

THE EFFECT OF TECHNOLOGY-ASSISTED LANGUAGE LEARNING ON THE MOTIVATION OF ESL LEARNERS

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Abstract

This research examines how technology enhances English language learning by studying its influence on students' learning motivation and if it helps create their Identity in Language. Research shows that most learners view technology as a fun and effective system which makes them better at English. The research shows technology helps students feel better about themselves and builds their educational and professional futures through worldwide connection. The results from our data collection reveal a strong positive view of language learning technology with an average agreement score of 40.0 though standard deviations ranging from 24.83 to 25.81 demonstrate some individual experience differences. This research explored how students see technology during their learning and how tech helps them form their personal language journey. The research meets its two main aims by showing how learners view technology impacts their motivation and how technology helps them establish language proficiency targets. Students see technology as an effective tool that boosts their motivation when it helps them complete learning assignments faster. They use technology both for university and career success. Technology pushes students to learn better and stay focused while providing them a clearer picture of their future language capabilities. Findings indicate that personalization and equal technology access remain necessary to address individual learning differences. Language education should enhance learning through equal access with interactive tools and create custom courses to support students' dream jobs while growing their interest in technology. This research answers why technology benefits English language education and validates our study goals through its main results.

Keywords: Motivation, Intrinsic Motivation, Extrinsic Motivation, Self-Determination Theory (SDT), L2 Motivational Self System (L2MSS)

Introduction

Technology has transformed language education by radically changing how people learn languages. TALL refers to the use of software programs, mobile applications, web-based courses, and digital resources in teaching languages to create better student learning experiences (Golonka et al., 2014). Student motivation strongly affects how well these technology-driven educational approaches work. Student motivation directs learning success by encouraging focus on language material and keeps learners committed to push through obstacles to meet their objectives (Dörnyei 2001). Research about how motivation works in TALL environments has grown important because digital tools and online spaces both help and hurt students' drive to learn.

Motivation in Technology Assisted Language Learning combines different types of factors that include personal traits and features of learning tools according to Kern (2014). Technology has brought fresh ways to learn languages through real-time communication, gaming, and customized material which boost or lower learner motivation based on how well designers execute these tools (Chik, 2014). To make meaningful instructional changes and

better learning outcomes we must grasp how technology affects student motivation for learning.

This research studies how technology tools affect language learning motivation and looks at what happens when these tools boost or reduce student interest and teacher effectiveness. We use established theories of learning motivation to understand how students learn languages in online settings.

This research demonstrates how motivation shapes Technology-Assisted Language Learning (TALL) through its specific analysis of this process. Educators and policy makers need to recognize what factors inspire students to learn languages better in the current digital learning environment. The research shows us how teaching tools from mobile apps to online learning platforms influence student motivation and their success in language education.

The research shows that understanding how technology affects motivation helps designers build effective digital spaces that lively both intrinsic and extrinsic motivations. Educators must learn to effectively use online learning platforms and blended teaching approaches because these now drive language education forward. This research shows how adapting learning styles to match learner needs helps create stronger student involvement and better learning results.

Theoretical Framework

We integrate various theories about motivation from Ryan & Deci and Dörnyei to study technology's role in boosting student language learning enthusiasm. By using Deci and Ryan's Self-Determination Theory (1985, 2000) I examine how digital tools enhance both natural and external-driven motivation in TALL environments. Through the L2 Motivational Self System (Dörnyei, 2005) we examine how technological tools impact learners' self-beliefs and their capacity to learn languages properly. Students take different learning paths through technology acceptance based on their views of how easy the tools are to use and how helpful they prove to be according to Davis's 1989 model. We use Flow Theory by Csikszentmihalyi from 1990 to study how technology helps create optimal engagement states for better intrinsic motivation. Vygotsky's socio-cultural theory (1978) and Schunk et al.'s Cognitive Theory of Motivation (2008) support how interaction with others and mental activities help students become more motivated. Devising all these theories creates ways for us to analyze the relationship between learner motivation and language-learning technology.

Research Questions

- i. How do learners' perceptions of the usefulness and ease of use of technology influence their motivation to engage with language learning tasks?
- ii. In what ways does technology influence learners' Ideal L2 Self and the motivation to achieve language proficiency?

Research Objectives

- i. To explore how learners' perceptions of the ease of use and usefulness of language learning technologies influence their overall motivation and engagement.
- ii. To investigate the role of technology in shaping learners' Ideal L2 Self and its effect on their motivation to pursue language learning.

Literature Review

Research now focuses on technology in language teaching because it helps students become more interested and active learners. Research shows Technology-Assisted Language Learning (TALL) helps and hurts students based on how well developers design and implement their digital programs.

Motivation drives how well students learn a language because it directly affects their studying habits and results. SDT states that people show better learning outcomes because

they naturally want to master things they find interesting. Technology creates natural motivation by delivering self-guided learning that keeps students engaged in interactive content. A study by Chik (2014) shows digital games and social networking boost motivation through interactive personalised learning that matches student interests. According to Dörnyei's (2005) work, the L2 Motivational Self System theory reveals that students' internal thought patterns about themselves and their future language abilities drives their learning process. Technology helps develop immersion-based language learning experiences which build the Ideal L2 Self and drive learners toward their language goals according to Thornbury (2015).

Students respond well to external rewards through grades and recognition in Technology Assisted Language Learning spaces. Precisely as described by the Technology Acceptance Model (TAM), learners' views on digital tool usefulness and usability directly affect their willingness to use these tools (Davis, 1989). According to Golonka et al. (2014), students continue to be driven by learning when they experience tools that work well for improving their speaking skills and have an easy learning experience. Students are more motivated to use digital tools and embrace them better based on two key factors according to research by Venkatesh et al. (2003), user-friendly features and clear educational benefits.

Studies prove that turning educational tasks into games makes learners more motivated. Research from Anderson and Rainie (2014) shows that educational gamification components including reward systems, advancement levels, and point-based achievements helps students stay engaged through entertainment and competition. Research by Csikszentmihalyi (1990) shows that deep engagement through Flow helps turn learners into highly motivated participants in their studies. Students participate more deeply in TALL settings when they tackle balanced challenges with instant feedback through games and interactive tasks.

Modern language learning apps on mobile devices show us how technology boosts student motivation. Mobile language learning as described by Chen and Tsai (2012) lets users control their learning path at any time or location. This leads to higher self-motivation. Students can learn their language on mobile devices while doing everyday tasks which keeps them interested in their studies.

Studying TALL shows that learners' motivation comes from combining natural interests with outside influences. Technology boosts learning motivation by creating active lessons that match students' preferences and identities. The ability of technology to maintain motivation relies on how users find digital tools easy to access and beneficial. Researchers should study how best to use features of TALL including gamification, personal feedback, and social interaction to keep students motivated and better their language learning results.

Research Methodology

My research on student motivation in Technology-Assisted Language Learning (TALL) used quantitative methods which are detailed in this section. The research instrument was a survey questionnaire with five Likert scale response options to measure student motivation.

Research Design

Through this quantitative study researchers studied how Technology-Assisted Language Learning tools influence student motivation levels. To study this topic the researcher used non-experimental methods that relied on statistical analysis of structured survey data.

Population and Sampling

This research was conducted in Khawaja Fareed University of Engineering and Information Technology Rahimyar Khan. University ESL students of graduate level aged 20 to 25 who learned English using technology-based tools participated in the research. I selected students

from BS English Department, and they were taught with digital tools for language learning including platform and apps in their lesson plans.

To get an even distribution I used random selection methods across all proficiency levels. The researcher selected 200 students to ensure that the sample included diverse student backgrounds.

Research Tool

The primary data collection tool was a survey questionnaire, specifically designed to measure motivation in TALL environments.

Validity and Reliability of the Research Tool

The researcher validated the questionnaire by having experts who understand language learning and learning technologies examine its content. I used 20 students in a pilot study to validate that our items were easy to understand and applicable to the topic. The researcher updated questions based on feedback for higher accuracy and relevance.

To measure item consistency we ran Cronbach's alpha on the questions to ensure it was tested the same concept. The research tool delivered a Cronbach's alpha result of 0.85 which demonstrates strong measurement strength.

Research Variables

- **Independent Variable:** Use of Technology-Assisted Language Learning tools, including digital platforms, apps, and software.
- **Dependent Variable:** Learners' motivation, measured through the Likert-scale questionnaire.
- **Control Variables:** Age, gender, and proficiency level, as these factors potentially influenced the relationship between TALL tools and motivation.

DATA Analysis and DATA Interpretation

After collecting data, it was analyzed and interpreted as

Sr.#	Statement	SD	DA	UD	A	SA	Avg	SD
1	I enjoy using technology to learn English because it makes learning fun.	27	37	9	49	78	40.0	25.81
2	Using technology helps me explore interesting ways to improve my English skills.	29	37	8	50	76	40.0	25.25
3	Learning English through technology feels more engaging than traditional methods.	29	36	10	48	77	40.0	24.85
4	I use technology for learning English because it helps me perform better in exams.	29	37	8	50	76	40.0	25.25
5	Technology motivates me because it makes learning faster and more efficient.	26	38	8	53	75	40.0	25.58
6	Learning English with technology is rewarding because it enhances my career opportunities.	26	37	9	50	76	40.0	25.30
7	I use technology to learn English because it helps me connect with people from other cultures.	27	36	10	50	77	40.0	25.27
8	Using technology for English learning	28	37	9	48	78	40.0	

	allows me to understand English media (e.g., movies, music, articles).							25.60
9	Learning English through technology makes me feel more confident in interacting with others globally.	25	38	11	50	76	40.0	24.83
10	I believe learning English through technology will help me achieve my academic goals.	27	37	9	49	78	40.0	25.81
11	Technology-assisted learning prepares me for future opportunities like studying abroad.	27	37	9	49	78	40.0	25.81
12	I use technology to improve my English because it helps me succeed in my current or future job.	29	37	8	50	76	40.0	24.83
13	Technology makes learning English enjoyable and worth the effort.	27	37	9	49	78	40.0	25.81
14	I feel more motivated to learn English when I use technology-based tools compared to traditional methods.	28	37	9	48	78	40.0	25.60
15	Overall, technology has a positive impact on my motivation to learn English.	25	38	11	50	76	40.0	24.83

Interpretation of Statement 1

Our findings show that most respondents (127 out of 200) like using technology for English learning because it makes education more enjoyable based on their strong agreement. The data shows that 64 respondents disagree with the positive benefits of technology for learning English. Most participants voted for agreement on the scale with their score of 40.0 but their answers also showed moderate range from 25.81 indicating different perspectives from their own experiences with technology.

Interpretation of Statement 2

Our results demonstrate that technology drives 126 of 200 participants to find new ways to improve their English skills which confirm its positive impact on educational techniques. From our sample group of 200 participants around two-thirds agreed strongly with testing technology to improve English language skills. The surveyed group shows a positive personal response to the questionnaire but with stronger differences than other statements.

Interpretation of Statement 3

Based on our research 125 out of 200 participants stated that learning English using technology is more engaging than traditional classes. Among 200 participants 60 percent strongly agreed and 65 percent disagreed with many uncertain about their opinions. Most participants rated the overall appeal of technology-enhanced learning at 40.0 with a tight level of common agreement shown by the small standard deviation of 24.85.

Interpretation of Statement 4

The results show 126 people out of 200 respondents use technology to learn English because it improves their exam outcomes as they find great educational value in technology. A majority of 126 users supported this viewpoint and 66 participants disagreed with the rest neutral. The results show positive feedback from participants who scored 40.0 on average on

this survey. Also, the standard deviation number 25.25 shows measurement volatility remains at acceptable levels.

Interpretation of Statement 5

The results show that 128 students out of 200 use technology because it lets them learn better and faster, which motivates them strongly. The survey results show that although supporters outnumbered opponents by more than two to one the remaining eight participants were uncertain about the matter. Although the respondents showed clear positive feelings toward technology motivation results exhibit 40.0 on average and a moderate standard deviation of 25.58.

Interpretation of Statement 6

126 out of 200 participants think receiving career benefits from teaching English through technology makes learning rewarding. Most participants (126 or 63%) adopted a strong point of view about tech-based English learning benefits with fewer disagreement responses at 63 and indecisive responses at 9. With scores averaging 40.0 participants generally approve of this method yet responses vary by 25.30 points showing employees recognize its value for workplace success.

Interpretation of Statement 7

The results show that 127 of 200 participants use technology to study English because it lets them interact with people from different nations. The smaller response group (63 people) showed their opposition, and several others remained neutral, but most respondents clearly stated their opinions. The results show students find English technology-based learning positive and demonstrate a widely accepted cultural benefit of this approach.

Interpretation of Statement 8

Research results show that 126 out of 200 people say technology helps them better understand English media like films, music, and reading materials. Of our 200 participants 65 indicated disagreement with the rest agreeing strongly or just agreeing that digital tools help them understand English content. Most people share this point of view in our survey with an average score of 40.0 yet differences in personal experiences result in a moderate measurement spread of 25.60.

Interpretation of Statement 9

Through our study we found that 126 out of 200 people believe technology helps them feel more confident when communicating with people worldwide. About one third of respondents opposed this idea but less than half were undecided about it. The remaining people agreed firmly that learning English with technology helps them feel confident using their new language skills internationally. The survey results show a clear overall positive attitude about technology as students scored 40.0 on average. Deviations from the mean were minimal at 24.83 suggesting all participants saw technology as supporting their English learning experience.

Interpretation of Statement 10

Participants in the study feel strongly that modern technology helps them reach their academic goals as 63% answered positively with 127 responses. The data reveals that most participants at 127 out of 200 registered their support for using technology to learn English and reach academic targets. Most participants maintain positive views about technology, yet responses vary moderately as shown by a standard deviation of 25.81.

Interpretation of Statement 11

More than half of the participants (127 from 200) believe that technology-enhanced learning makes them ready for future academic programs outside their home country. Our data demonstrates that 63 percent of participants disagreed with 9 percent undecided and just 64

percent agreed that technology-assisted learning sets them up for future educational opportunities. Online learning using technology efficiently helps prepare future students for studying abroad according to participants who rated with an overall positive score 40.0 when compared across all respondents.

Interpretation of Statement 12

According to our data 126 out of 200 participants support using technology to study English because it makes them more successful at work now and in the future. The majority group stands at 63 percent and just under one-quarter of the sample submitted feedback they were undecided. The response score of 40.0 shows positive attitude toward this practice and the 24.83 standard deviation shows that opinions are similar across all responses.

Interpretation of Statement 13

The statistics reveal 127 students out of 200 enjoy finding English learning fun with technology and feel it's worth the effort. About two-thirds of participants disagreed with the statement because only nine remained neutral. Most participants (127 out of 200) responded positively to our survey questions, rating technology at 40.0 on average. The standard deviation of 25.81 shows there is midpoint variation in how people feel about technology for learning English.

Interpretation of Statement 14

Most participants (126 out of 200) confirm that technology-based tools drive better English learning motivation than traditional methods. Out of our 200 participants 65 disagreed while 9 showed no clear opinion. This demonstrates most participants had firm views about technology why education. Out of 200 participants our result shows 40.0 average score and 25.60 standard deviation which reveal that participants generally believe technology helps them learn better but respond differently based on their personal tech experience.

Interpretation of Statement 15

Most English learners (126 out of 200 participants) believe technology boosts their desire to learn English expressing strong support. About half (63) of our participants disagreed with this statement and another 11 stayed neutral. Most participants had a clear point of view. Technology provides clear motivation benefits in English education which participants highly support across a very predictable range.

Findings

Our study shows students know technology brings real added value to their English learning process. People across the study said technology makes learning more interesting and pleasant educational activities. Our study shows participants strongly agree that tech-based English education feels more fun than standard classroom learning. Participants saw how technology makes learning easier by helping them understand English media and helping them become more skilled while they prepare for exams and keep in touch with other cultures. By using technology students make progress by discovering unique ways to build their English skills and earn better career prospects. Technology helps students perform tasks more quickly and effectively while building their global confidence and serving their educational and work goals. The ratings show overall student favor toward technology, yet the range of standard deviations shows that personal technology use and learning style differences affect students' opinions.

Conclusion

Our study shows students know technology brings real added value to their English learning process. People across the study said technology makes learning more interesting and pleasant educational activities. Our study shows participants strongly agree that tech-based English education feels more fun than standard classroom learning. Participants saw how

technology makes learning easier by helping them understand English media and helping them become more skilled while they prepare for exams and keep in touch with other cultures. By using technology students make progress by discovering unique ways to build their English skills and earn better career prospects. Technology helps students perform tasks more quickly and effectively while building their global confidence and serving their educational and work goals. The ratings show overall student favor toward technology, yet the range of standard deviations shows that personal technology use and learning style differences affect students' opinions.

Interpretation of Research Questions and Research Objectives

When students see technology as practical and simple they become more motivated to complete their language learning tasks. Participants say technology helps them learn English better and faster through positive responses to questions about this topic. When technology supports language learning it becomes simpler and more engaging for students. Through technology, students develop their vision for English language use by connecting with the world and thus enhancing personal and academic achievement. Through technology, learners gain better study preparation for abroad study and boost their self-assurance in speaking English with worldwide contacts. These studies match our research goals to show how technology helps students become more motivated and involved learners who want to master English.

Recommendations

- i. **Enhance Accessibility to Technology**
To reduce variability in learners' experiences, educational institutions and policymakers should ensure equitable access to technology and digital resources. Providing affordable devices, reliable internet access, and user-friendly platforms can help more learners benefit from technology-enhanced language learning.
- ii. **Incorporate Interactive and Engaging Tools**
Since learners perceive technology as engaging and enjoyable, educators should integrate interactive tools such as language-learning apps, gamified platforms, and multimedia resources. These tools can help sustain motivation and make the learning experience more dynamic.
- iii. **Personalize Learning Experiences**
To cater to individual differences, educators should adopt adaptive learning technologies that tailor content to learners' proficiency levels and preferences. Personalization can help address diverse learning needs and enhance engagement.
- iv. **Promote Cultural Connectivity:**
Given the importance of connecting with other cultures, institutions should encourage the use of technology for intercultural communication. Virtual exchange programs, online language partner platforms, and culturally diverse content can enhance learners' global interaction skills.
- v. **Provide Training and Support**
Educators and learners should be provided with training on effectively using technology for language learning. Workshops, tutorials, and ongoing support can help maximize the potential of technology while addressing challenges like digital literacy gaps.
- vi. **Leverage Technology for Career-Oriented Learning**
Since learners recognize the career benefits of technology, educational programs should incorporate career-focused content, such as business English or professional communication skills, to align with learners' aspirations for professional growth.

- vii. **Monitor and Evaluate Technological Tools**
Regular assessments of the effectiveness of technological tools and methods should be conducted. Feedback from learners can guide improvements, ensuring that the tools remain relevant and effective in meeting their needs.

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Questionnaire: Motivation in Technology-Assisted Language Learning

Instructions

The purpose of this questionnaire is to understand how using technology affects your motivation to learn English. Please read each statement carefully and select the option that best reflects your opinion. Use the following scale to indicate your level of agreement:

- | | | | |
|--------------------|---|----------|----------|
| 1 | = | Strongly | Disagree |
| 2 | = | | Disagree |
| 3 | = | | Neutral |
| 4 | = | | Agree |
| 5 = Strongly Agree | | | |

Section A: Demographic Information

1. Age: _____

2. Gender:

- ☐ Male
- ☐ Female
- ☐ Other

3. English Proficiency Level:

- ☐ Beginner
- ☐ Intermediate
- ☐ Advanced

4. How often have you used technology (e.g., apps, online tools, multimedia) to learn English in the past?

☐ 1	=	Never
☐ 2	=	Rarely
☐ 3	=	Sometimes
☐ 4	=	Often
☐ 5 = Very Often		

Section B: Motivation Statements

Intrinsic Motivation

1. I enjoy using technology to learn English because it makes learning fun.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
2. Using technology helps me explore interesting ways to improve my English skills.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
3. Learning English through technology feels more engaging than traditional methods.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Extrinsic Motivation

4. I use technology for learning English because it helps me perform better in exams.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
5. Technology motivates me because it makes learning faster and more efficient.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
6. Learning English with technology is rewarding because it enhances my career opportunities.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Integrative Motivation

7. I use technology to learn English because it helps me connect with people from other cultures.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
8. Using technology for English learning allows me to understand English media (e.g., movies, music, articles).
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
9. Learning English through technology makes me feel more confident in interacting with others globally.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Instrumental Motivation

10. I believe learning English through technology will help me achieve my academic goals.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

11. Technology-assisted learning prepares me for future opportunities like studying abroad.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

12. I use technology to improve my English because it helps me succeed in my current or future job.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Overall Motivation

13. Technology makes learning English enjoyable and worth the effort.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

14. I feel more motivated to learn English when I use technology-based tools compared to traditional methods.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

15. Overall, technology has a positive impact on my motivation to learn English.
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5