

ICT IN THE TEACHING AND LEARNING OF ENGLISH IN UNIVERSITY STUDENTS

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Abstract

ICT may be utilized to aid in the assimilation of a second language; since persons use technology on a daily basis, it is advantageous to extend this learning to ICT; nevertheless, integration is essential for increased interest. There are many reasons why it is vital to evaluate the interaction between ICT and English learning. That is why, with the broad objective of establishing a link between ICT and English acquisition, this research used a hypothetical deductive technique, a non-experimental cross-sectional design, and a sample of 60 university students. Enrique Guzman and the surrounding valley. They were given two instruments made from variables and dimensions using Spearman's rho statistician. It was discovered that there is a substantial association between ICT and English learning. Thus, increased usage of ICT will result in increased English language learning accomplishment for students enrolled in the second year of an English study program at a public university.

Keywords: Learning, Communication, Digital Competences, Higher Level, Technology.

Introduction

According to Soler (2008), information and communication technology (ICT) is the use of different technical methods to store and communicate visual, digital data for a variety of objectives, whether at work or in academic settings (p.26). According to Gómez and Macedo (2010), educational institutions worldwide are confronted with the problem of using ICT to provide their students with the equipment and information necessary for these times. In 1998, UNESCO's worldwide report on education on teachers and how to educate in a changing society discussed the influence of ICT on traditional teaching and learning methodologies, foreshadowing the transformation of teaching and the way instructors and students acquire information (p.27). Similarly, Choque (2010) defines cognitive tools as "extensions of man built by humans to make their task simpler." If the wheel represented a significant mechanical advancement for the globe, enabling numerous data processing functions in the particular issue of educational technologies, they facilitate the knowledge process and give assistance (p.35).

On the other hand, Besse (1984) defines foreign language learning as an appropriation, which means that rules of the lexicon of what is heard and spoken must be acquired and made sense in the same way that they must be able to connect the experiences described above in order for the information to be retained in memory (p.35).

The skill to learn a second language is contingent upon the ability to comprehend texts and the ability to hear; in other words, the material must be intelligible. According to Harmer (2001), language acquisition occurs because extensive exposure to the language and many opportunities to use it are often beneficial, as they suggest a gain in the student's knowledge and aptitudes (p. 95).

The manner in which they utilize this technology in teaching is decreased in certain courses, which is why its usage is necessary (Alfalfa et al., 2001); as a consequence, the deficiency that teaching demonstrates when it is used is shown. From this vantage point. According to Raisazadeh and Etkin (1989), despite significant development, ICT is incapable of being integrated into the classroom.

As a result of the limited usage of modern technology, it can be observed that traditional teaching methods are those that stand out in class. At the setting of Peru, Chumpitaz and Rivero (2012) did research on the use of ICT by professors in Lima colleges. They discovered that different lecturers emphasize the benefits of using digital tools, stating that these technologies provide students with more. Since they enable instructors to monitor students using a variety of ways, they also enable teachers to provide students with more comprehensive information via audiovisual content, allowing students to engage with the resource and allowing teachers to stay current, despite their problems that affect different skills.

Apart from improving technology skills, it is critical for individuals to study a second language nowadays, since it opens up global development pathways for communication. It is reported that English is part of the primary school curriculum, yet the attempt to incorporate this language into the children' early years of studies has not been enough, and the pupils' learning success has not been as anticipated. Similarly, Prato and Mendoza (2006) assert that this is due to passivity and concludes that all students have the same learning requirements when, in fact, they comprehend at varying rates and that a single methodology is ineffective for all students and does not result in the same academic achievement. (p.52).

On the path to acquiring a second language, ICT can be used as a tool because society has integrated digital tools into their daily lives and an increasing number of people are attracted to them; therefore, it is advantageous if this learning is conducted through various disruptive strategies; they only require proper incorporation with the goal of increasing interest (López, 2007). The criteria for analyzing the association between ICT and English learning. Similarly, it is relevant, as it is expected to benefit university teachers greatly to make necessary adjustments to the teaching of English, taking into account the impact on society,

because students at a public university seek to improve their knowledge of English in order to enter a context that requires the use of another language.

Methodology

The research employs a quantitative method of the most fundamental kind, with a correlational level. Similarly, the research design will be non-experimental, as no variables will be changed, and cross-sectional, since the purpose of the study will be "to characterize the variables and examine their relationships through time." (Hernández et al., p. 151).

The hypothetical deductive procedure was applied. Hernandez et al. (2014) define a population as a collection of people who share a set of characteristics that will be stated in the study's purpose.

The population consisted of 73 second-year English students, whereas the sample consisted of 59 individuals. The technique used was a survey, and the instrument used was a questionnaire. In accordance with the objectives of this study, the dimensions and indicators established in the variable use of ICT were considered, which is structured in 17 items, and in the case of learning English, a 20-point test was used entirely in English for its exam-type resolution, both instruments were validated by four experts, with the majority of them receiving approval of more than 80%. Additionally, a Cronbach alpha reliability of 0.758 was obtained for the first variable, and a Kuder Richardson reliability of 0.830 for the second variable, indicating both variables had a high level of reliability.

Results

Table 1

Frequency distribution of the ICT variable

Nevels	Range	Absolute frequency(f)	Relative frequency (%)
Very good	□72 - 85□	6	10,2%
good	□59 - 71□	35	59,3%
Regular	□45 - 58□	9	15,3%
bad	□32 - 44□	8	13,6%
Very bad	□17 - 31□	1	1,7%
Total		59	100.0%

Note: Variable ICT. Source: SPSS 24 results.

Of those who completed the survey, 59.3% (35) indicate that the use of ICT is good, followed by 15.3% (9) who consider it to be regular, 13.6% (8) affirm is bad, 10.2% (6) consider it very good, and 1.7% (1) indicate very bad. The average is 58.76, this indicates that for those who completed the ICT survey, it is good.

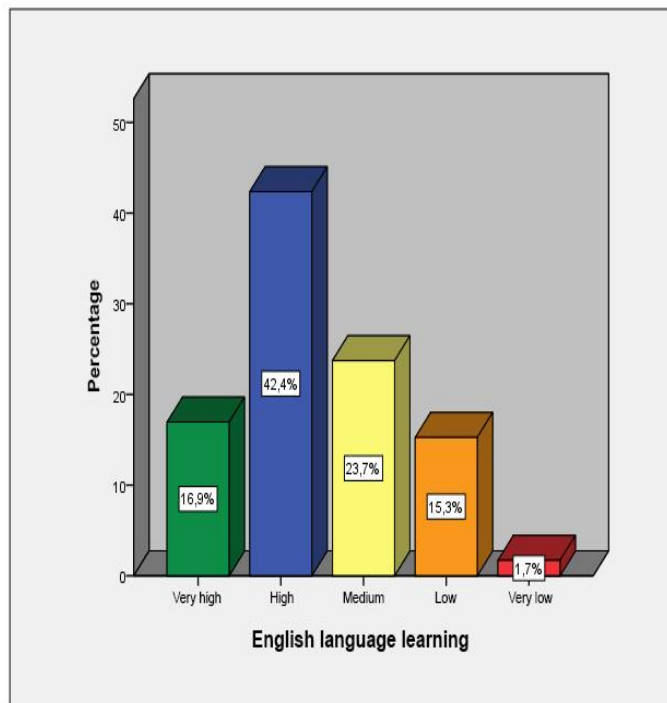


Figure 1 English language learning.

Of those who completed the survey, 42.4% (25) have a high level of learning English, followed by 23.7% (14) who have a medium level, 16.9% (10) very high, 15.3% (9) a low level, and 1.7% (1) very low. The average is 19.78, this indicates that for those who completed the survey, learning English is at a high level.

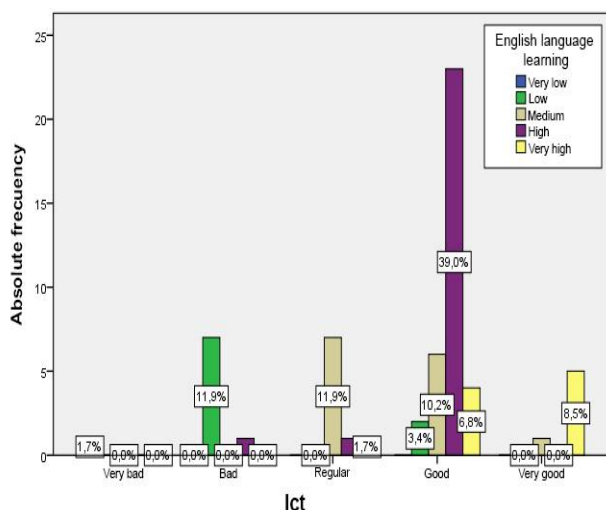


Figure 2

Distribution of comparative levels between ICT and English language learning.

Note: Cross tables in relation to ICT and learning English. SPSS 24 result

From the foregoing, it is estimated that when those who completed the survey indicate that the use of ICT is very good, 8.5% have a very high level of English learning, and 1.7% have a medium level; when those who completed the survey state that the use of ICT is good, 6.8% have a very high level of learning English, 39.0% high, 10.2% medium, and 3.4% low ; On the other hand, when those who completed the survey indicate that the use of ICT is regular, 1.7% have a very high level of English learning, 1.7% high, and 11.9% medium; when those who completed the survey affirm that the use of ICT is bad, 1.7% have a high learning of English, and 11.9% low; and finally when those who completed the survey say that the use of ICT is very bad, 1.7% have a very low learning of English.

Table 2
Correlation and significance between ICT and English learning

		ICT	English learning
ICT	Correlation coefficient	1,000	,636**
	Sig. (bilateral)	.	,000
	N	59	59
English learning	Correlation coefficient	,636**	1,000
	Sig. (bilateral)	,000	.
	N	59	59

****.** *The correlation is significant at the 0.01 level*

The results are presented to test the general hypothesis: there is a Spearman's Rho correlation coefficient = 0.636** which is understood to be 99.99% ** the correlation is significant at the bilateral 0.01 level, understood as a positive relationship between the variables, with $p = 0.00$ ($p < 0.01$), then the null hypothesis is rejected. In addition, it can be seen that ICTs are directly related to learning English, in other words, the better the ICTs, the greater the learning of English, also according to Spearman's correlation of 0.636, this means a positive correlation.

Discussion and conclusion

The research's overall objective was to ascertain the extent to which ICT is used to teach and study English among second-year students enrolled in an English career at a higher education institution in Lima, Peru. When the general hypothesis was tested, a Spearman's Rho value of 0.636 and a p value of 0.000 were obtained, indicating the presence of a direct and significant relationship between ICT and English learning, which is consistent with de Luperdi's (2018)

research on the use of English and the use of ICT as teaching and learning techniques in university students. These results are a result of educational technology' potential to adapt teaching and learning processes in novel ways that accommodate both classic and non-traditional forms of instruction (León and Tapia, 2013). Thus, Robles et al. (2021) argue for the inclusion of technology instruments in higher level education in order to foster the autonomy of future professional English language instructors throughout their educational experiences.

Concerning particular aim 1, which was to determine the degree of association between the usage of ICT in the classroom and oral understanding and expression of second-year English students. When the specific hypothesis 1 is tested, Spearman's $Rho = 0.617$ and $p\text{-value} = 0.000$ indicate that there is a direct and significant relationship between ICT in education and English comprehension and oral expression, similar to Vega (2017), whose Pearson coefficient results indicated a positive correlation between ICT and English learning. De La Cruz et al. (2022) demonstrate the efficacy of gamification aspects in generating substantial improvements in higher level students' English learning, and then validate the efficacy of digital tools in improving reading and listening skills.

Addressing particular goal 2, which attempted to determine the degree of association between the use of ICT in the classroom and text comprehension in second-year English degree students. For specific hypothesis 2, a Spearman's Rho of 0.572 and a p value of 0.000 indicate that there is a direct and significant relationship between ICT in the classroom and text comprehension, which is consistent with the findings of Castilian et al. (2014), who discovered a significant relationship between motivation and English learning in public school students. According to Laura et al. (2021), it is critical for university students concentrating in English to master the English language, recognizing their talents in information discovery and the English-Spanish translation process. Which is required to demonstrate the critical nature of text comprehension. Similarly, Laura et al. (2019) prove the efficacy of using digital tools in their educational practice by optimizing the reading ability of English language in normal basic level pupils, not just by creating major positive improvements. Additionally, desire and enthusiasm in studying and engaging in class activities improves.

Assessing particular goal 3, which sought to ascertain the degree of link between ICT in education and text production among second-year English students. When specific hypothesis 3 is tested, a Spearman's Rho correlation coefficient of 0.596 and a p value of 0.000 are obtained, indicating that there is a direct and significant relationship between ICT and text writing. This finding is consistent with the findings of Brito and Garcia (2016), who stated that their proposal for didactic guides benefits and facilitates the process of teaching and learning the lexicon while also promoting achievement of specified competencies. Similarly, Laura et al. (2020) emphasize the necessity of incorporating digital technologies into the process of teaching and learning the English language, stating that gamification engages students considerably in accomplishing stated goals and is a feasible method of reinforcing their autonomy. On the other hand, Laura et al. (2021)

argue that the use of educational software that teachers plan and develop enhances students' learning of the English language by improving the planning and execution of activities that engage students in improving their English vocabulary and reinforcing their writing skills in order to have direct contact with the English language.

It is worth noting that the research had a time constraint on the use of the instruments in the case of students, and so data collection took around one month. Similarly, this research will have a transcendent effect on second-year English students at a public university institution.

English instructors should examine a variety of digital technologies to significantly increase English learning over time. Additionally, it is vital to do and display more research-based activities at a higher level. While the significant results in regular education for English learning are confirmed, in a university setting, the same progressive improvement is expected to support teachers' theory and application experiences, resulting in significant changes in their pedagogical practice and reinforcement of digital skills. The usage of technology will continue to evolve at a breakneck pace, and as a result, teaching must keep pace in order to maintain the highest possible standard of English learning.

References

1. Alfalla, R.; Arenas, F. y Medina, C. (2001). *La aplicación de las TIC a la enseñanza universitaria y su empleo en la formación en dirección de la producción/operaciones, Pixel-Bit*. Revista de Medios y Educación, 16, 61-75.
2. Besse, H. (1984). *Grammaire et Didactique des Langues*. París: Hatier - Crédif.
3. Brito, F. y García, A. (2016). *Efectividad de las guías de enseñanza en el aprendizaje del vocabulario del idioma inglés en los estudiantes de grado sexto de la Institución Educativa Técnica San José del Municipio de Fresno-Tolima año 2016* (tesis de maestría). Universidad Privada Norbert Wiener, Lima, Perú.
4. Castellano, A., Ninapaytan, D. y Segura, H. (2014). *La motivación y su relación con el aprendizaje del idioma inglés en los estudiantes del tercer grado de secundaria de la Institución Educativa 1283 Okinawa, Ate-Vitarte, 2014* (Tesis de licenciatura). Universidad Nacional de Educación Enrique Guzmán y Valle, Lima, Perú.
5. Choque, R. (2010). *Estudio en aulas de innovación pedagógica y desarrollo de capacidades TIC*. Lima: Universidad Nacional Mayor de San Marcos.
6. Chumpitaz, L. y Rivero, C. (2012). *Uso cotidiano y pedagógico de las TIC por profesores de una universidad privada de Lima*. Educación Vol. XXI, N° 41, septiembre 2012, pp. 81-100 / ISSN 1019-9403. Recuperado de: <http://revistas.pucp.edu.pe/index.php/educacion/article/view/2900>
7. De La Cruz, K. M. L., Gebera, O. W. T., & Copaja, S. J. N... (2022). Application of Gamification in Higher Education in the Teaching of English as a Foreign Language. In Sustainability in Energy and Buildings 2021 (pp. 323–341). *Sustainability in Energy and Buildings 2021*. https://doi.org/10.1007/978-981-16-5063-5_27
8. Gómez, L. y Macedo, J. (2010). *Importancia de las TIC en la Educación Básica Regular*. Investigación Educativa, vol. 14 N. ° 25, 209-224.
9. Harmer, J. (2001). *The Practice of English Language Teaching*. Longman Group Limited. London.
10. Hernández, R., Fernández C., y Baptista, P. (2014). *Metodología de la Investigación Científica*. Sexta Edición. Colombia: MC Graw Hill.
11. Citation: Laura, K., Franco, L., & Luza, K. "Gamification for understanding English texts

- for students in a public school in Peru”, *International Journal of Development Research*, 10, (10), 41787-41791. <https://doi.org/10.37118/ijdr.20319.10.2020>
12. Laura De La Cruz K. M., & Velarde Molina J. F. (2019). La Aplicación de un Software en Comprensión de Textos en Inglés para Estudiantes en Perú. *Neumann Business Review*, 5(2), 108-121. <https://doi.org/10.22451/3002.nbr2019.vol5.2.10042>
 13. Laura De La Cruz K. M., Velarde Molina J. F., Luque Mamani B. R., & Yupanqui Gonzalo G. R. (2021). Administrar la tecnología para la traducción en la clase de inglés en estudiantes de la carrera de Idioma Extranjero. *Neumann Business Review*, 7(1), 115-138. <https://doi.org/10.22451/3006.nbr2021.vol7.1.10061>
 14. Laura, K., Morales, K., Clavitea, M., & Aza, P. (2021). Aplicación Quizizz y comprensión de textos en inglés con el contenido de la plataforma educativa “Aprendo en Casa”. *Revista Innova Educación*, 3(1), 151-159. <https://doi.org/10.35622/j.rie.2021.01.007>
 15. León E. y Tapia J. (2013) *Educación con TIC para la sociedad del conocimiento*. Rev. Digital Universitaria 14(2)
 16. López, M. (2007, noviembre). *Uso de las TIC en la educación superior de México. Un estudio de caso*. Apertura, año 7, núm. 7, pp. 63-81
 17. Luperdi, F. (2018). *Dominio del inglés y el uso de tics como estrategias de enseñanza en el aprendizaje del idioma inglés en universitarios* (Tesis de doctorado). Universidad César Vallejo, Lima, Perú.
 18. Maroto, A. (2007). *El uso de las nuevas tecnologías en el profesorado universitario*. *Pixel-Bit*. Revista de Medios y Educación. N° 30 Julio 2007 pp.61-72.
 19. Prato, A. y Mendoza, M. (2006). *Opinión, conocimiento y uso de portales web para la enseñanza del inglés como lengua extranjera*. <http://redalyc.uaemex.mx/redalyc/pdf/823/82330104.pdf>
 20. Raiszadeh, F. y Etkin, L. (1989). *POM en academia: algunas causas de preocupación*. *Diario de producción y gestión de inventario*, 30(2), 37-40.
 21. Robles Gonzales, H. E. . ., Salamanca Chaparro, R. X., & Laura De La Cruz, K. M. (2021). Quizizz y su aplicación en el aprendizaje de los estudiantes de la carrera profesional de idioma extranjero. *PURIQ*, 4(1), 97-115. <https://doi.org/10.37073/puriq.4.1.239>
 22. Soler, V. (2008). *El uso de las TIC (Tecnologías de la Información y la Comunicación) como herramienta didáctica en la escuela*. *Contribuciones a las Ciencias Sociales*.
 23. Vega, F. (2017). *Uso de las TICS y su influencia con la enseñanza – aprendizaje del idioma inglés en los estudiantes del I y II ciclo de la Escuela Académico Profesional de la Facultad de Educación UNMSM-Lima* (Tesis de maestría). Universidad Nacional Mayor de San Marcos, Lima, Perú.