# INCORPORATING INSTRUCTIONAL TECHNOLOGY METHOD IN ICT CLASSES IN THE FIELD OF HIGHER EDUCATION

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**Abstract**
The current investigation aims to explore the efficiency of educational technology in higher education ICT classes, emphasizing my personal stance on utilizing instructional technology in my ICT lessons. This is based on extensive research conducted by international scholars in this field. The study employs both quantitative and qualitative methods, utilizing analytical, descriptive, and applied techniques to gather data from higher education students. Data collection tools include a questionnaire, an information form, and a classroom observation checklist. The study was conducted at Uzbekistan State World Languages University with first-year students enrolled in the Faculty of Foreign Language and Literature. Results indicate that incorporating instructional technology in language teaching and learning promotes learner collaboration and participation in English language ICT classes, ultimately enhancing performance and competence. The study focuses on four key areas: the availability of instructional technologies in universities, the application of ICT in teaching and learning, teacher and student competence, perceived benefits of ICT use, and challenges encountered in implementing ICT in teaching.

**Keywords:** ICT (Information Communication Technology), ESTERELLA (Encouraging Students through Technology to Reach High Expectations in Learning Life skills and Achievement), AECT (The Association for Educational Communications and Technology), Instructional technology, educational technology.

## Introduction
The use of Information and Communication Technology (ICT) is widespread in all aspects of modern life, including personal, social, professional, and educational domains. ICT refers to any communication device or application, encompassing radio, television, cellular phones, computer and network hardware and software, satellite systems, as well as various services and applications associated with them, such as video conferencing and distance learning. While ICT has been integrated into most educational curricula, the focus has been on mastering tools such as word processing and presentation software or internet search engines. However, educators are increasingly using emerging technologies as a critical tool to help learners construct and engage with fundamental disciplinary concepts and collaborate with intellectual partners beyond their physical teaching environments.

During my teaching sessions, I always refer to the term "ESTERELLA," which is not a name for either girls or boys. It stands for "Encouraging Students through Technology to Reach High Expectations in Learning Life skills and Achievement." My goal is to motivate and guide my students to achieve higher goals and reach their peak performance through valuable teaching instructions and assignments.

State policies require students to be proficient in ICT competencies, as the government promotes the development of e-learning resources and an integrated e-learning curriculum. This includes creating

awareness of the opportunities offered by ICT as an educational tool, facilitating and sharing e-learning resources between institutions, and integrating e-learning resources with other existing resources. Instructional technologies play a significant role in achieving these objectives.

Instructional technology has been adopted in the education system as it has proven effective in developing language skills and enhancing a proper and flexible delivery of instruction. However, learners need to develop the necessary skills to improve their abilities and make language easily used for various communicative purposes. These objectives are achieved through learners' interaction with teachers, peers, and content, mostly based on applying instructional technology. International trends in English language learning confer a great responsibility on teachers, who are recommended to use active learning processes instead of traditional teaching methods. In other words, they have to apply instructional technology. The Ministry of Education has taken steps to support the implementation of the National ICT strategy for education and training, either through direct action or various institutions and agencies.

## Literature Review

Specialists hold diverse perspectives on the interpretation of instructional technology. Despite appearing distinct, they share many similarities.

For example, according to Whelan's[1] interpretation, instructional technology refers to the examination of issues, creation of solutions, production, implementation, supervision, and assessment of educational procedures and materials with the intention of enhancing education and performance both in academic and professional settings. He stresses the importance of separating technological processes from physical media. Whelan, on the other hand, puts it simply by stating that instructional technology involves the use of various teaching tools to enhance students' learning. While most people associate instructional technology with computers and software, educational technologies are not limited to just these. It encompasses all learning tools such as cameras, CD players, computer-based probes, calculators, and electronic gadgets that are yet to be invented. The Association for Educational Communications and Technology (AECT) defines instructional technology as "the study and application of the principles and practices of design, development, implementation, utilization, and evaluation of processes and resources for learning."

Molenda[2] , in his definition of instructional technology, summarizes his ideas. He states that defining Instructional Technology can sometimes fail to distinguish between it as a theory and as a field of practice. When viewed as a theory, Instructional Technology is the proposition that certain ways of creating and presenting instruction are more effective than others. People apply the theory of Instructional Technology when they analyze problems, plan solutions, and create materials. The author believes it is possible to construct a definition that explicitly addresses these difficulties, combining theory and practice, processes and things, and recognizing both the artistic and scientific elements.

Therefore, instructional technology can be seen as the combination of art and science in designing, producing, and utilizing solutions to instructional problems with efficiency and elegance. These

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[1] Whelan, R. (2005). Instructional technology and theory: A look at past, present and future trends. NY: New York University.

[2] Molenda, M. (2003). Instructional technology. In A. Kovalchick, & K. Dawson (Eds.),Educational technology: An encyclopedia. Santa Barbara, CA: ABC-Clio.

solutions may include verbal or audiovisual media and can take the form of lessons, courses, or entire systems that promote learning efficiently, effectively, and compassionately.

According to Mc. Neil[3], instructional technology can be described as the organized and methodical use of approaches and methods drawn from behavioral, cognitive, and constructivist philosophies to address instructional challenges.

According to Weller, Little, Mc. Andrew, and Woods[4], It refers to a "methodical use of principles and other structured information in order to create and improve educational planning and production."

## Methodology

I plan on implementing my own methods and techniques to organize my ICT lessons using instructional technology tools, which include the following steps:

1- Capturing attention: Attracting the learner's focus to the material being taught.

2- Informing learners of the objectives: Clearly stating the goals of the lesson.

3- Activating prior knowledge: Reminding the learner of previously covered topics.

4- Presenting the material: Delivering the learning activities.

5- Providing guidance: Offering strategies to enhance comprehension and retention.

6- Encouraging participation: Encouraging the learner to practice what has been taught.

7- Offering feedback: Providing constructive criticism to improve learning.

8- Evaluating performance: Assessing the learner's understanding of the material.

9- Enhancing retention and transfer: Helping the learner to assimilate the information.

## My objectives are as follows:

a. To create a conducive learning atmosphere.

b. To foster effective interaction between myself and my students.

c. To present the content in an engaging and enjoyable manner.

d. To facilitate a flexible learning process.

e. To easily monitor and evaluate student progress.

f. To develop human resources.

g. To provide a learner-centered education.

h. To encourage innovative and insightful learning.

Expectations from my students during lessons:

a. To develop their personal skills and abilities.

b. To set their own learning pace.

c. To receive individualized attention.

d. To engage in meaningful activities.

e. To expand their intellectual horizons.

f. To submit homework easily and enjoyably.

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[3] McNeil, S. (2005). Visualizing mental models: Understanding cognitive change to support teaching and learning of multimedia design and development. Educational Technology Research and Development, 63(1). https://doi.org/10.1007/s11423-014-9354-5.

[4] Weller, M., Little, A., McAndrew, P., & Woods, W. (2006). Learning design, generic service descriptions and universal acid. Journal of Educational Technology & Society, 9(1), 138-145.

g. To refrain from daydreaming.

My responsibilities during lessons include:

a. To avoid routine and monotony.

b. To tailor the teaching approach to the student's learning pace.

c. To introduce innovative teaching methods.

d. To provide meaningful activities.

e. To improve language skills.

f. To simplify homework assignments.

g. To encourage outstanding performance.

h. To eliminate classroom barriers.

My Lesson Priorities:

1. Changes to Student Roles:

a. Encouraging active participation instead of passive reception of information.

b. Encouraging critical thinking and decision-making.

c. Providing authentic tasks to perform.

d. Assisting in goal-setting and decision-making.

e. Evaluating progress.

2. Changes to My Role as a Teacher:

Transforming from an information dispenser to a facilitator who sets project goals, provides guidelines and resources, and questions the reasoning behind design choices.

3. Boosting Motivation and Self-Esteem:

Increasing learners' sense of self-worth by enhancing their competence in technology-based tasks and their awareness of the value placed on technology.

4. Technical Skills:

Providing a basic understanding of various computer tools and fostering confidence in learning new tools. Supporting the learning of new software applications.

5. Tackling More Complex Tasks:

Empowering learners to handle complex tasks and utilize higher-order skills with the support and capabilities provided by technology.

6. Increased Collaboration with Peers:

Facilitating cooperative work and peer tutoring through instructional technology.

7. Greater Usage of External Resources:

Enabling learners to access external resources for learning through technology.

8. Improved Design Skills:

Offering learners the option to choose from multiple media to convey ideas in a more professional-looking way, thus improving their design skills and tools for manipulating the presentation of information.

**Data Analysis**

In March, I conducted an assessment to evaluate my students' attitudes towards the use of instructional technology in my ICT classes. I teach a total of 50 students, and I orally asked them a series of questions

to gauge their independent responses. These questions were designed to elicit critical thinking and teamwork skills from my students.

The questions I asked were as follows:

1. How valuable is instructional technology in the learning process in your ICT class?

2. How effective is instructional technology in enhancing your language learning skills?

3. Does instructional technology motivate the EFL teaching process?

4. Are there any needs for instructional technology in language classes?

5. Does instructional technology make lessons more enjoyable?

I was pleased to see that all of my students, including those who had previously struggled, eagerly responded to each question with thoughtful and intelligent answers. Overall, their opinions of instructional technology were positive. However, I wanted to get a more honest and accurate assessment of their attitudes and feedback.

To accomplish this, I distributed an anonymous questionnaire to my students. This was the next step in my research investigation. The questions on the questionnaire were as follows:

1. Does the use of instructional technology increase language learning?

2. Does the use of instructional technology improve language skills in reading, writing, speaking, and listening?

3. Does the use of instructional technology motivate students to learn?

4. Should instructional technology be used in language classes?

5. Does the use of instructional technology make lessons more enjoyable?

By using both oral questioning and anonymous questionnaires, I was able to gain a more comprehensive understanding of my students' attitudes towards instructional technology.
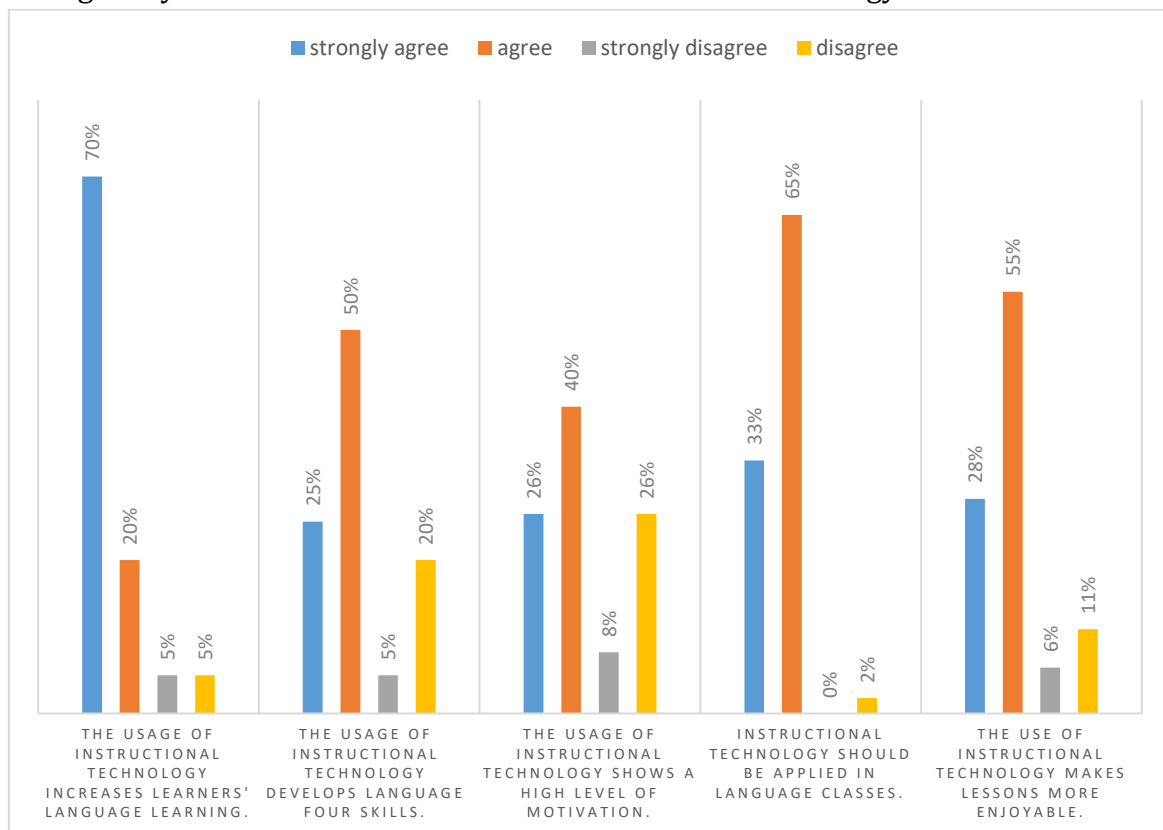
From the chart, it is evident that the respondents provided accurate and transparent responses in the anonymous survey. The responses were credible and authentic. All the suppositions were affirmative and aligned with the anticipated principles of the research. Over 50% of the learners expressed their agreement with the ideas that "Incorporating Instructional technology enhances language acquisition," "Instructional technology is necessary in language classes," and "Incorporating Instructional technology makes lessons more enjoyable." It was apparent from the survey that some of my pupils were indolent and did not favour the use of ICT. This notion was apparent in the second and third questions. Nevertheless, I am grateful for the students who enjoy my classes.

**Conclusion**

I conducted this research because I firmly believe that the integration of ICT lessons in academic areas is pivotal and reflects the current global demands. My assertion is that the utilization of educational technology in the process of acquiring English language skills for EFL learners is crucial and leads to effective and satisfactory outcomes. Therefore, the primary objective of this study is to urge English language instructors to incorporate instructional technology in teaching ICT courses for EFL students and enhance the existing learning environment for an exceptional educational experience.

**References**

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