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Language Instructors' Attitudes towards Innovative Implementations of Technology: A Case Study from India

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ABSTRACT
The use of technology in language teaching and learning has become ubiquitous, but its widespread use does not mean that instructors incorporate it in classrooms efficaciously. This study focuses on language instructors' attitudes towards innovation in technology integration in English language classes. A research gap was identified, as no study has focused on language instructors' Technological and Pedagogical Skills, Will, Tools, Experience, and Innovativeness with regards to technological acceptance and implementation to the best of the authors' information. To bridge the gap, the study proposed an extended model, called 'WESTINN', based on prior studies (WST by Knezek & Christensen, 2008; Knezek & Christensen, 2016; WEST by Farjon et al., 2018). The research questions addressed in this study were: "How do the language instructors evaluate their Will, Experiences, Skills, Technological tools, and Innovativeness?", "Does the proposed model 'WESTINN' elucidate innovative technology implementation by language instructors in India?" The data were collected from 115 language instructors in India through questionnaires, and analyzed using IBM SPSS, v26. Results revealed that participants exhibited an overall positive opinion regarding innovative implementations of technology in classroom. Additionally, correlation and regression analysis illustrated that WESTINN was a robust model for measuring language instructors' attitude towards Technological and Pedagogical innovativeness acceptance and implementation; Tool and Will were the strongest factors, trailed by Skills and Innovativeness, while Experience was insignificant based on empirical findings. Results could be used for assessing instructors' attitudes regarding their implementation of innovative technologies in language classrooms.

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1. Introduction

The use of technology in language teaching has become ubiquitous in the past two decades (Chien, 2016); yet, this widespread usage does not mean that instructors are effectively integrating it into their classrooms. The proper implementations of technology requires instructors to recognize their students' needs and objectives, be innovative in their selection of practical technological instruments, and have the necessary skills in combining their language knowledge, pedagogical expertise and digital literacy for effective, contextually-appropriate teaching (Mishra, 2019; Taopan et al., 2020). In general, instructors use technology for various functions in their classrooms, including administrative functions (Mundy et al., 2012) and teaching functions (Pokhrel & Chhetri, 2021; Winter et al., 2021) to make course content and activities more accessible to students, more authentic in nature, and more practical for lifelong learning.

The use of technology enables instructors to connect with students and inspires innovative approaches to teaching in various disciplines, including the English language (König et al., 2020). In recent years, technology has become omnipresent in English language classes not only for sharing information and content, but also for enhancing the teaching and learning process, as it provides opportunities for more authentic exchanges and more enriched interactions with diverse authentic resources and materials. Extensive research in developed countries (Nordlöf et al., 2019; Nelson et al., 2019; Li et al., 2019; Pratolo & Solikhati, 2021) has focused on language instructors' attitudes and perceptions regarding their technological and pedagogical competencies in order to overcome their challenges in the use of technology-based teaching. However, no such study has been conducted in India, especially after the Covid-19 pandemic and the widespread use of technology in English language teaching and learning. As such, the current study focuses on English language instructors' attitudes and perceptions regarding technological and pedagogical innovation acceptance and implementation in classrooms, particularly in the State of Rajasthan in India.

Research conducted in developing countries about instructors' perceptions regarding the use of technology for innovative teaching indicates that many instructors feel unequipped to integrate technology with pedagogy (Eghtesad & Mehrabi, 2023). Thus, the current study seeks to address the identified research gap, as no study has been conducted to ascertain language instructors' technological and pedagogical skills, willingness, experience, tools, and innovativeness for technological acceptance and implementation in India, to the best of the authors' knowledge. To bridge the gap, this study proposes a modified and extended model, called WESTINN by the researchers, built on extant research on the WEST Model, comprised of Will, Experience, Skill, Tool by Farjon et al. (2018). The component Innovativeness was added by the researchers to the model in order to assess the ways in which innovativeness could be used by instructors to address the difficulties in merging technology and pedagogy for a more practical teaching of English in India. Based on the components of the WESTINN model, the following research questions have been formulated:

1. **How do language instructors view their willingness, experiences, skills,**

technological tools, and innovativeness in India?

2. Does the proposed model 'WESTINN' elucidate and explain the technological and pedagogical innovative acceptance and implementation of language instructors in India?

2. Review of Literature

Technology integration, according to Akcil et al. (2021), is a complex and multidimensional process. Using technology in the English classroom entails selecting, adapting and applying various (internet-based) digital devices as an effective medium for helping students develop their language skills, which necessitates several elements such as awareness and cooperation on the part of students, parents, instructors, and administrators, and involves language instructors' sufficient Will, Experiences, Skills, pedagogical technological Tools, and Innovativeness for enhancing teaching. The WST model was initially developed by Knezek & Christensen (2001/2008) to investigate the role of interdependent factors on technology integration, including instructors' *will* based on their views toward technology, *skills* or competencies in using new technologies, and access to innovative *tools*. The construct 'Will' is theoretically described as user's approach towards technology use for the purpose of teaching (Knezek & Christensen, 2016), which is commonly considered a crucial requirement for effective integration of innovative technology and pedagogy. 'Skills' refers to instructors' ability to utilize their pedagogical and technological knowledge efficiently to implement innovative and practical learning tasks in English. 'Tool' in the context of the present study indicates any technology-based aid that can expand instructors' capability for accomplishing teaching-related tasks. According to Knezek & Christensen (2008), the integration of technology in teaching is a function of internal factors (i.e., will and skill) and external factor (i.e., tool); An acceptable level of technology use therefore refers to instructors who are willing to use technology (*will*), equipped with the necessary technological skills (*skill*), and provided with equipment and facility (*tool*) for creating successful opportunities for developing language skills and competencies (Sasota et al., 2021). Later, 'Experience' was added to the model as an important factor in ensuring efficacious technological amalgamation, thus naming the model WEST. According to research, experience is a critical factor impacting instructors' acceptance of new innovations, especially early in their careers (Papay & Kraft, 2015; Ladd & Sorensen, 2017). According to the WEST model, instructors' will, experience, tools, and skills are all important in successful integration of technology in language classes, as suggested by Mouza et al. (2017) and Farjon et al. (2018). As a result, this model appears promising for determining instructors' effective use of technology in the present study.

Building on the WEST Technology Integration Model, in this research, the model was extended by adding a new construct based on an extensive literature review (Serdyukov, 2017; Bedir, 2019; Aldahdouh et al., 2020; Demir, 2024), adding a new component called Innovation. Innovation is a term that refers to practices that make use of creativity and inventiveness to address the difficulty of merging technology and pedagogy. Given the challenges that instructors face in implementing technology in accordance to students' needs and objectives,

as well as the institutional context and learning situation in which they teach, innovativeness in selecting, adapting, and successfully integrating technology could open new horizons in the use of technological tools and devices in English language lessons, student interactions and communications, learning activities and projects, and course assessment. As a result, the WEST model was enlarged by adding technological innovativeness, thus called WESTINN for analyzing the way in which this new component, alongside the existing components, could elucidate instructors' attitudes and perceptions regarding technology acceptance and implementation in language classes. As seen in Figure 1, the new model incorporates five critical components necessary for successful technology integration.

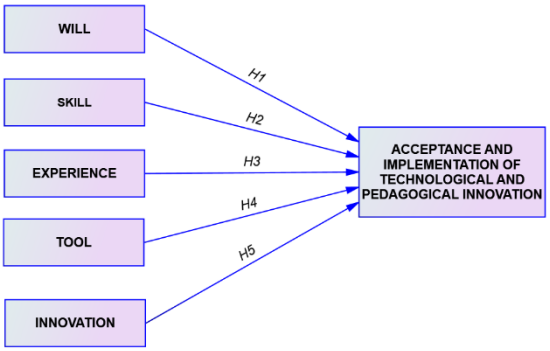

Figure 1 :Conceptual Model

The 'WESTINN' model proposes to investigate innovative integration of technology in classrooms by measuring language instructors' attitude towards technological and pedagogical innovativeness acceptance and implementation.

3. Methodology

This study employed a qualitative research approach to evaluate language instructors' self-perceived attitudes regarding the components of the proposed WESTINN model. The qualitative approach was chosen to deeply explore instructors' subjective experiences and perceptions, focusing on capturing detailed, contextual insights critical for validating this novel framework. While a mixed-methods approach could offer broader generalizability, this design aligns with the study's exploratory nature, serving as a foundational step for future research, where mixed methods could complement these findings. Additionally, the inclusion of statistical analyses ensures a rigorous examination of the data within the qualitative framework.

4 Instrument

The study utilized an online questionnaire for collecting the data. The survey instrument (Appendix –Questionnaire), was designed to evaluate educators' engagement with technology across six constructs: Technological and Pedagogical Innovativeness, Acceptance and Implementation, Experiences (Previous Exposure and Use), Tool (Access and Resources), Skill (Proficiency in Using Technology), and Will (Motivation and Attitudes). Each construct included items adapted, modified, or adopted from established sources, rated on a five-point Likert scale from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). The construct Technological and Pedagogical Innovativeness, adapted from Kilicer and Odabasi (2010) and Jaskyte et al. (2009), comprised 15 items for assessing Instructors' openness to adopting new tools, experimenting with technology, engaging in professional development, collaborating with peers, and refining curriculum. Key items included: "I actively seek out new technological tools to incorporate into my teaching methods" and "I

enjoy creating new ways to engage students using technology." Acceptance and Implementation, with three items adapted from Avidov-Ungar & Iluz (2014), explored educators' readiness to adopt institutional directives and confidence in applying technology, for example: "I readily accept institutional directives to adopt new teaching technologies" and "I implement technology-based lesson plans with confidence." Next, Experience, adapted from Tondeur et al. (2012; 2017), consisted of three items assessing prior exposure to technology and its influence on teaching practices, such as: "I have prior experience using digital tools in classroom settings" and "My exposure to technology has positively influenced my teaching practices." Tool evaluated the availability of resources and institutional support through seven items adapted from Farjon et al. (2018), including: "I have access to reliable technology infrastructure at work" and "My institution provides adequate training for using teaching technologies." Skill, with five items adapted from Schmidt et al. (2009), measured educators' ability to use technology effectively, such as: "I am proficient in using online platforms for language teaching" and "I can troubleshoot basic technical issues independently." Finally, Will, adapted from van Braak (2001) and Sang et al. (2010), included six items evaluating enthusiasm, attitudes, and motivation toward innovation, such as: "I feel motivated to learn new technologies for classroom use" and "I encourage my colleagues to use technology innovatively." Table 1 illustrates the Cronbach's Alpha estimations for each construct:

The descriptive statistics (Table 1) indicated positive perceptions of technology use among educators. Will (M = 4.147, SD = 0.986) reflecting strong motivation toward innovation, while Experience (M = 4.496, SD = 0.822) suggested substantial prior exposure to technology. Skill (M = 4.660, SD = 0.794) and Tool (M = 4.777, SD = 0.840) indicated high proficiency and access to resources. Technological and Pedagogical Innovativeness (M = 4.140, SD = 0.793) and Acceptance and Implementation (M = 4.748, SD = 1.33) showed openness to innovation and readiness to adopt technology-based teaching methods.

Table 1: Cronbach's alpha estimations

Construct	Mean	Std D.	Adapted/adopted/ modified based on Sources	CA
Will	4.147	0.986	van Braak, 2001; Sang et al., 2010	0.862
Experiences	4.496	0.822	Tondeur et al. 2012; 2017	0.969
Skill	4.660	0.794	Schmidt et al., 2009	0.903
Tool	4.777	0.840	Farjon et al. 2018	0.871
Technological And Pedagogical Innovativeness	4.140	.793	Kilicer & Odabasi, 2010; Jaskyte et al., 2009, etc.	0.964
Acceptance and implementation scale	4.748	1.33	Avidov Ungar & Iluz (2014)	0.892

It is recommended that the reliability/ dependability be high/ not lower than .70 (Carmines & Zeller, 1979). The estimations for the study's constructs varied from 0.862 to 0.964. The range was regarded as satisfactory to exceptional (George & Mallery, 2010).

4.1 Pilot Study

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The pilot study's objectives were to determine whether the items were easily comprehensible for the instructors, whether the average time required to complete the survey was adequate, and whether the items elicited detailed information about language instructors' willingness, experiences, skills, tools used and technological and pedagogical innovativeness, as well as their attitudes towards technological and pedagogical innovation acceptance and implementation. The survey items were re-evaluated for clarity and necessity in light of the pilot study results. The survey instructions were changed to specify that it should take between 15 and 20 minutes to complete. Google Forms was used to administer the survey.

4.2 Data Collection

The data were obtained from 115 English language instructors engaged in various institutes in the State of Rajasthan, using 48 items-scale adapted/ modified/ adopted from prior studies, which was divided into two sections, one for demographics and another for the six constructs under study, comprising 39 items. IBM SPSS, v26 was used to analyze the data. The study adhered to ethical research practices; informed consent was obtained from all survey participants before data collection. Participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without penalty. Data confidentiality and anonymity were maintained by ensuring no personally identifiable information was collected or reported. Approval for the study was obtained from the institutional ethics committee. The study's participants included 37 (32.2%) males and 78 (67.8%) females in the sample. Language instructors were employed in a variety of institutions, as illustrated in Table 2:

Table 2: Study's Participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Primary School	3	2.6	2.6	8.7
Middle School	43	37.4	37.4	46.1
High School	55	47.8	47.8	93.9
College	7	6.1	6.1	6.1
University	7	6.1	6.1	100.0
Total	115	100.0	100.0	

4.3 Data Analysis

The data were evaluated using Cronbach's Alpha, Descriptive Statistics, Pearson's Correlation, and Multiple Regression analyses, while language instructors' technological attitudes and beliefs were quantified using descriptive statistics, as measured by the mean score of the items.

5 Results and Discussion

5.1 Results

IBM SPSS, v26, was used to perform descriptive statistics and analytic analysis on the data. The results of descriptive statistics on language instructors' attitudes and beliefs, experiences, proficiency, and accessibility regarding technology were observed. The average item scores were used to assess the scale score for these constructs. As shown in Table 1, instructors had a fairly good level of Willingness to use technology (mean= 4.147 and Std D.=0.986), Experience (practice in integrating

technology and pedagogy) (mean= 4.496 and Std D.=0.822), Skill (competency in using technology) (mean= 4.660 and Std D.=0.794), tool (access to technology) (mean= 4.777 and Std D.=0.840) and innovativeness (mean= 4.140 and Std D.=0.793). Additionally, the current study tested and validated the hypotheses formulated using empirical data for language instructors in the Indian context.

The proposed WESTINN model was tested for language instructors using stepwise regression analysis. The results are illustrated in Table 3:

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.683[a]	.467	.443	.592	.467	19.103	5	109	.000
a. Predictors: (Constant), INN, TOOL, WILL, SKILL, EXP									

Table 4: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.521	5	6.704	19.103	.000[b]
	Residual	38.253	109	.351		
	Total	71.774	114			
a. Dependent Variable: intent to use technology for language teaching						
b. Predictors: (Constant), INN, TOOL, WILL, SKILL, EXP						

The regression analysis results in Tables 3 and 4 demonstrate a statistically significant model for predicting the intent to use technology for language teaching, based on the five predictors: INN, TOOL, WILL, SKILL, and EXP. Table 3 presents the model summary, where the correlation coefficient (R = .683) suggests a moderately strong positive relationship between the observed and predicted values. The R Square value of .467 indicates that approximately 46.7% of the variance in the intent to use technology for language teaching is explained by these predictors. The Adjusted R Square, slightly lower at .443, accounts for the number of predictors, suggesting that while the model is fairly accurate, some predictors may have a minimal individual impact on the outcome. The standard error of the estimate (.592) represents the average distance of the observed values from the regression line, with lower values indicating better precision. Additionally, the Change Statistics confirm the overall significance of the model with an F Change of 19.103 and a Sig. F Change of .000, underscoring the importance of the included predictors.

Table 4 provides an ANOVA breakdown, further verifying the model's significance. The regression sum of squares (33.521) shows the portion of variability explained by the predictors, which is notably higher than the residual sum of

squares (38.253), indicating that the model accounts for a considerable portion of the variability in the intent to use technology for language teaching. The total sum of squares is 71.774, representing the overall variance in the data. The F value of 19.103 and the associated significance level of .000 highlight that the combined influence of INN, TOOL, WILL, SKILL, and EXP is statistically significant, making these predictors collectively effective in explaining variations in the intent to use technology for language teaching. Overall, these results reflect a well-fitting, statistically significant model with moderate explanatory power.

Table 5: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-1.126	.813		-1.385	.169	-2.738	.486
	WILL	.063	.019	.313	3.263	.001	.025	.101
	SKILL	.034	.017	.211	2.013	.047	.001	.067
	EXPERIENCE	.004	.007	.086	.624	.534	-.009	.018
	TOOL	.047	.011	.398	4.330	.000	.025	.068
	INNOVATION	.018	.008	.271	2.340	.021	.003	.033

a. Dependent Variable: intent to use technology for language teaching

Table 5 displays the coefficients for the regression model, detailing the impact of each predictor (WILL, SKILL, EXPERIENCE, TOOL, and INNOVATION) on the intent to use technology for language teaching. The unstandardized coefficient (B) values indicate the expected change in the dependent variable (intent to use technology) for a one-unit increase in each predictor, while holding others constant.

The constant (-1.126) represents the predicted value of the intent to use technology when all predictors are zero, although it is not statistically significant (p = .169). Among the predictors, WILL (B = .063, p = .001), SKILL (B = .034, p = .047), TOOL (B = .047, p = .000), and INNOVATION (B = .018, p = .021) all show significant positive relationships with the intent to use technology. This suggests that as willingness, skill, tool availability, and innovation increase, so does the intent to use technology for language teaching. Specifically, TOOL has the highest standardized coefficient (B = .398), indicating it is the strongest predictor among the variables.

In contrast, EXPERIENCE (B = .004, p = .534) is not statistically significant, implying that it does not contribute meaningfully to predicting the intent to use technology in this model. Each predictor's confidence interval further supports these results, with intervals for WILL, SKILL, TOOL, and INNOVATION not crossing zero, highlighting their significance. Overall, the coefficients confirm that willingness, skill, tool availability, and innovation are key drivers in the intent to use technology for language teaching.

5.2 Discussion

The study examined the influence of five constructs on language instructors' attitudes toward technological and pedagogical innovation acceptance and implementation: Will,

Experience, Skill, Tool, and Innovation. Findings indicated that language instructors' desire to incorporate technology into the classroom significantly influences their adoption and implementation of technological pedagogical advances in their English classrooms. This demonstrates that attitude, both positive or negative, would affect how and to what extent instructors integrate technology into their language lessons. Thus, findings suggest that attitudes and beliefs affect the acceptance and implementation of technological and pedagogical innovations in the classroom, corroborating previous studies (Admiraal et al., 2017).

The results indicate that instructors' willingness to use technology is a significant predictor, which establishes Knezek & Christensen's (2016) study. The construct "experience" was associated with the quality/quantity of instructors' experience, and participants' acceptance and implementation of technological and pedagogical innovations in the classroom (Tondeur et al., 2016), was not as significant as anticipated; this contrasted with previous research that suggested that experience was a significant stimulus for instructors' use of new innovations (Tondeur et al., 2017). This unexpected insignificance could be attributed to cultural and institutional factors in the Indian context. In many Indian educational institutions, standardized curricula and rigid teaching practices limit opportunities for experienced instructors to experiment with and adopt new technological tools. Additionally, technological training was often absent during the formative years of more experienced instructors, leaving them less equipped to adapt to digital innovations. Institutional challenges, such as inadequate infrastructure and insufficient administrative support, further diminish the role of experience in facilitating technology use. Finally, generational differences in technology familiarity mean that younger instructors may compensate for limited teaching experience with greater comfort and proficiency in using digital tools.

The third construct necessary for instructors to successfully integrate technology is their skills, abilities and proficiency in technology use; the knowledge of (contextually and situationally) appropriate pedagogical and technological methods is important for instructors, as it gives them the necessary confidence and expertise to incorporate the right type and amount of technology in accordance to the course's goals and students' needs and objectives (Mishra & Koehler, 2006; Mishra, 2019). The next construct for successful technology innovation acceptance and implementation by language instructors was Tool; Tool had a greater impact on instructors' acceptance and implementation of technological and pedagogical innovation in the English classrooms. Knowledge of Tools is important, since a deficiency of new technological tools and instruments would negatively influence the acceptance and implementation in developing countries like India. Additionally, the study showed the importance of instructors' innovativeness and creativity in their acceptance and implementation of technical and pedagogical innovations in their classrooms, as it increases instructors' creativity and their capacity to adapt the use of technology to various learning situations in accordance to students' goals, which corroborates prior findings (Chou et al., 2019).

5.3 Limitations

This study has several limitations that need to be acknowledged. First, it relies on self-reported

data, which, while valuable for understanding instructors' perceptions, may not fully reflect their actual practices or challenges in technology integration. The reliance on a single data collection method could also limit the depth of insights gained. The sample is geographically restricted to the state of Rajasthan, which may not capture the diversity of cultural, institutional, and technological contexts across other regions in India or globally. As such, the findings should be interpreted with caution when generalizing to broader populations. Moreover, the study focused on a cross-sectional design, which provides a snapshot of instructors' attitudes and practices, but does not allow for tracking changes over time or assessing causality. A longitudinal approach could better explore how factors like experience or institutional support evolve and influence technology integration. Finally, while the WESTINN model offers a robust framework, the newly introduced "Innovativeness" construct requires further validation across varied contexts and disciplines to ensure its reliability and applicability. Future research could expand the model's testing to include more diverse educational settings, investigate additional predictors, and employ mixed-methods approaches for richer insights.

5.4 Theoretical Implications

Theoretically, this study's results reinforce and expand upon existing models of technology acceptance, such as the Technology Acceptance Model (TAM) (Davis, 1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, 2003), by highlighting specific factors relevant to language teaching contexts. For instance, willingness to adopt technology and availability of tools are shown to be crucial predictors, aligning with constructs like perceived ease of use and facilitating conditions in TAM and UTAUT. This study also emphasizes innovation and skills as influential factors, which suggests that models of technology adoption may benefit from incorporating variables that capture educators' openness to new methods and their proficiency levels. Such adaptations could provide a more nuanced understanding of technology adoption in educational settings, particularly in disciplines like language teaching, where interactive and immersive technology use is growing. Moreover, the finding that experience with technology does not significantly predict technology adoption contradicts some conventional assumptions, which propose that familiarity alone drives usage intent. This challenges traditional theories by suggesting that it is not merely prior exposure, but rather the attitudes and perceived abilities of users that influence technology integration, which opens avenues for further research on the ways in which individual traits like creativity, innovation, and adaptability interact with technology acceptance models in specific educational contexts.

Furthermore, while the study was conducted in India, the WESTINN model holds promise for broader international applicability. The constructs of willingness, skills, tools, innovativeness, and experience are not confined to a specific cultural or educational context, but are increasingly relevant across diverse educational systems. For instance, the challenges in technology adoption in developing countries may differ from those in more resource-rich contexts, although the fundamental factors influencing instructors' attitudes toward technology adoption are similar. This suggests that the model could be tested in various

international contexts, with potential modifications based on region-specific challenges such as infrastructure, training, or cultural attitudes toward technology use in education. The present study paves the way for further research on the ways in which individual traits like creativity, innovation, and adaptability interact with technology acceptance models in specific educational contexts. These insights are valuable for educators, policymakers, and researchers worldwide, as they seek to understand and improve the integration of technology in education on a global scale.

5.5 Practical Implications

Practically, the article's findings highlight actionable areas for educational institutions, policymakers, and curriculum designers when encouraging technology integration in language teaching. As willingness significantly influences technology adoption, institutions could implement motivational programs, workshops, and incentives to foster positive attitudes toward technology. Moreover, training programs tailored to improving language instructors' digital literacy and specific technology-related skills are essential. By offering workshops, simulations, and practice sessions on relevant digital tools, such as Google Classroom, Edmodo, Kahoot!, or Quizlet, institutions can equip educators with the confidence and competence needed to effectively integrate technology in their classrooms.

Given that in this research, tool availability showed the most substantial influence on intent, institutions should prioritize investment in technological resources and instruments. Schools and universities need to ensure that educators have consistent access to high-quality devices, software, and technical support to facilitate technology-based language instruction. Practically, this might involve upgrading hardware, acquiring language-specific digital tools, like Duolingo or Rosetta-Stone, and ensuring robust technical support. Furthermore, since innovative teaching attitudes correlate with higher intent to use technology, fostering a culture of experimentation can be beneficial. Institutions could support educators by providing resources for innovative projects, creating spaces for peer collaboration, and incentivizing creative use of technology. Leadership and professional development programs can also emphasize the value of innovation, providing educators with both the support and freedom to explore new methods. Finally, the finding that experience is not a significant predictor suggests that experience alone is insufficient to drive technology use, which implies that professional development efforts should move beyond just increasing familiarity and focus on building the skills, tools, and attitudes necessary for effective technology adoption. Workshops and training sessions should therefore prioritize hands-on experience with specific tools over general exposure to technology, such as practical sessions using Padlet, Flipgrid, or Moodle to simulate real classroom scenarios.

The findings suggest that language instructors with a lower level of technological and pedagogical proficiency may easily feel frustrated, and concerned about technology use for teaching, and consequently become diffident in using it. Conversely, the more they use technology and the more innovatively they use it, the more positive their attitude toward technology, resulting in the adoption and implementation of technological and pedagogical innovation. Moreover, the study demonstrates that institutions can foster a culture of

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innovativeness in several ways such as by creating an environment that encourages experimentation, creativity, and continuous learning or by providing educators with dedicated time and resources to explore new teaching methods, technologies, and tools. Offering professional development programs focused on innovation—such as workshops on emerging educational technologies, collaborative teaching models, and design-thinking approaches—can help instructors develop the confidence and skills to innovate in their classrooms. Additionally, creating spaces for peer collaboration and knowledge-sharing, such as innovation hubs or regular brainstorming sessions, can promote a supportive community, where educators are motivated to try new ideas. Recognizing and rewarding innovative practices through incentives, grants, or public acknowledgment further reinforce a culture that values creativity. Leadership should also play a key role by modeling innovative behaviors, offering autonomy for instructors to experiment with new approaches, and providing institutional support for piloting and scaling innovative projects.

6. Conclusion

The present research focused on language instructors' attitudes towards technological and pedagogical innovation acceptance and implementation, and demonstrated that the proposed model termed 'WESTINN' was a valid and robust model for assessing language instructors' attitudes regarding technological and pedagogical innovations. The study established that the select constructs influenced technological and pedagogical innovation acceptance and implementation in the classroom, as perceived by the respondents. Technical skill was found to be positively associated to instructors' attitudes about technological and pedagogical innovation acceptance and implementation. More precisely, a positive attitude toward technology was acknowledged as a critical starting point for instructors, as they work to build their technology competency (Avidov-Ungar & Eshet-Alkakay, 2011) as well as their pedagogical expertise. Not only are language instructors' will and intent important, but their competence also determines their ability to successfully integrate technologies in their teaching. Moreover, their favorable attitude toward technological tools also correlates with the extent to which they incorporate technology to their classroom.

In conclusion, this study suggests that the proposed WESTINN model can offer a valuable framework for understanding the dynamics, between various factors, by integrating both technological and pedagogical components to provide a comprehensive perspective on effective technology use in language classrooms. By extending existing models of technology adoption with the addition of innovativeness, the WESTINN model can guide future research and practice, not only in India, but also in global contexts. As educational institutions continue to embrace digital transformation, the WESTINN model can serve as a practical tool for fostering the successful integration of technology, ensuring that educators are equipped to navigate the evolving educational landscape. Future applications of this model can further explore the interaction between cultural, institutional, and individual factors, potentially informing policy decisions and professional development programs worldwide.

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Appendix- Questionnaire

Construct 1: Technological and Pedagogical Innovativeness

Adapted/ Modified / Adopted from Source: Kilicer & Odabasi (2010); Jaskyte et al. (2009).

1. **I actively seek out new technological tools to incorporate into my teaching methods.**
2. **I am always open to trying new teaching strategies and techniques, even if they involve new technologies.**
3. **I am willing to experiment with unfamiliar technology to enhance my teaching.**
4. **I enjoy creating new ways to engage students using technology.**
5. **I regularly participate in workshops and training sessions to improve my technological skills.**
6. **I prioritize continuous professional development to stay updated on the latest educational technologies.**
7. **I collaborate with colleagues to explore new and innovative teaching methods.**
8. **I believe that sharing experiences with other teachers helps improve my teaching and promotes innovation.**
9. **I use technology to create more engaging and interactive learning experiences for my students.**
10. **I focus on how technology can enhance student participation and engagement in my lessons.**
11. **I believe that taking risks with new technologies is essential for improving teaching effectiveness. .**
12. **I am willing to implement new and untested technologies in my classroom if they have the potential to enhance student learning. .**
13. **I regularly incorporate student feedback to refine my use of technology in the classroom.**
14. **I adapt my curriculum to include new technological tools that enhance learning outcomes. .**
15. **I approach teaching challenges by looking for innovative technological solutions.**

Construct 2: Acceptance and Implementation

Adapted/ Modified / Adopted from Source: Avidov Ungar & Iluz (2014)

1. I readily accept institutional directives to adopt new teaching technologies.
2. I implement technology-based lesson plans with confidence.
3. I believe institutional support boosts my willingness to adopt technology.

Construct 3: Experiences (Previous Exposure and Use)

Adapted/ Modified /Adopted from Source: Tondeur et al. (2012; 2017).

1. I have prior experience using digital tools in classroom settings.
2. My exposure to technology has positively influenced my teaching practices.
3. I have used diverse technologies to manage teaching tasks effectively.

Construct 4: Tool (Access and Resources)

Adapted/ Modified / Adopted from Source: Farjon et al. (2018)

1. I have access to reliable technology infrastructure at work.
2. My institution provides adequate training for using teaching technologies.
3. I have access to high-speed internet for teaching purposes.
4. The technology tools I use are compatible with my teaching needs.
5. I have a variety of digital resources for language instruction.
6. My institute's technology policies encourage innovative usage.
7. I feel equipped with the necessary tools to use technology effectively.

Construct 5: Skill (Proficiency in Using Technology)

Adapted/ Modified / Adopted from Source: Schmidt et al. (2009)

1. I am proficient in using online platforms for language teaching.
2. I can troubleshoot basic technical issues independently.
3. I effectively incorporate multimedia resources into my lessons.
4. I confidently teach students to use technology for language learning.
5. I manage digital teaching tools without external assistance.

Construct 6: Will (Motivation and Attitudes)

Adapted/ Modified / Adopted from Source: van Braak (2001); Sang et al. (2010)

1. I am enthusiastic about adopting innovative teaching methods.
2. I believe technology integration enhances my teaching quality.
3. I feel motivated to learn new technologies for classroom use.
4. I view technology as a valuable tool in language instruction.
5. I encourage my colleagues to use technology innovatively.
6. I actively seek opportunities to integrate new tools into my teaching.