will take a lot of time, money, effort and commitment to try. This effort seems to be unsuccessful when online communication is used. Some common factors in online communication learning English includes: Technology, motivation, time frame learning and participation.

1. **Technology**

   The success of online communication in learning can be seen from the technical qualifications possessed by the teacher besides that it must have the availability of equipment and Technological stability that does not experience ups and downs. The purpose of online communication in learning English is limited due to technical problems from the teacher.

2. **Motivation**

   At the beginning of learning, teachers must already have a close cause to communicate with each other. It is the teachers themselves who must then determine student motivation to use online network-based communication.

3. **Time frame learning**

The teacher needs sufficient time to determine what learning design should be conveyed and given to students, so that students will be ready to learn using the technology provided.

4. Participation

The information available during the learning and teaching process must be used as effectively as possible in online communication Therefore, the participation of teachers and students online is appropriate can be maximized in learning.

J. ADVANTAGE AND DISADVANTAGE OF USING COMPUTER MEDIATED COMMUNICATION (CMC)

In using CMC we will be faced with advantages and disadvantages. There is a side where we will be comfortable to communicate through CMC but we also have to be wary because CMC is a machine that definitely has incompetence and flaws.

Everything that has been provided for humans to enjoy will have comforts and inconveniences including the CMC itself. Even though it has drawbacks, at least people will look for something that has many advantages from this product. There is no need to worry about dissatisfaction with something.

1. Advantage of Using Computer Mediated Communication (CMC)

a) Computer Mediated Communication (CMC) does not mind and ignores the dependence on the use of time and place. Using Computer Mediated Communication (CMC) is not limited in terms of time and place compared to face-to-face communication. In the sense that communication

can occur anytime and anywhere. It doesn't take the same amount of time to communicate. In addition, people also do not need to be in the same place to communicate. Communication can be done in various places even with people who are outside the area though. An example that we can see is between teachers and students. During the semester break, automatically students and teachers will not come to school if they want to communicate with each other. When they want to communicate with each other, in order to make it easier for them to communicate with each other, students can use and write messages via their e-mail and the application that is very easy to use at this time is via Facebook. In addition to communicating with each other, Facebook is also used by teachers to convey information or something important with the intention of being read by students.

b) Computer Mediated Communication (CMC) will ensure excellence to reach in the use of media to be used. CMC users will be sure to get affordable information and users will feel satisfied compared to face-to-face communication. The information sent will also be the same and will not discriminate against whoever gets the information. As a real example if it is in the classroom environment. There is a teacher who has urgent needs and cannot enter the class to teach and finally has to cancel the lesson. it would be better for the teacher to provide information on his absence in class via Facebook, email, etc. compared to having to convey it by word of mouth which could be that people will easily misunderstand the meaning of what is conveyed and it could happen that everyone who provides

information will differ in different ways delivery. If the news is through online media, one language and there will definitely be one understanding too. That way the teacher no longer feels troubled in conveying something and is made easier through new communication media that is easy to reach anytime and anywhere.

c) Computer Mediated Communication (CMC) will assist in facilitating the archiving of information that has been provided and has been obtained. The function of an archive, among other things, can help save files so they are not lost and we can revisit them when we want to read the previous conversation again. This is typical when students work on group assignments given by the teacher. when receiving information from other people and receiving information from others, we will definitely use written media so that we can read it again if we forget the information that was previously conveyed. Writing down the information conveyed also helps to save time compared to having to say the same thing over and over again to waste time just saying the same thing. Usually students will use the WhatsApp message communication media. In this communication medium, we only have to archive messages that we want to read back easily.

d) Computer Mediated Communication (CMC) can remove one's obstacles in communicating with other colleagues. It can help a person to overcome problems in relationships. These barriers can come from people who have a high sense of shame about their own appearance, even because they have physical limitations so they are reluctant and

awkward in communicating. Most students will feel embarrassed if they want to ask their teacher directly. Even though they want to get a direct answer, it is because of their embarrassment that they usually discourage them from asking. the higher their position, the higher their embarrassment in communicating. It tends to make students quiet in their ignorance. students will be more open in communicating, more free to convey what they want to convey to their teachers when via written messages on their cell phone media. By communicating in writing, they can just type messages that are very large and long compared to when they meet and talk directly with their teacher. The new communication media that students usually use for special cases like this are usually Whatsapp and E-mail. Most teachers will reply with a positive response and some will not give it at all because they think that if it is explained through text it will be difficult for them to understand compared to when they ask directly. Even so, for now, students will choose any way to solve something that is their problem. On the other hand, studies around the world have noted that Computer Mediated Communication (CMC) provides a useful platform for anyone so that even deaf or speech-impaired students can engage in online textbased communication without a mediator.

2. Disadvantage of Computer Mediated Communication (CMC)

a) Computer Mediated Communication (CMC) limits the richness of communications. Communication does not have to be about text and words only. It

has long been recognized that Computer Mediated Communication (CMC) is lacking in terms of socio-emotional and non-verbal cues. Misunderstanding of meaning and the wrong way of conveying it comes from someone's tone can happen. For example, someone says that it's just a joke and it's not serious, don't take it to heart, but on the other hand, people will understand that it's all true and it's not a joke. Another misunderstanding that might occur when someone is confronted with the delay in getting a reply from the person we sent the message to, even when that person replies with a short message and we don't understand what that person means. For example, when someone gets a short reply from someone we talked to on Facebook, we can be anxious and worry excessively even if our conversation is bothering them a lot, even though the other party doesn't really have that feeling and is probably just busy going about their business other.

b) Confidentiality and trust issues. When we communicate using Computer Mediated Communication (CMC), we really put ourselves out there. Phone and video calls may be recorded, our messages may be taken from the screen or copied. We may not know the intent and purpose of the other party with the information we have just shared. whether they use it for good or for bad intentions. For example, when students get assignments from their teacher in groups. A group just found a clever and very creative way. the brilliant idea was shared via Whatsapp and one of the group members showed it to other people even though they had previously agreed that none of

them would share the secret of how it was done. In the end, some groups scored highly because of one person's idea of not keeping the group's secrets.

c) There are limitations in technology. Computers may be damaged, internet networks that suddenly die or experience interference, cell phones turn off because they run out of battery, there are many things that cause limitations in a technology. Several things become a problem caused by Computer Mediated Communication (CMC). Internet-based lessons can be delayed due to network interruptions and so on. (https://newtechnocomm.wordpress.com/2016/03/05/advantages-and-disadvantages-of-computer-mediated-communication-in-the-context-of-unimasstudents-and-staff)

K. CONCLUSSION

Today is an era where everything is sophisticated. Everyone is scrambling to get a technology that will help to communicate with each other. From small children to old people, they must be proficient in using technology. People who are able to master technology will feel confident and ready to compete with anyone at any time. On the other hand, if they do not understand a technology, it will lead to a lack of knowledge and will make them feel insecure about themselves, avoiding meetings with people who are able to use that technology.

In society, many people use technology to communicate because they are already proficient in using technology, it will give us advantages and we will be embarrassed if we don't know how to use it.In a school environment in this modern era, it should already use a

technology base so that it can compete with any school and is not outdated. With the help of technology, it

can make it easier for teachers to control students in learning and to develop learning plans.

Computer Mediated Communication (CMC) is a new communication media whose system uses a computer. At the moment we can't bend the user anymore because a lot of people are already using it. Many changes have occurred to people and even their respective lifestyles. This could indicate that the current technology is really improving. It's a shame there are still schools that abolish "TIKOM" lessons. Even though the lesson is very important for students to learn as the basis of their knowledge of computer science. Even though many are already using technology, prospective teacher enthusiasts are still lacking in taking education majors in computer science and communications. Teachers cannot be replaced by anything even with technology. However, teachers who are technology blind will be left behind.

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ROBOT ASSISTED LANGUAGE LEARNING (RALL)

A. INTRODUCTION

Educational robots are well-known for their ability to help language education; nevertheless, how contextual cooperation methods lead to good learning results has received little attention. To investigate instructional administration and the impact of robot-assisted language learning (RALL) interaction on student ability, this study automatically retrieved twenty-two empirical papers published between 2010 and 2020. Overall research appearances were detected using an enclosure method, including the context, target language, and research design. Advanced analysis on verbalized interaction administration, which included language teaching methods, interactive learning assignments, interaction progressions, interactive mediators, and interaction belongings, revealed that the communicative or telling story paradigm was the most effective method, supplemented by total physical response and audiolingual methods in RALL verbal interactions. The examination delivers perceptions on how educational robots can simplify oral relations in classrooms of language teaching, as well as how much learning assignment can be planned to efficiently implemented on robotic reachable to achieve the purposes that provided by language teachers itsef. Forthcoming research guidelines theme is focusing to communication based meaning and unambiguousness in verbalized fabrication between language teacher on RALL.

Robotics in education famously called as genius cooperative pedagogical representatives in language teaching classrooms. Former studied has stated that

through educational robotics performances for exercise talents in one's first, second, or foreign language [1–3]. Notwithstanding privileges about the potential of educational robots in order to help students on increasing their language skills [4], no privileges studied focused on educational administration that improving good teaching out- comes in robot-assisted verbalized connections. The concluding study, therefore, objective to insert this space through investigating 22 experiential studies in terms of the collaborative design of verbalized assignment by underlining the teaching approaches implemented, the kinds of verbalized assignment, the character assisted by the robot and the teacher, as well as their usefulness in cultivating verbalized proficiency.

1. Scope and Definitions

Proactive robots and service robots are the two categories into which robotics in education would fall [5]. Service robots are intelligent robots that instructors may use as balance outfits to integrate comprehensive instructional information and activities appropriate for particular educational contexts, whereas proactive robots are robots developed for manufacturing-related exercises (e.g., LEGO Mindstorm) [5,6]. The focus of this study is on educational robots for language instruction. The use of educational service robots in language instruction may greatly enhance the way digital information is presented, as well as the repeatability of assignments, interactivity, flexibility in integrating different learning theories, and examples of interactions that promote learning [7, 8]. Specifically, the foundation of robot-assisted language learning (RALL) is interactions that enable students and robots to communicate verbally. It was explained that RALL,

an interactive language learning system that uses robots in real life, gives students face-to-face communication opportunities that mimic authentic discussion settings [9]. RALL can benefit from the employment of both verbal (such as question-and-answer) and nonverbal (such as gesturing, sleeping, and facial tracking) modalities to support language training, which leads to better learning inspiration, awareness, and engagement as well as cognitive gains [9]. The roles played by various interactive agents in RALL, as well as the appropriate use of language teaching methods for planning learning events [10], as well as instructional design philosophies for technology-enhanced language learning [11], require close inspection in order to gain understandings of effective pedagogy. In order to assist language practitioners in creating interactive courses that incorporate robots into their classrooms, this well-organized review provides information about the activities conducted by various interacting agents (such as learners, robots, instructors, and facilitators) in RALL and their implications on learning consequences.

2. The Review Study

The goal of this study was to conduct a systematic review, which falls within the SALSA (Search, Appraisal, Synthesis, and Analysis) framework [12,13]. A systematic review looks for valuable and trustworthy data on a subject in order to address research concerns. Researchers who use this kind of review:

a) Assume exhaustive, comprehensive searching,
b) Apply inclusion/exclusion to assess the data,

c) Produce the data through a description convoyed by tabular results, and
d) Analyze what is recognized to offer references for practice, or analyze what is unknown and state hesitation around outcomes with suggested directions for future research [12].

Prior research has looked into the advantages of educational robots as well as the learning objectives linked with their use across various age groups [7].

However, one area of RALL study that has yet to be investigated is the cooperation between the teacher and the robot, as well as the resulting language teaching and learning model in this collaboration mode [5]. As a result, it is critical to thoroughly investigate the application of RALL in the classroom, with an emphasis on interactions including activity design, interactive agents, and interaction processes. Understanding how these interaction components influence learning outcomes and learner profiles in RALL is equally crucial. As a result, the following four research questions were formulated:

RQ1: What language teaching methods are assimilated in the design of oral interactions in RALL?

RQ2: Which categories of oral interaction assignment design are engaged inRALL?

RQ3: What characters do robots and instructors accomplish whensimplifying oralinteractions in RALL?

RQ4: What are the learning products of RALL oral interactions in terms oflearners' perception, language abilities, and implications?

B. LITERATURE REVIEW

1. Oral Interactions in Language Classrooms

Traditionally, interaction has been defined as the process of "face-to-face action controlled by non-verbal cues like eye contact, facial expressions, and signaling, or verbal cues like written or spoken words" [14]. Understandable input is important for second or foreign language expansion [15]. That is, in order for language learners to engage in true spoken or written communication, they must be able to understand the linguistic input that is made available to them. Specifically, oral contact in the classroom involves listening to real language output from other people and appropriately reacting in order to continue participating in a communicative activity like role-playing, discussion, or problem-solving [16, 17].

In oral interactions in the classroom, two conversants speak and listen to one another in order to anticipate the communicative event's future content and plan a response [18]. Therefore, setting up the framework for meaning negotiation becomes essential to supporting oral interactions in the classroom, which can range from formal and penetrating to real and meaning-focused communication like information sharing [19, 20]. In addition to establishing the framework for verbal exchanges, another objective for language learners is to develop suggested communication styles. A classroom is a place where two types of interaction occur: verbal and non-verbal, according to Robinson [14].

Verbalize exchanges are a part of communicative activities including interacting with classmates, asking and answering questions, offering

remarks, and participating in class discussions. Conversely, non-verbal communication involves engaging in actions like nodding your head, raising your hand, making body motions, and making eye contact [17]. Educational robots can assist in achieving different kinds of conversational classroom interactions in RALL as they take on humanoid appearances.

2. Affordances of Educational Robots for Language Learning

In the mid-2000s, instructional robots started to appear in North America, South Korea, Taiwan, and Japan, as reported by [21]. These robots adopted humanoid shapes and served as learning partners, peer instructors, or caregivers. They resemble anthropomorphized robots on the outside, with faces, limbs, tablet interfaces, and mobile gadgets fastened to their chests [21]. Compared to computer-assisted language learning, which depends only on mobile devices (such as smartphones or tablets), RALL is said to be more entertaining, believable, pleasurable, and engaging due to its various features, including voice/sound, face, gesture, and location recognition.

Robots may be programmed to play a variety of roles, including talking, moving, or gesturing like human or animal figures [21] to tell tales. RALL is a promising topic with lots of opportunities in interactive design for language acquisition because of the several multimodal sources of information and interactions. Additionally, there is still a lot of room for academics and educators to propose language learning models for optimal practices, as robot-assisted learning is still in its infancy.

3. Human-Robot Interaction in RALL

Previous studies have demonstrated that language development can result from human–robot interaction (HRI). Comprehensive insights on the benefits of HRI on language progress were offered in a review research [22]. These insights included the favorable influence of robots on learner motivation and emotions owing to novelty effects, as well as the diverse robotic behaviors that offer learners social and pedagogical support. In order to enhance their vocabulary, speaking, grammar, and reading skills, learners can also experience made-flesh learning by immersing themselves in real-life physical surroundings and manipulating real-life items.

For example, it has been discovered that whole body motions and exercises improve language learning. In language learning situations that concentrate on certain language abilities like speaking, grammar, or reading, robots can be a useful addition to humans. According to studies, robots can assist kids in expanding their vocabulary just as effectively as human teachers. Additionally, the emotional state of language learners—including feelings associated to learning—is greatly impacted by the usage of robots in this context. When a human instructor is replaced with a robot, students experience less anxiety and are less fearful of making errors in front of the humanoid robot. Teenage students who practiced speaking in robot-assisted settings also reported feeling more confident [22].

3. Applying Language Teaching Methods in Interactive Design in RALL

According to Cheng et al. [7], the employment

of educational robots in language instruction ranks first among learning domains. Because these are two critical stages in language acquisition, the most typical age groups for adopting RALL were three to five (preschool) and before puberty (primary school). The claimed types of language acquisition ranged from general, foreign, and second or additional language skills. Additional ties between RALL instructional design and language teaching approaches must be created. The term didaktik might be used in this sense [23].

Didaktik, a German term, is similar to the concept of instructional design in North America. It considers the learner's requirements, task design, and learning materials. According to Jahnke and Liebscher [23], the instructor's role should be highlighted, as well as how his or her course design translates to or relates to student learning and performance. The Didaktik system consists of three parts: the student, the teacher, and the course design or content. To deliver the intended learning experience, teaching methods are included into the design of second and/or foreign language learning activities.

According to [24], language instruction in the twentieth century primarily employed a range of language teaching methods in circumstances where pupils were learning a second or foreign language. According to [24], language specialists fluctuate between strict and loose approaches to content and quantity. The traditional procedures developed in the early twentieth century, such as grammar translation, the direct methodology, and the reading method, are positioned on one side of the pendulum. During the mid-1900s, the audiolingual method (ALM) gained

popularity, mostly for teaching speech skills. ALM emphasizes drill-based practice and assists learners in replacing native language habits with target language habits by delivering specific language structures (e.g., sentence patterns) to them in a methodical and controlled manner. Exercises are used to improve pronunciation and grammar.

Following ALM, two new concepts emerged: Total Physical Response (TPR) and Teaching Proficiency via Reading and Storytelling (TPRS). TPR [25] requires students to listen to instructions in the language of instruction and respond immediately with a guided movement. TPRS, like TPR, was designed to promote oral and reading fluency in the target language. TPRS has been viewed as an effective approach for building 21st century speaking skills by having students tell compelling and intelligible stories in the classroom. This method strongly connects with the ideas of comprehensible information and the natural approach [26].

The paradigm for teaching foreign and second languages steadily shifted away from alternate language learning (ALM) in the 1980s and toward communicative techniques like communicative language teaching (CLT), which has gained traction globally in the twenty-first century [27]. By emphasizing language's functional rather than formal aspects, CLT somewhat compensates for ALM's drawbacks. Therefore, rather than assuring pronunciation or grammatical accuracy, CLT primarily educates learners' communicative skills through genuine interactions (e.g., role-play scenarios) [28]. Meaningful tasks like opinion-giving, role-playing, and interviewing are typically included in CLT

activities[29].

C. METHODS

1. Search Strategy

The authors examined the evolution of RALL during the previous ten years using a search method to locate papers published between 2010 and 2020 [30, 31]. The journal sources included ten journals in the field of educational technology and computer-assisted language instruction (e.g., Computers & Education, British Journal of Educational Technology, Computer-Assisted Language Learning, Educational Technology Research & Development, Interactive Learning Environments, System), with the majority of them coming from the Social Sciences Citation Index. The databases used were Web of Science, ERIC, and Ebsco. The researchers found 1897 articles after doing six searches using the key phrases "Interactive robots AND language learning," "L1 learning AND robots," "L2 learning AND robots," "Educational robots," "Robot," and "Humanoid."

2. Study Selection

Following the first retrieval of articles, the researchers proceeded through a study selection procedure. First, the researchers removed items that were not in English, duplicates, or unavailable, bringing the total down to 1887. Following the removal of these papers, the remaining research was filtered according to study category, title, and abstract. Particularly, abstracts and titles that mentioned using robots to learn languages were chosen. Additionally, the only empirical phrase that is equivalent to the task

design, learning materials, and learner needs of the North American notion of instructional design. According to Jahnke and Liebscher [23], the importance of the teacher's role and the way in which the course design relates to the performance and learning of the students should be emphasized. Three things make up the Didaktik system: the student, the teacher, and the course design or content. In order to provide the desired learning experience, teaching strategies are included into the design of second and/or foreign language learning activities.

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3. Eligibility: Inclusion/Exclusion Criteria

With a total of 49 studies eligible for assessment, rigorous inclusion/exclusion criteriawere applied to obtain valid data on interactions in RALL. The criteria were as follows:

a) The study must present physical use of robots;
b) The study must focus onlanguage learning;
c) The study must employ rigorous methodology with sufficient details;

d) The study must report about robot-learner interactions in detail, including the specific language input and output during the interactions.

Articles that did not match the inclusion criteria were eliminated, as seen in Figure 1. Studies that focused on topics other than language learning, such as those that employed virtual robots, were eliminated. Studies that failed to offer comprehensive explanations of the instructional design for oral interactions, encompassing the language input and output in RALL, were also excluded. Twenty-two papers were ultimately chosen, and their publication dates ranged from 2010 to 2020.

4. Data Extraction

The 22 chosen studies must be thoroughly evaluated as part of the data extraction method. Initially, the overall study profile (refer to Table A1) was coded using a variety of factors, including the nation, language of target, duration of implementation, research design, and technological components. Second, the researchers categorized material about the learning activity, the robot's position as a pedagogical agent, interactive task design, language input and output, and learning outcomes in terms of cognition, emotion, and competence (see Tables A2 and A3). This was accomplished utilizing the Didaktik instructional design approach, which includes three components: the teacher, the learner, and the course design. Table 1 shows the coding strategy for the interactive oral task design (refer to Table A3).

5. Tabulations

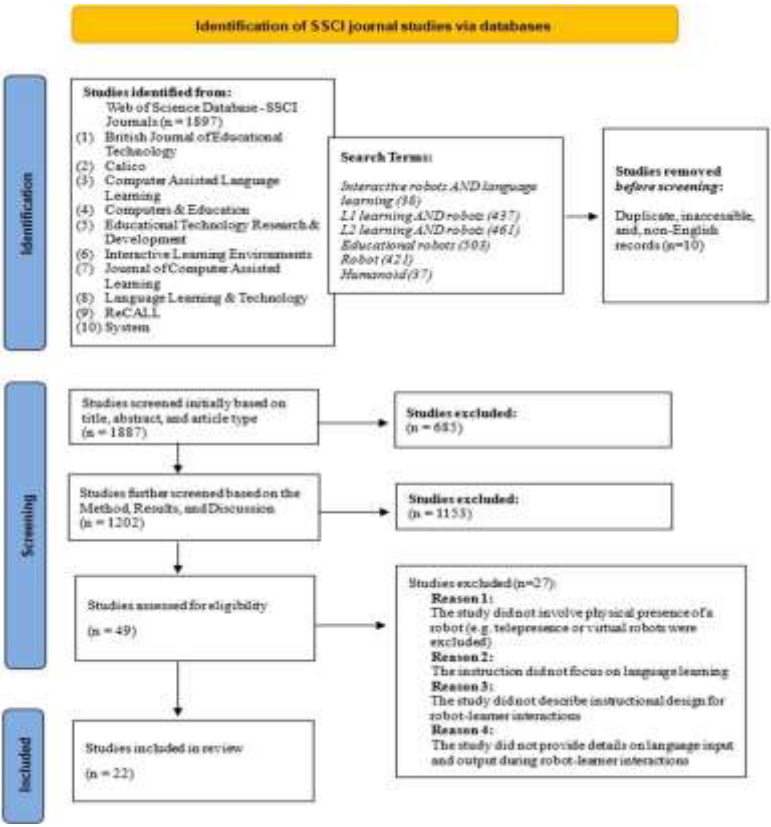
One of the co-authors and a seasoned research

assistant performed a number of tabulations. Initially, broad traits were determined. Table A1 illustrates how the target language for each research was classified as either a first language, a foreign language, or a second language. A further common feature revealed in all 22 investigations was the main theoretical underpinnings of RALL and its advantages and disadvantages. The last basic feature pertained to the technical affordances inside RALL, including the robot type and sensors employed (see to Table A1).

Second, a tabulation was made of the distribution of the main language teaching techniques used in the 22 examined studies (e.g., the audiolingual approach, communicative language teaching) (See Table A2). Numerous studies included more than one approach to language instruction in their operations. Third, oral interaction tasks that were deemed successful in the chosen research fell into the following categories: (a) question-and-answer; (b) role-play; (c) action command; (d) narrative; (e) drills (such as reciting or repeating); and (f) conversation (See Table A3). Fourth, the responsibilities that the robot performed and the facilitator's or instructor's assistance were coded (refer to Table A2). While human instructors and facilitators provided (a) procedural assistance, (b) learning support, and (c) technological support, the robot's primary duties were (a) role-play character, action commander, (c) dialogue interlocutor, (d) learning companion, and (e) teaching helper. (e) Fifth, coding was applied to the linguistic input and output (refer to Table A3).

The language output was divided into four levels based on linguistic complexity, including (a) phonemic level (referring to the smallest sound unit

in speech, e.g., the phonetic entities/b/,/ae/, and/t/, respectively in the word bat), (b) lexical level, (c) phrasal level, and (d) sentential level. In particular, the language input mode was classified into (a) linguistic, (b) visual, (c) aural, (d) audiovisual, and (e) gestural/physical modes. (f) One of the researchers was the first coder for the duration of the inter-coding procedure, developing a coding scheme to instruct the second coder. Following their first round of coding trials on three papers, the two coders got together to talk about the differences that they had found and to plan a second experiment. After all the studies were coded, the inter-coder reliability in terms of percent agreement was calculated to be 87%.



6. Synthesis

Combining the types of tasks and activities carried out by the robot, students, and human facilitators/instructors allowed for a sophisticated instructional design for conversational interactions in RALL. To link the characteristics of each task type to the interactions that the tasks really caused, the researchers generated the coded data. For instance, a robot might read aloud a narrative to a student so they may hear it and get language feedback. In order for the learners to create linguistic output in response to the

robot's content delivery or action directions, they might then be requested to act out, repeat, or recite the tale in a role-playing activity. In order to better understand the processes that enhanced the oral interactions, the researchers also studied the language input and output, as well as the kind of teacher speak that the robot provided in each of the 22 experiments' oral interactive tasks. In order to determine whether the oral tasks were stimulating and engaging, the researchers looked for evidence of these qualities. They discovered that the oral interactive tasks were helpful in increasing motivation, interest, and cognitive engagement, all of which aided in the development of oral skills in language education.

D. RESULTS

1. General Characteristics

In order to better understand the processes that enhanced the oral interactions, the researchers also studied the language input and output, as well as the kind of teacher speak that the robot provided in each of the 22 experiments' oral interactive tasks. In order to determine whether the oral tasks were stimulating and engaging, the researchers looked for evidence of these qualities. They discovered that the oral interactive tasks were helpful in increasing motivation, interest, and cognitive engagement, all of which aided in the development of oral skills in language education. As children between the ages of 7 and 12 (the primary schooling age in most countries) still find robots fun and appealing, this finding suggests that robots are best suited for use by children during their formal primary school years. Older teenagers may find robots less

intellectually stimulating or childish. Preschoolers were the second age group that benefited most from RALL. Similarly, young children and toddlers continue to find enjoyment in engaging with humanoid robots. Preschoolers and elementary school students coincidentally fall into the two key developmental stages for language acquisition. It is plausible that language educators focus more of their efforts on integrating robot-assisted oral interactive learning activities to engage students in these two age cohorts since they are the ones who gain the most from enriched language learning activities.

The 22 RALL studies' target languages were mainly focused on learning foreign languages, with learning English as a foreign language occurring most frequently (n = 14), followed by learning Russian (n = 1) and Dutch (n = 1). Learning first and second languages occurred less frequently (three studies for each category). The bulk of the studies used either between-group (n = 6) or single-group (n = 7) experiments as their study design; some of these experiments used pre- and post-test instruments (n = 6), while others used survey assessment design (n = 2). Additional study designs consist of four quasi-experiments, one ethnographic study design, and one system design and implementation assessment. Overall, the study tools showed that RALL is increasingly employing quantitative, summative evaluation. In particular, more than 70% of the research included assessments such word-picture association, writing, speaking, listening, and reading to gauge how well students performed on target abilities. Less than 15% of students used formative, qualitative assessments on narrative and artifact sketching. Even though video recording was

used in 29% of the studies to gather information on learning performance, test-oriented evaluation techniques persisted in RALL.

The RALL study identified two primary theoretical frameworks: technologies for human-robot interaction and robot-based content design for embodied cognition. Building robots to establish human-robot connections through HRI interactions served as the first theoretical foundation. It has been attempted to use optical, aural, and tactile sensors to allow humanoid robots to independently interact with kids [36]. Additionally, RFID tags made it possible to implement strategies like recognizing specific students and adjusting to their interaction styles in order to effectively include students in real-world language usage. Such findings, which emphasize similarities and common ground in learning, complement theoretical stances from the field of social psychology. When considering RALL from this angle, it was essential that robots had the same qualities and expertise as target users [36]. Benefits from doing this included enhanced oral communication abilities, motivated language use, and increased enthusiasm in learning. Novelty effects have been documented, but [37]. Additionally, there was minimal variance in student answers from highly organized tasks for autonomous robot replies. As a result, suggestions were provided on how to modify robot actions based on students' answers.

Robot-based content design using embodied cognition served as the second theoretical foundation. Robot-based content design comprises dynamic user models with visual, audio, and tangible, human-like humanoids with an appearance and body parts that perform face-to-face interactions, in contrast to

computer-based content design, which consists of static user models and two-dimensional, visual, and audio content displayed on screen [37]. Apart from providing tactile and interactive design, RALL design also facilitated bidirectional interactive content by installing e-book materials. This allowed learners to benefit from both embodied language learning and e-learning aids, which in turn improved their reading literacy, motivation, and habits [38].

The general functionalities of RALL's technological affordances included face recognition, dialogue interactions, teaching, explaining, singing, dancing, body movements, oral interactions, recalling past interactions, identifying multiple learners, speech recognition and synthesis, motions on wheels, and interaction event tracking. Various affordances were supported by sensors such infrared, touch, RFID readers/sensors, eye/stomach/arm LEDs, wireless ID tags, and sonars.

2. Language Methods Used in RALL Oral Interactions (RQ1)

The language education theories that developed in the 20th and 21st centuries served as the foundation for the language teaching strategies that were employed to produce RALL oral encounters. Furthermore, in the design of their RALL oral engagement activities, many research included multiple language training modalities. According to Figure 2, CLT (n = 13) was the most often used technique, followed by TPRS (n = 7) and TPR (n = 6). Additional strategies include learning by teaching, socio-cognitive conflict (n = 6), ALM (n = 4), multimedia-enhanced education, and multimodal stimuli (n = 2). Furthermore, studies that used various

language teaching approaches included combinations including CLT plus TPR plus TPRS (n = 4), CLT plus TPR (n = 2), CLT plus TPR plus ALM (n = 1), ALM plus TPRS plus TPR (n = 1), and CLT plus TPRS.

3. Task Design for Oral Interactions in RALL (RQ2)

A learner-centered approach was used to examine the oral interaction task design. The job itself, the language input the learner got from the robot, and the learner's vocal language output made up the instructional design elements (a, b, and c). Regarding the interactive task design, the following task types resulted in oral interactions: question-and-answer (n = 7), role-play (n = 5), action instructions (n = 3), storytelling/story acting (n = 8), conversation (n = 11), and drill (n = 4). There were only two studies that combined both (n = 2), and the instruction in the task design was more form-focused (n = 12) than meaning-focused (n = 8).

The robot's language input functioned as input from the learner's perspective, and it was mostly auditory (n = 18), followed by visual (n = 11), linguistic (n = 4), and gestural/physical (n = 3).

The learners' language output was mostly sentential, closed replies (n = 11), followed by lexical, closed answers (n = 13).

4. Role of Robots and Instructors (RQ3)

Five functions that the robots may have performed in RALL oral encounters were identified from a design-based approach (Figure 6). A discussion interlocutor was the most often occurring role (n = 12). This was a reference to pre-planned conversations in which the robot spoke to the

students using predetermined words or sentences. The robot's most common role was that of a role-play character, wherein it acted out a story as one of the characters (n = 9). This was followed by a companion that played games, sang, danced, or displayed pictures on its screen (n = 5), a teaching assistant that assisted the teacher with any aspect of the teaching process (4), and a companion that sang and danced, and action commander that acts out certain movements commanded by the learner during an activity (*n* = 1).

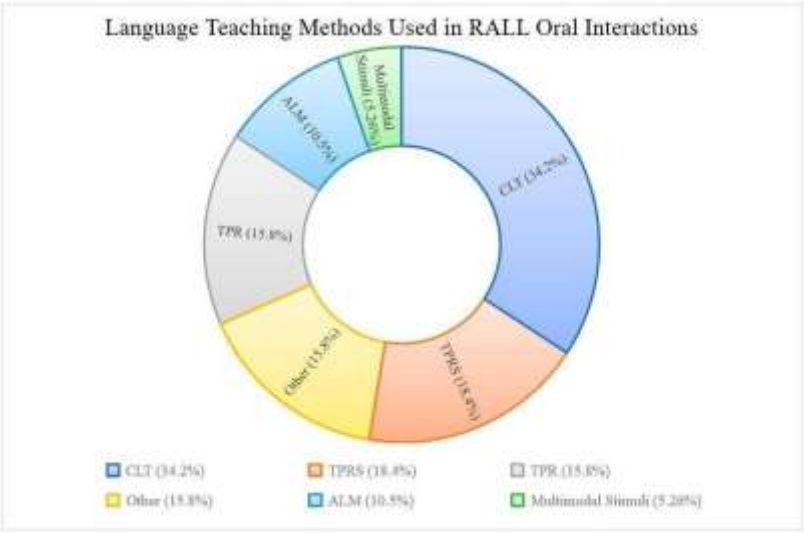


Figure 2. Language teaching methods in RALL oral interactions.

NOTE: CLT = Communicative Language Teaching. TPRS = Teaching Proficiency through Reading and Storytelling. TPR = Total Physical Response. ALM = Audiolingual Method.

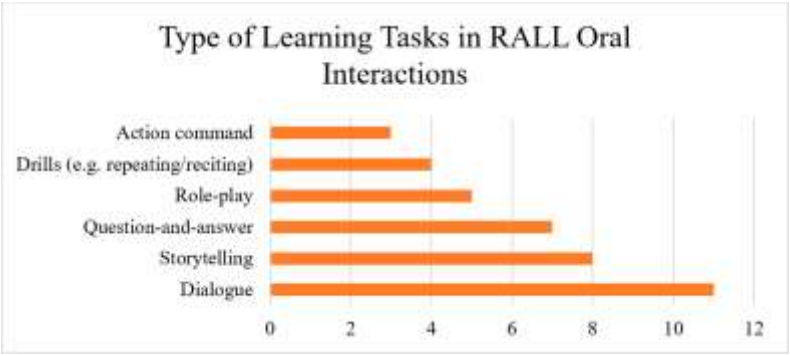
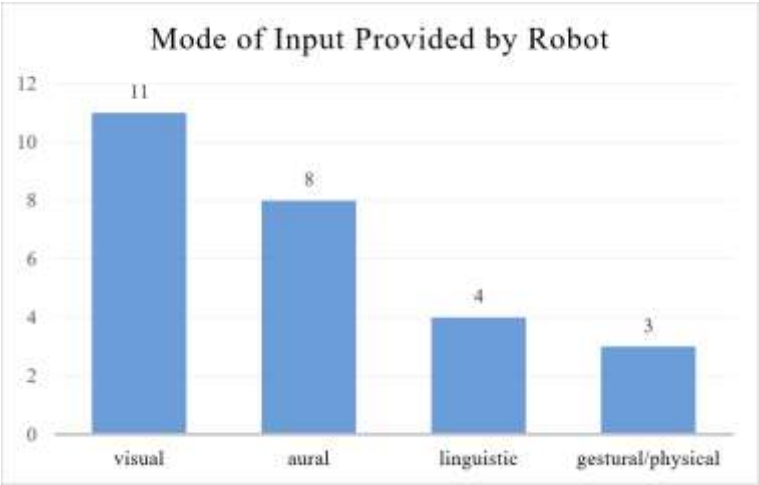
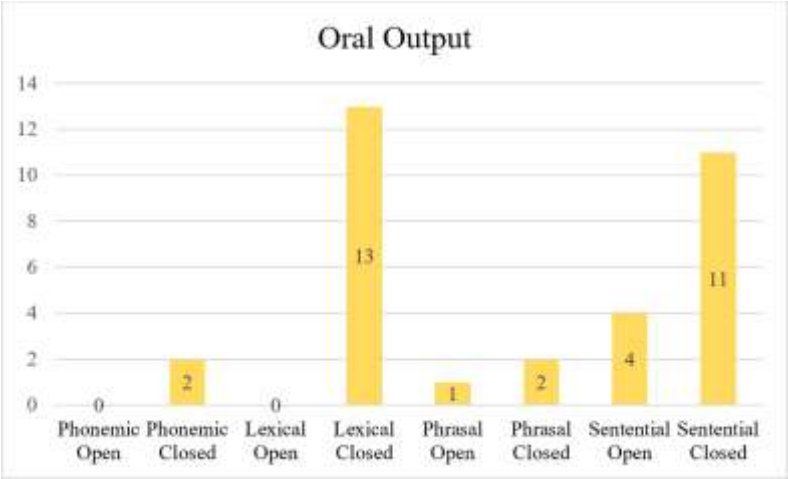


Figure 3. Type of task design for RALL oralinteractions.





E. CONCLUSSION

The interactions between different agents, the robot, the learners, and the human facilitator at different educational levels were examined in this systematic review, which also included general research trends for RALL. With regard to language teaching methodologies, instructional design, robot and instructor/facilitator roles, and cognitive, skill-based, and emotional learning outcomes, the study topics were specifically focused on (a), (b), and (c). According to the review's results, the most common language learning strategies used in RALL instructional design are communicative language teaching and narrative, which are frequently enhanced by audiolingual and total physical response techniques. The specified language learning teaching techniques' guiding principles form the basis of the learning activities, and the interaction processes and outcomes that follow have been shown to support language acquisition. Interaction effects from the learning tasks led to positive cognitive, skilled-based, and affective outcomes in language learning.

The review makes a significant contribution to the field of research on robot-assisted language teaching and learning by analyzing the advantages and disadvantages of RALL theoretical perspectives and design practices. It does this by thoroughly exploring and discovering the effects of effective instructional design elements on language learning and interaction processes. Teachers, instructional designers, and researchers who work with RALL are guided by particular design aspects and fresh perspectives offered by the thorough analysis.

Subsequent investigations have to focus on creating increasingly complex features that enhance the precision and adaptability of systems like speech recognition, providing feedback, and individual identification. Additionally, these features should involve numerous learners in RALL interactions through cooperative oral activities. Furthermore, since storytelling has emerged as a popular activity design trend in RALL, creating comprehensive and useful storytelling rubrics that prioritize oral production's intelligibility through features like automatic speech recognition will support the goal of ensuring that interactive RALL is meaning-focused.

Lastly, it will be beneficial to look at creative approaches to developing and evaluating interactions for students at various educational levels while utilizing creative teaching strategies. To further support young learners' real and embodied language acquisition, efforts should also seek to integrate RALL with other new technologies, such as the utilization of physical items and internet-of-things technology [61]. Finally, the RALL study field shows promise for the special emotional design in RALL that contributes to young learners' socio-emotional development.

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