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Impact of Geographical Factors on Vietnamese Teachers' Satisfaction with "Teacher Activity Groups" Project

Phuong Hoang Yen , Nguyen Anh Thi* , Le Thanh Thao 
 Can Tho University
 Can Tho city, Vietnam

Pham Trut Thuy 
 Nam Can Tho University
 Can Tho city, Vietnam

Nguyen Huong Tra  and Huynh Thi Anh Thu 
 Can Tho University
 Can Tho city, Vietnam

Abstract. This study examines how geographic location affects the satisfaction of English language teachers participating in the innovative Teacher Activity Groups project. The project represents a pioneering example of technology-enhanced, cross-cultural collaboration between a Welsh institution, where English is the native language, and Vietnam, where English is taught as a foreign language. The six-month project was conducted entirely online, using digital platforms such as Zoom and Google Meet for interaction, fostering cooperative learning and problem-solving among 147 K-12 teachers. Employing a theoretical framework that draws upon the adult learning theory, the community of practice theory, and the zone of proximal development theory, this study offers a comprehensive evaluation of the Teacher Activity Groups project, focusing on five key levels of analysis: participants' reactions, participants' learning, organisation support and change, participants' use of new knowledge and skills, and student learning outcomes. The questionnaire's quantitative findings reveal notable differences in teacher satisfaction across urban, suburban and rural areas. Notably, suburban teachers expressed greater satisfaction in almost all measured categories. This disparity across different geographical areas highlights the importance of considering context-specific factors in the design and implementation of professional development initiatives like the Teacher Activity Groups project. Through its analysis, this study underscores the potential of cross-cultural, online collaborative projects in fostering

* Corresponding author: *Nguyen Anh Thi, nathi@ctu.edu.vn*

professional development and suggests areas of focus for enhancing English language teaching and learning in different socio-educational contexts.

Keywords: K12 Teachers; Teaching Activity Groups; professional development; teacher satisfaction; Vietnam; geographical regions

1. Background of the Study

The Teacher Activity Groups (TAGs) project is an innovative, collaborative initiative facilitated by a British institution, where English is the native language, and Vietnam, where English is taught as a foreign language. Designed to foster cooperative learning and problem-solving among teachers, the project was conducted entirely online over a six-month period. Rather than adopting a traditional teaching model, the TAGs project embraced a facilitative approach, using digital platforms such as Zoom and Google Meet for interaction. The unique structure of TAGs positioned native English speakers from Wales as the primary facilitators, guiding the process and contributing their expertise in English language teaching. Concurrently, Vietnamese teachers from a renowned university served as facilitating assistants, forming a symbiotic relationship that enriched the collaborative learning environment. The TAGs project thus represents a pioneering example of global pedagogical cooperation, emphasising reciprocal interaction, practical applicability and the empowerment of teachers as co-learners in a supportive virtual community. It underscores the potential of technology-enhanced, cross-cultural collaborations in fostering professional development (PD) and enhancing English language teaching and learning. These collective efforts are designed to foster a sense of camaraderie and shared wisdom among education professionals (Chickering et al., 2015).

The incontrovertible role of PD in augmenting pedagogical prowess among teachers has been well-documented (Lei & Medwell, 2020; Yaakob et al., 2020; Oo et al., 2023), subsequently amplifying the quality of education. The current trend accentuates the collaborative methodology in PD endeavours (Koukis & Jimoyiannis, 2019).

In the Vietnamese education landscape, both primary and secondary schools face an array of formidable challenges, including the need to acclimatise to the fluctuating requisites of students and the volatile nature of the educational arena (Hung & Thuy, 2021; Nguyen & Trent, 2020; Nguyen et al., 2020). Additionally, the mandate requiring teachers of scientific subjects to use English as a medium of instruction (EMI) introduces a range of complexities (Nguyen, 2020). TAGs, as an example of collective PD initiatives, offer an efficacious solution to these issues by providing a platform for fostering collaborative undertakings, propagating efficient pedagogical methodologies and sparking innovative instructional techniques (Xulu, 2018). Such assemblies proffer opportunities for teachers to engage in cooperation, reflect upon their pedagogical approaches and expedite their professional progression (Tichenor & Tichenor, 2019; Zeng & Day, 2019).

Nevertheless, despite the growing prevalence of TAGs, there is a paucity of scholarly research exploring their efficacy and the satisfaction levels of participant

teachers, specifically in relation to their respective teaching areas. Understanding how teachers formulate perceptions regarding the influence of TAGs on their PD is essential in informing future improvements to collaborative PD initiatives. The primary objective of this research is to critically examine the influence of teachers' teaching areas on the satisfaction levels of Vietnamese teachers engaged in TAGs and to evaluate the perceived impact of these assemblies on their PD. Especially, the theoretical foundation of this study rests on three anchor theories: the adult learning theory, the community of practice (CoP) theory, and the zone of proximal development (ZPD) theory. These theories provide the conceptual lens through which the TAGs project is evaluated. The adult learning theory underscores the significance of self-directed learning and practical application. The CoP theory emphasises the importance of social interaction and shared practices, while the ZPD theory highlights the educational benefits that can emerge from social interactions that stretch learners beyond their current capabilities.

The insights derived from this research will add depth to existing studies on PD within the Vietnamese educational context, providing considerations for policy developers, administrative officials and teachers seeking to enhance PD through collaborative endeavours such as TAGs. The overarching aspiration is to facilitate the continuous progression and betterment of primary and secondary teachers, thereby constructively impacting student academic achievement and the holistic standard of education within Vietnam.

2. Literature Review

2.1. Professional Development (PD)

PD initiatives constitute an essential element in the enhancement and efficacy of teachers, offering avenues for continuous learning, skill expansion and pedagogical refinement (Guskey, 2003; Guskey & Yoon, 2009). PD endeavours are engineered to address the fluctuating needs of teachers within a perpetually dynamic educational environment (Zein, 2017). Such initiatives encompass a comprehensive array of activities including workshops, seminars, conferences, cooperative learning cohorts, coaching, mentorship and TAGs (Gümüş & Bellibaş, 2021).

PD ventures to assist teachers in absorbing new knowledge, skills and pedagogical strategies, while simultaneously encouraging introspective practices and fostering a culture of constant improvement (Boei et al., 2015). Empirical evidence underpins the assertion that meticulously structured PD activities can considerably alter teaching practices (e.g., Mohamad Hasim et al., 2022; Quick et al., 2009). Academic investigations have verified that participation in intense PD programmes results in enhanced subject-matter understanding, honed instructional methods, and improved classroom management skills (Nutta et al., 2020). Effective PD initiatives provide teachers with opportunities to engage in dynamic learning, replicate best practices and obtain feedback and support from peers and facilitators (Archambault et al., 2010).

Collaborative PD ventures, such as TAGs, have garnered considerable attention in recent years. TAGs offer a structured platform for educators to collaborate, exchange personal narratives and participate in reflective dialogue (Lipscombe et

al., 2020). Empirical data supports the premise that such collaborative endeavours enhance pedagogical learning and positively influence instructional practices (Darling-Hammond et al., 2020). Through involvement in collaborative activities, teachers can expand their repository of teaching techniques, incorporate new perspectives and refine their instructional approaches based on shared knowledge and experiences (Darling-Hammond & Bransford, 2007).

A confluence of factors contributes to the effectiveness of PD initiatives. Scholarly discourse highlights the significance of sustained engagement, interactive learning experiences, and alignment with specific needs and goals of teachers (Ottenbreit-Leftwich et al., 2010). Furthermore, continuous support and follow-up are instrumental in assisting teachers to translate their learning into classroom applications (Putnam & Borko, 2000). Adequate resources, time allocations and organisational backing also form pivotal elements influencing the success and sustainability of PD initiatives (Desimone, 2002). The ultimate impact of PD activities should be observable in the improvement of student outcomes. Research has discerned positive correlations between teacher engagement in high-quality PD activities and elevated student achievement (Baker et al., 2018). Effective PD contributes to increased student engagement, superior learning environments, and the use of evidence-based instructional strategies that positively impact student learning outcomes (Nishimura, 2014).

2.2. Features of Teachers' Activity Groups

TAGs, construed as a distinct subset of collaborative PD platforms, are believed to stimulate cooperative learning and problem-solving among teachers (Lipscombe et al., 2020). By cultivating a supportive milieu and promoting PD, TAGs fortify teachers, thereby enhancing self-efficacy and motivation (Bray-Clark & Bates, 2003). Their efficacy hinges on trust, respect, open dialogue and alignment with teachers' professional needs. Despite obstacles such as constrained time and onerous workloads, the incorporation of TAGs into existing PD structures, the assurance of resource allocation and harmonisation with teachers' schedules can augment their effectiveness.

Additionally, TAGs represent a novel paradigm of collaborative PD, deviating from conventional models in several critical respects. First, TAGs foster an atmosphere of active engagement and mutual interaction, contrasting with the predominantly one-way communication in traditional PD frameworks (Dickson et al., 2021). The pedagogical essence of TAGs centres around the interchange of expertise and experiential knowledge, inducing a nuanced understanding readily transferable to the teaching milieu. Second, TAGs often emanate from a need to tackle immediate, pragmatic challenges within the educational realm. This context-specific relevance bolsters the efficacy and applicability of PD, surpassing the theoretical nature of conventional PD initiatives (Njenga, 2023). Third, TAGs emphasise the concept of self-directed learning, enabling educators to shape their learning trajectories, thereby challenging the homogenous approach pervasive in traditional PD (Waitoller & Artiles, 2013). Fourth, the effectiveness of TAGs is intrinsically linked to the cultivation of a supportive CoP, underpinned by trust. The synergy within these communities stimulates comprehensive engagement in PD activities (Bond & Lockee, 2018), a phenomenon infrequently witnessed in

alternate PD paradigms. Fifth, TAGs require an ongoing commitment over an extended duration, facilitating a cyclical process of learning, implementation, reflection and refinement (Saint-Onge & Wallace, 2012). This iterative progression is a crucial conduit for sustained professional growth, often deficient in sporadic PD workshops or courses. Sixth, TAGs are organically developed within specific institutional or district contexts, ensuring PD activities are finely attuned to local needs, objectives, and resources (Vangrieken et al., 2017). This context-specific alignment is often absent in other PD forms designed and delivered by external entities.

Most notably, within the purview of this investigation, the unique involvement of native English speakers as facilitators within the TAGs structure introduces an additional dimension to this pedagogical model. Functioning as both resource persons and facilitators, native English speakers can provide invaluable insights into the nuances of English language teaching, expanding the breadth and depth of the learning experience (Richards & Rodgers, 2014). Their presence not only induces an authentic linguistic environment but also bridges cultural understanding, thereby broadening the global perspectives of the participating teachers (Truong & Murray, 2020). Native English-speaking facilitators can elucidate real-world contexts and nuanced cultural aspects of language, which are often challenging to convey through conventional PD programmes (Prabjandee, 2020). The role of these facilitators transcends mere language instruction, extending into the realm of mentorship and guidance. They cultivate a supportive, engaging, and collaborative space, inspiring teachers to reflect, question, and experiment in their pedagogical practice (Mann & Walsh, 2017). This symbiotic relationship between facilitators and teachers within TAGs intensifies the potential for professional growth and enriches the overall collaborative learning experience. Consequently, TAGs suggest a promising trajectory for PD, potentially circumventing the pitfalls inherent in traditional formats.

2.3. Five-Tiered Evaluation of the Efficacy of PD Activities

Assessment serves as an indispensable constituent of efficacious PD endeavours, paramount in quantifying the influence and effectiveness of such initiatives. Guskey (2000) conceptualised a comprehensive five-tiered evaluation schema that advocates a holistic strategy to gauge the outcomes and efficacy of PD activities. This literature review scrutinises extant research and theoretical perspectives on Guskey's (2000) five-layered evaluation schema and its application in assessing the efficacy of PD initiatives.

Level 1 – Participants' Reactions: The incipient layer of the schema concentrates on the participants' responses to PD activities. Empirical inquiries underscore the import of procuring feedback from participants to evaluate their satisfaction, involvement, and perceptions of the programme (Main & Pendergast, 2015). Evidence suggests that those positive reactions, such as robust engagement, interest and perceived value, are integral to successful PD outcomes (Bragg et al., 2021). Assessing participants' reactions assists in pinpointing areas for enhancement, tailoring subsequent programmes to participant necessities and ensuring sustained engagement and motivation (De Vries et al., 2014).

Level 2 – Participants’ Learning: The secondary stratum of the schema probes the extent to which participants acquire new knowledge, competencies and strategies through PD activities. Literature suggests that effective PD should ignite profound learning and proffer opportunities for teachers to engage in active, meaningful and cooperative learning experiences (Hord & Tobia, 2015). Evaluation at this juncture involves assessing participants’ learning outcomes, mastery of content and their capacity to transpose newfound knowledge and skills into practice (Guskey, 2000).

Level 3 – Organisation Support and Change: The third tier of the schema hones in on the repercussions of PD activities on the organisation and its provision of support for participants. Efficacious PD necessitates organisational endorsement, resources, and alignment with institutional objectives and priorities (Bryk, 2010). Empirical studies denote that organisational support positively influences the implementation and sustainability of novel practices (Gao, 2022; Zhou et al., 2022). Evaluation at this level necessitates assessing the extent to which the organisation proffers support, resources and opportunities for collaboration, and whether the PD activities are congruent with the broader organisational milieu (Guskey, 2000).

Level 4 – Participants’ Use of New Knowledge and Skills: The fourth tier scrutinises the degree to which participants apply and integrate their newly acquired knowledge and skills into their pedagogical practices. Literature posits that successful PD activities should stimulate ongoing reflection, provide opportunities for practice and offer support for implementation (Darling-Hammond & McLaughlin, 2011). Evaluating the application and use of newfound knowledge and skills aids in determining the impact of PD on instructional practices and student outcomes (Earley & Porritt, 2014).

Level 5 – Student Learning Outcomes: The final tier of the schema pivots on the ultimate objective of PD activities: the enhancement of student learning outcomes. Empirical evidence underscores that high-calibre PD has a positive impact on student achievement, engagement and attitudes towards learning (Shagrir, 2011). Evaluation at this level involves assessing modifications in student performance, engagement and other pertinent outcome measures to ascertain the efficacy of PD in enhancing student learning (Guskey, 2000).

The five-tier evaluation schema furnishes a comprehensive framework for assessing the efficacy of PD activities. By considering participants’ reactions, learning, organisational support, application of new knowledge and skills and student learning outcomes, this model presents a holistic approach to evaluation. Using this model aids in identifying strengths and areas for enhancement in PD initiatives, informs decision-making and fosters ongoing professional growth. Employing this evaluative framework allows teachers and policymakers to augment the efficacy of PD activities, ultimately enhancing student learning outcomes. Consequently, the evaluation framework promulgated by Guskey (2000) proves highly applicable to the measurement of teacher satisfaction with TAGs. The model, with its comprehensive approach encapsulating diverse facets of PD such as participants’ reactions, learning outcomes, organisational support and application of new knowledge and skills, when applied to TAGs, enables the evaluation of teacher satisfaction with the collaborative learning experience, their

perception of the value and impact of TAGs on their PD, and the extent to which they implement the knowledge and competencies accrued from participation in TAGs in their pedagogical practice.

3. Methodology

3.1. Research Design

This investigation used a cross-sectional comparative research design specifically aimed at exploring satisfaction levels among K-12 English language teachers from different geographical locations (urban, suburban and rural) in Vietnam who participated in the TAGs project. It compared the experiences of these teachers to identify any geographical disparities in their responses. The study employed a theoretical framework that is underpinned by three fundamental theories: The adult learning theory, the CoP theory and the ZPD theory. These theories not only provide conceptual foundations for the study but also have practical implications in the context of TAGs. To delve into the practical application of these theories, it is important to explore how they are specifically employed in the study.

The adult learning theory, as proposed by Zepeda et al. (2014), is used to gain insights into the autonomous motivations and self-directed nature of adult learners, specifically the participating teachers. By understanding how adults use their prior experiences to inform their learning processes, the study aims to examine how TAGs can create an environment that nurtures self-directed learning among teachers. This practical application of the adult learning theory investigates how TAGs, by catering to the intrinsic motivations and self-directed learning tendencies of teachers, can enhance satisfaction levels and promote PD outcomes.

Moving on to the CoP theory advanced by Mak and Pun (2015), it plays a pivotal role in understanding the social dynamics within TAGs. The theory highlights learning as a social process, facilitated through interaction, collaboration and knowledge exchange within a community sharing a common interest or practice. In this study, the CoP theory is practically used to examine how the collective engagement within TAGs cultivates a supportive environment, promotes knowledge exchange and fosters collaborative problem-solving among teachers. By exploring the communal and collaborative characteristics of TAGs, the study aims to understand how these aspects influence teachers' satisfaction levels and contribute to their professional growth.

Lastly, the ZPD theory, proposed by Vygotsky and Cole (1978), is integrated into the theoretical framework to account for the diverse teaching experiences across urban, suburban and rural areas. The ZPD theory suggests that learning occurs within the zone between what a learner can do with guidance and what they can do independently. In the context of this study, the ZPD theory is practically used to analyse potential disparities in perceptions and experiences among teachers from different geographical regions participating in TAGs. By considering the unique sociocultural and economic conditions inherent in these locations, the study aims to shed light on how teachers from diverse geographical areas perceive, experience and benefit from their participation in TAGs.

By employing these theories in a practical manner, the study aims to provide a comprehensive understanding of how TAGs operate within the context of the Adult Learning Theory, CoP theory and ZPD theory. The practical application of these theories allows for a more nuanced examination of the factors influencing teachers' satisfaction levels and professional growth within TAGs.

In light of the aforementioned theoretical perspectives, this study adopted a quantitative research design to methodically examine the following research question: "Does geographical information have a notable impact on K-12 teachers' satisfaction regarding their involvement in TAGs?". By employing a questionnaire as the principal instrument for data collection, numerical data were amassed from the participants. This methodology facilitated rigorous statistical analysis, enabling the discernment of possible geographical variations in teachers' satisfaction with the TAGs project and its perceived influence on their PD.

3.2. Participants

Given that the study is principally quantitative, the selection of study participants used a stratified random sampling technique instead of a purposive approach. The directory of 147 K-12 teachers was divided into three strata based on geographical location—urban, suburban and rural. Random sampling was then conducted within these strata to select 34 urban teachers, 21 suburban teachers and 92 rural teachers for participation. Principal investigators initially communicated with Vietnamese educational institutions via electronic correspondence or telecommunication, explicating the scope and objectives of the study. A comprehensive directory of 147 K-12 teachers, either actively participating or previously involved in TAGs, was procured from these academic entities. An informative email, detailing the research objectives, investigator affiliations, the voluntary nature of participation, an extensive exposition of the research methodology, data management procedures, ethical considerations and privacy measures was dispatched to all potential respondents. Stratified random sampling was applied to ensure that teachers from different geographical areas were adequately represented in the study. Those displaying interest in contributing were formally enlisted into the study. In compliance with ethical norms, written informed consent was garnered from all participants prior to initiating data gathering. The consent document explicitly outlined participant privileges, including the freedom to retract from the study at any point without repercussion, anonymity, confidentiality and prospective data application. Assurances were provided that all responses would be anonymised, with personal identifiers detached from the data in any subsequent scholarly discourse or presentations. The chosen stratified random sampling approach aligns with the study's quantitative nature and ensures a generalisable analysis concerning geographical differences.

3.3. Data Collection

The instrument devised for this inquiry was intended to ascertain the level of satisfaction among Vietnamese K-12 teachers concerning the influence of TAGs on their PD. The questionnaire, composed of 21 distinct items, was meticulously crafted to gauge respondents' satisfaction in alignment with Guskey's (2000) five-tiered evaluation framework pertinent to PD endeavours. The participants were

asked to rate their satisfaction using a 5-point Likert scale, ranging from 1 for "Strongly Unsatisfactory," 2 for "Unsatisfactory," 3 for "Neutral," 4 for "Satisfactory," to 5 for "Strongly Satisfactory." A multitude of measures were undertaken to secure the validity and reliability of the questionnaire. To ensure the integrity of the instrument, the research team employed a multi-step validation process. It was conceived following an exhaustive review of germane academic literature encompassing PD, TAGs, and Guskey's (2000) evaluative framework. Items within the questionnaire were judiciously formulated through an iterative process involving subject matter experts and careful consideration of the constructs being examined, aiming to ensure content validity. This rigorous approach involved aligning the wording of the items with the specific aspects of the constructs, eliminating ambiguities and capturing the nuances essential to the study. By incorporating these meticulous steps, the questionnaire achieved a high level of content validity, ensuring that it would accurately measure the intended constructs and provide meaningful and reliable data for analysis. Moreover, the questionnaire underwent a rigorous appraisal by two experts in the domain of education and PD to verify the relevance and appropriateness of the items.

Before official dissemination, a pilot study was conducted to gather feedback on the instructions, language and overall structure of the questionnaire. A representative sample of 20 urban, 20 suburban, and 20 rural teachers participated in the pilot study, ensuring diverse perspectives were considered. Feedback from this pilot study was systematically incorporated into the final version of the instrument. The input and suggestions were carefully analysed and led to crucial modifications aimed at improving comprehension and clarity. These adjustments included refining the wording of certain items, rephrasing ambiguous statements and reorganising sections for better flow. The revised questionnaire, reflecting the changes made based on the pilot study feedback, was then used for the main data collection phase. These iterative refinement processes were fully documented and made available to reviewers and stakeholders for transparency.

The modifications implemented after the pilot trial were clearly presented and documented to ensure transparency and to provide a clear understanding of any revisions made to the questionnaire. The instrument's reliability was validated by assessing its internal consistency via the calculation of Cronbach's alpha coefficient ($\alpha=.82$), demonstrating consistent item responses. This reliability analysis was conducted employing SPSS version 20.0, confirming that the instrument possessed both the reliability and validity needed for the study. Ethical norms were rigorously observed throughout the questionnaire formulation and data-gathering stages. Informed consent was obtained from participants, and stringent procedures were instituted to ensure anonymity and confidentiality. The research objectives, the voluntary nature of participation, and data protection measures were transparently communicated to the participants. These methodical procedures fortified the questionnaire's validity and reliability, thereby ensuring its efficacy in ascertaining participants' satisfaction levels with the TAGs initiative and its perceived influence on their PD.

3.4. Data Analysis

The amassed data, procured from the questionnaire, were subjected to a comprehensive statistical analysis. The objective of this analysis was to encapsulate, interpret and visually represent the distribution and central tendencies of participants' responses. This encompassed the computation of mean scores, sum of squares, mean squares, F-values and p-values. These measures imparted a generalised understanding of the data, facilitating the interpretation of the multifaceted dataset. The distribution of the data underwent normality evaluation via the Shapiro-Wilk test, a standard method for scrutinising the normality of a data distribution. The outcomes revealed a W statistic of 0.98, suggestive of an adequate fit to a normal distribution. The calculated p-value was 0.15, exceeding the conventional 0.05 threshold, thereby indicating that the data conformed to a normal distribution. To unearth any considerable variations in the responses offered by teachers from distinct geographical regions, an ANOVA test was used. This inferential statistical test was employed to ascertain whether a statistically significant discrepancy existed between the means of the different groups. To establish the practical significance of these differences, effect-size analyses were conducted using eta squares (η^2). A statistical significance threshold was predetermined at $p < .05$, in line with Cohen's (2013) guidelines. Effect sizes were subsequently interpreted based on Cohen's (2013) benchmarks: $\eta^2 = .01$ implies a small effect; $\eta^2 = .06$ suggests a medium effect; and $\eta^2 = .14$ indicates a large effect. This interpretation of effect sizes furnishes a measure of the magnitude of the discovered differences and aids in evaluating the practical significance of the findings, independent of the sample size. This integration of descriptive and inferential statistical analysis, coupled with the consideration of effect sizes, facilitated a comprehensive and nuanced interpretation of the accumulated data. This approach bolstered the validity and reliability of the findings and ensured the extrapolation and application of these results within analogous educational contexts.

4. Results

The outcomes gleaned from the ANOVA test, to compare the satisfaction levels of participants operating in varied geographical regions within the TAGs programme, are presented in Table 1.

Table 1. Influence of Geographical Teaching Locations on K-12 Teachers' Satisfaction with TAGs

Criteria		Groups	N	M	Sum of Squares	df	Mean Square	F	Sig.	η^2
Attractiveness of the Programme	Between Groups	Urban	34	4.24	7.48	2	3.74	6.12	.00	.08
		Suburban	21	4.57						
		Rural	92	3.95						
	Within Groups			87.99	144	.61				
Total			95.47	146						
Appropriateness of Training Course Duration	Between Groups	Urban	34	3.74	.42	2	.21	.33	.72	X
		Suburban	21	3.81						
		Rural	92	3.66						
	Within Groups			90.41	144	.63				
Total			90.83	146						

Criteria		Groups	N	M	Sum of Squares	df	Mean Square	F	Sig.	η^2
Quality of Training Course Materials	Between Groups	Urban	34	4.00	3.16	2	1.58	2.20	.12	X
		Suburban	21	4.10						
		Rural	92	3.74						
	Within Groups				103.55	144	.72			
Total				106.71	146					
Anticipated Future Utility of the Course	Between Groups	Urban	34	4.15	5.34	2	2.67	4.95	.01	.06
		Suburban	21	4.38						
		Rural	92	3.87						
	Within Groups				77.65	144	.54			
Total				82.99	146					
Expertise of Trainers	Between Groups	Urban	34	4.41	3.97	2	1.99	3.83	.02	.05
		Suburban	21	4.76						
		Rural	92	4.28						
	Within Groups				74.70	144	.52			
Total				78.67	146					
<i>Level 1 - Participants' Reactions</i>	<i>Between Groups</i>	<i>Urban</i>	<i>34</i>	<i>4.11</i>	<i>3.49</i>	<i>2</i>	<i>1.75</i>	<i>4.41</i>	<i>.01</i>	<i>.06</i>
		<i>Suburban</i>	<i>21</i>	<i>4.32</i>						
		<i>Rural</i>	<i>92</i>	<i>3.90</i>						
	<i>Within Groups</i>				<i>56.98</i>	<i>144</i>	<i>.40</i>			
<i>Total</i>				<i>60.47</i>	<i>146</i>					
Knowledge Appropriation	Between Groups	Urban	34	4.09	3.34	2	1.67	2.60	.08	X
		Suburban	21	4.24						
		Rural	92	3.85						
	Within Groups				92.41	144	.64			
Total				95.76	146					
Skills Appropriation	Between Groups	Urban	34	3.97	3.17	2	1.59	2.60	.08	X
		Suburban	21	4.19						
		Rural	92	3.78						
	Within Groups				87.86	144	.61			
Total				91.03	146					
Influence on Subsequent PD Initiatives	Between Groups	Urban	34	3.91	8.00	2	4.00	5.40	.01	.07
		Suburban	21	4.24						
		Rural	92	3.60						
	Within Groups				106.66	144	.74			
Total				114.67	146					
<i>Level 2 - Participants' Learning</i>	<i>Between Groups</i>	<i>Urban</i>	<i>34</i>	<i>3.99</i>	<i>4.59</i>	<i>2</i>	<i>2.29</i>	<i>4.05</i>	<i>.02</i>	<i>.05</i>
		<i>Suburban</i>	<i>21</i>	<i>4.22</i>						
		<i>Rural</i>	<i>92</i>	<i>3.74</i>						
	<i>Within Groups</i>				<i>81.54</i>	<i>144</i>	<i>.57</i>			
<i>Total</i>				<i>86.12</i>	<i>146</i>					
Institutional Support	Between Groups	Urban	34	4.18	4.76	2	2.38	3.91	.02	.05
		Suburban	21	4.43						
		Rural	92	3.93						
	Within Groups				87.69	144	.61			
Total				92.45	146					
Acknowledgement of Trainees	Between Groups	Urban	34	3.65	7.16	2	3.58	4.45	.01	.06
		Suburban	21	4.19						

Criteria	Groups	N	M	Sum of Squares	df	Mean Square	F	Sig.	η^2	
	Rural	92	3.54							
	Within Groups			115.83	144	.80				
	Total			122.99	146					
Resolution of Challenges	Between Groups	Urban	34	4.09	5.52	2	2.76	5.54	.01	.07
		Suburban	21	4.52						
		Rural	92	3.96						
	Within Groups			71.80	144	.50				
	Total			77.32	146					
Suitability of Course Materials	Between Groups	Urban	34	3.65	3.44	2	1.72	2.81	.06	X
		Suburban	21	4.10						
		Rural	92	3.66						
	Within Groups			88.13	144	.61				
	Total			91.57	146					
Appreciation of Exemplary Participants	Between Groups	Urban	34	3.65	1.61	2	.81	1.12	.33	X
		Suburban	21	3.90						
		Rural	92	3.60						
	Within Groups			103.69	144	.72				
	Total			105.31	146					
<i>Level 3 - Organisation Support and Change</i>	<i>Between Groups</i>	<i>Urban</i>	<i>34</i>	<i>3.84</i>	<i>4.10</i>	<i>2</i>	<i>2.05</i>	<i>5.85</i>	<i>.00</i>	<i>.08</i>
		<i>Suburban</i>	<i>21</i>	<i>4.23</i>						
		<i>Rural</i>	<i>92</i>	<i>3.74</i>						
	<i>Within Groups</i>			<i>50.46</i>	<i>144</i>	<i>.35</i>				
	<i>Total</i>			<i>54.56</i>	<i>146</i>					
Procurement of Novel and Useful Knowledge	Between Groups	Urban	34	3.91	5.01	2	2.50	4.38	.01	.06
		Suburban	21	4.29						
		Rural	92	3.75						
	Within Groups			82.27	144	.57				
	Total			87.28	146					
Acquisition of Teaching Efficacy Enhancement Skills	Between Groups	Urban	34	3.91	3.48	2	1.74	3.52	.03	.05
		Suburban	21	4.19						
		Rural	92	3.75						
	Within Groups			71.22	144	.50				
	Total			74.71	146					
Implications for Students' Learning Outcomes	Between Groups	Urban	34	3.97	6.15	2	3.07	5.91	.00	.08
		Suburban	21	4.33						
		Rural	92	3.75						
	Within Groups			74.89	144	.52				
	Total			81.03	146					
Amelioration of Students' Performance	Between Groups	Urban	34	4.06	4.10	2	2.05	4.00	.02	.05
		Suburban	21	4.10						
		Rural	92	3.73						
	Within Groups			73.90	144	.51				
	Total			78.00	146					
<i>Level 4 - Participants' Use of New Knowledge and Skills</i>	<i>Between Groups</i>	<i>Urban</i>	<i>34</i>	<i>3.96</i>	<i>4.40</i>	<i>2</i>	<i>2.20</i>	<i>4.98</i>	<i>.01</i>	<i>.06</i>
		<i>Suburban</i>	<i>21</i>	<i>4.23</i>						
		<i>Rural</i>	<i>92</i>	<i>3.74</i>						
	<i>Within Groups</i>									

Criteria		Groups	N	M	Sum of Squares	df	Mean Square	F	Sig.	η^2
	<i>Within Groups</i>				63.63	144	.44			
	<i>Total</i>				68.03	146				
Favourable Influence on Students' Physical and Psychological Welfare	Between Groups	Urban	34	3.94	3.18	2	1.59	2.47	.09	X
		Suburban	21	4.05						
		Rural	92	3.68						
	Within Groups				92.69	144	.64			
	Total				95.88	146				
Amplification in Learners' Self-confidence	Between Groups	Urban	34	4.09	4.11	2	2.05	3.90	.02	.05
		Suburban	21	4.05						
		Rural	92	3.73						
	Within Groups				75.89	144	.53			
	Total				80.00	146				
Augmentation in Class Attendance	Between Groups	Urban	34	3.88	3.74	2	1.87	2.78	.07	X
		Suburban	21	3.86						
		Rural	92	3.54						
	Within Groups				96.93	144	.67			
	Total				100.67	146				
Diminution in Student Attrition Rates	Between Groups	Urban	34	3.74	2.07	2	1.04	1.58	.21	X
		Suburban	21	3.67						
		Rural	92	3.47						
	Within Groups				94.19	144	.65			
	Total				96.26	146				
<i>Level 5 - Student Learning Outcomes</i>	<i>Between Groups</i>	<i>Urban</i>	<i>34</i>	<i>3.91</i>	<i>3.16</i>	<i>2</i>	<i>1.58</i>	<i>3.20</i>	<i>.04</i>	<i>.04</i>
		<i>Suburban</i>	<i>21</i>	<i>3.90</i>						
		<i>Rural</i>	<i>92</i>	<i>3.61</i>						
	<i>Within Groups</i>				<i>71.07</i>	<i>144</i>	<i>.49</i>			
	<i>Total</i>				<i>74.24</i>	<i>146</i>				
General Evaluation	Between Groups	Urban	34	3.96	3.66	2	1.83	5.46	.01	.07
		Suburban	21	4.19						
		Rural	92	3.75						
	Within Groups				48.19	144	.34			
	Total				51.85	146				

Pertaining to the comprehensive assessment, the test results shown in table 1 indicate a significant discrepancy among the tripartite groups ($M_{urban}=3.96$; $M_{suburban}=4.19$; $M_{rural}=3.75$; $p=.01$). Specifically, teachers in the suburban domains expressed more satisfaction with the TAGs project compared to their counterparts in urban and rural zones. Furthermore, the effect size was of medium magnitude ($\eta^2=.07$).

Regarding various tiers, meaningful variances were detected across all levels ($p<.05$). At Level 1 - Participants' Reactions, suburban teachers ($M_{suburban}=4.32$) exhibited greater satisfaction compared to the other two clusters ($M_{urban}=4.11$; $M_{rural}=3.90$). The effect size was of medium magnitude ($\eta^2=.06$). Similarly, at Level 2 - Participants' Learning, teachers in suburban areas ($M_{suburban}=4.22$) demonstrated more satisfaction compared to other groups

($M_{urban}=3.99$; $M_{rural}=3.74$), with a small effect size ($\eta^2=.05$). Moreover, at Level 3 - Organisation Support and Change, teachers in suburban zones ($M_{suburban}=4.23$) were more satisfied compared to the remaining groups ($M_{urban}=3.84$; $M_{rural}=3.74$), showcasing a medium effect size ($\eta^2=.08$). At Level 4 - Participants' Use of New Knowledge and Skills, suburban teachers ($M_{suburban}=4.23$) exhibited higher satisfaction than the other groups ($M_{urban}=3.96$; $M_{rural}=3.74$), with a medium effect size ($\eta^2=.06$). Lastly, at Level 5 - Student Learning Outcomes, teachers in suburban ($M_{suburban}=3.90$) and urban areas ($M_{urban}=3.91$) demonstrated higher satisfaction compared to those in rural areas ($M_{rural}=3.61$), with a medium effect size ($\eta^2=.07$).

Upon examining each subset, for Level 1 - Participants' Reactions, no notable disparities were observed among the groups in terms of Duration and Quality of the Training Course ($p>.05$). Conversely, significant variances ($p<.05$) were found in teachers' responses to Programme Attractiveness with a medium effect size ($M_{urban}=4.24$; $M_{suburban}=4.57$; $M_{rural}=3.95$; $\eta^2=.08$); Anticipated Future Course Utility with a medium effect size ($M_{urban}=4.15$; $M_{suburban}=4.38$; $M_{rural}=3.87$; $\eta^2=.06$); and Trainers' Expertise with a small effect size ($M_{urban}=4.41$; $M_{suburban}=4.76$; $M_{rural}=4.28$; $\eta^2=.05$).

As for Level 2 - Participants' Learning, no substantial disparities were found among the groups in terms of Knowledge and Skills Appropriation ($p>.05$). Conversely, significant differences ($p<.05$) were detected in teachers' responses to Influence on Subsequent PD Initiatives with a medium effect size ($M_{urban}=3.91$; $M_{suburban}=4.24$; $M_{rural}=3.60$; $\eta^2=.07$).

Regarding Level 3 - Organisation Support and Change, no significant variance was found among the groups in terms of Suitability of Course Materials and Appreciation of Exemplary Participants ($p>.05$). In contrast, meaningful differences ($p<.05$) were evident in teachers' responses to Institutional Support with a small effect size ($M_{urban}=4.18$; $M_{suburban}=4.43$; $M_{rural}=3.93$; $\eta^2=.05$); Trainees' Acknowledgement with a medium effect size ($M_{urban}=3.65$; $M_{suburban}=4.19$; $M_{rural}=3.54$; $\eta^2=.06$); and Challenges Resolution with a medium effect size ($M_{urban}=4.09$; $M_{suburban}=4.52$; $M_{rural}=3.96$; $\eta^2=.07$).

Under Level 4 - Participants' Use of New Knowledge and Skills, considerable disparities ($p<.05$) were detected in teachers' responses to Procurement of Novel and Useful Knowledge with a medium effect size ($M_{urban}=3.91$; $M_{suburban}=4.29$; $M_{rural}=3.75$; $\eta^2=.06$); Acquisition of Teaching Efficacy Enhancement Skills with a small effect size ($M_{urban}=3.91$; $M_{suburban}=4.19$; $M_{rural}=3.75$; $\eta^2=.05$); Implications for Students' Learning Outcomes with a medium effect size ($M_{urban}=3.97$; $M_{suburban}=4.33$; $M_{rural}=3.75$; $\eta^2=.08$); and Improvement in Students' Performance with a small effect size ($M_{urban}=4.06$; $M_{suburban}=4.10$; $M_{rural}=3.73$; $\eta^2=.05$).

For Level 5 - Student Learning Outcomes, no significant disparities were found among the groups in terms of Positive Influence on Students' Physical and Psychological Welfare, Increase in Class Attendance, and Reduction in Student Attrition Rates ($p>.05$). Contrastingly, significant variances ($p<.05$) were observed

in teachers' responses to Boost in Learners' Self-confidence with a small effect size ($M_{\text{urban}}=4.09$; $M_{\text{suburban}}=4.05$; $M_{\text{rural}}=3.73$; $\eta^2=.05$).

5. Discussion

5.1. Level 1 - Participants' Reactions

Through the lens of the adult learning theory (Zepeda et al., 2014) and the CoP theory (Mak & Pun, 2015), it can be postulated that the elevated satisfaction of suburban teachers with regards to Programme Attractiveness, Anticipated Future Course Utility, and Trainers' Expertise reflects a deep perceived relevance and alignment of the TAGs project to their PD needs. The specific socio-educational dynamics within suburban areas, which may favour experiential, collaborative and contextually relevant learning, could have magnified the appeal and perceived benefits of this project.

5.2 Level 2 - Participants' Learning

Drawing on the ZPD theory (Vygotsky & Cole, 1978), the superior satisfaction among suburban teachers with the Influence on Subsequent PD Initiatives can be interpreted. The TAGs project, with its facilitative approach and interactive learning environment, may have provided a conducive 'scaffolding' within which these teachers could project their future PD more confidently and optimistically than their urban and rural counterparts.

5.3 Level 3 - Organisation Support and Change

Differences in satisfaction levels with respect to Institutional Support, Trainees' Acknowledgement, and Challenges Resolution could be understood through the CoP theory (Mak & Pun, 2015). Suburban teachers, potentially enjoying a more robust institutional backing and supportive community of learners, may have perceived stronger acknowledgement of their efforts and a more efficient resolution of challenges, thereby increasing their satisfaction with the project.

5.4 Level 4 - Participants' Use of New Knowledge and Skills

Invoking the adult learning theory (Zepeda et al., 2014) and the ZPD theory (Vygotsky & Cole, 1978) once more, the enhanced satisfaction reported by suburban teachers can be reasoned. The TAGs project, by aligning with their adult learning needs and fitting into their ZPD, might have effectively empowered these teachers with novel, applicable knowledge and skills that enhanced their teaching efficacy and, consequently, their students' performance and learning outcomes.

5.5 Level 5 - Student Learning Outcomes

Interestingly, satisfaction levels associated with Boost in Learners' Self-confidence were comparably higher for suburban and urban teachers than rural teachers. Given the stronger digital infrastructure and less crowded digital space in suburban and urban areas, these teachers might have been able to leverage the online format of the TAGs project more effectively. This, through the lens of the adult learning theory (Zepeda et al., 2014) and the CoP theory (Mak & Pun, 2015), may have facilitated more impactful application of newly acquired teaching methodologies, fostering enhanced learner self-confidence.

5.6 General Evaluation

Taking into account the unique attributes of the TAGs project and the theoretical frameworks it draws upon, a nuanced interpretation of the outcomes can be offered. The adult learning theory underscores the necessity for mature learners to engage with meaningful and practical learning activities (Zepeda et al., 2014). This project, which strives to elevate English language teaching through a pioneering and collaborative pedagogical approach, might have been especially resonant for teachers in suburban locales due to the distinctive socio-educational context they navigate. These teachers might have discerned a direct alignment between this initiative and their pedagogical necessities or professional growth aspirations. This alignment, fitting well with the tenets of the adult learning theory, could account for their heightened satisfaction levels.

The CoP theory places pivotal importance on the social and communal context of learning (Mak & Pun, 2015). The TAGs project initiated a global virtual community, presenting Vietnamese teachers with a unique communal learning opportunity. It is conceivable that suburban teachers, potentially having better opportunities for effective engagement within this virtual community, derived greater benefits from the project's reciprocal interaction and its rich collaborative learning milieu. This, in turn, led to enhanced satisfaction levels compared to their urban and rural counterparts. Moreover, the pre-existence of robust CoP within suburban contexts might have further facilitated their engagement, enhancing their satisfaction derived from the project.

The ZPD theory posits that the most effective learning occurs within the ZPD, where a learner can accomplish a task under adult supervision or with peer assistance, which they could not achieve independently (Vygotsky & Cole, 1978). The TAGs initiative may fall within the ZPD of suburban teachers, offering a facilitative approach and necessary support from English-speaking and Vietnamese assistants to advance their skills, contributing to their overall satisfaction. In contrast, for urban and rural teachers, this project might exist outside their ZPD due to factors such as constrained resources, larger class sizes or a less favourable environment for virtual learning, leading to decreased satisfaction.

Furthermore, the project's digital nature could also play a role. Suburban locales may boast superior technological infrastructure compared to rural areas and be less impacted by the pressures of population density that often typify urban environments. Such factors might facilitate suburban teachers' engagement with the TAGs project's online elements, further amplifying their satisfaction.

The intricate interconnection between geographical disparities and socio-economic diversity plays a substantial role in melding Vietnam's pedagogical landscape, a proposition that aligns with a substantial body of research investigating the impact of geographic and socio-economic dimensions on global educational systems. For instance, research conducted by Dotong et al. (2016) underscored the profound disparities in educational resources and infrastructures that prevail between urban and suburban or rural locales within Vietnam. The efficacy of the TAGs initiative, particularly in Vietnam's suburban milieu, finds resonance with other scholarly studies underscoring the manifold benefits of

collaborative learning among teachers. Vescio et al. (2008) illuminated the positive ramifications of professional learning communities on pedagogical methodologies and student outcomes, a correlation mirrored by the successes of TAGs within suburban Vietnam. Concurrently, Nguyen (2008) offered significant insights into the potency of collaborative learning as a lever for enhancing PD among teachers within the Vietnamese context. The emphasis on experiential pedagogy among suburban Vietnamese teachers, as exemplified by the incorporation of real-life scenarios into instructional practices, parallels the foundational tenets of experiential learning theory. Kolb (2014) stressed the cardinal role of experience in the learning process, a principle echoed by suburban Vietnamese teachers engaged with the TAGs platform.

Additionally, the cultural value ascribed to collaborative practices within Vietnamese classrooms aligns with the findings of Thanh (2013). In that study, the author underscored the significance of cooperative learning paradigms within Vietnamese educational settings and their favourable impact on students' academic performance. Lastly, the distinct challenges and advantages associated with diverse teaching environments in Vietnam correspond with a breadth of studies centred on contextually responsive pedagogical approaches. For example, Norqvist and Leffler (2017) emphasised the critical need to recognise and adapt to local sociocultural nuances to bolster the effectiveness of teaching and learning processes. In conclusion, the present investigation offers a substantial contribution to existing scholarly discourse by furnishing additional evidence pertaining to the effectiveness of collaborative learning among teachers and the significance of contextually responsive pedagogical strategies, particularly in a context characterised by pronounced geographical and socio-economic diversity such as Vietnam. The study underscores the importance of initiatives analogous to TAGs, designed to cater to the distinct needs and challenges of diverse regions, to enhance the overall quality of education.

6. Conclusion

This comprehensive investigation into the efficacy and reception of the TAGs project within different geographical regions in Vietnam provided insightful findings that have profound implications for future teacher development programmes. The observed higher satisfaction levels among suburban teachers underscore the importance of the adult learning theory, the CoP theory and the ZPD theory as guiding principles in the design and implementation of such initiatives. Despite the uniformity of the training course's quality and duration across geographical regions, the perceived relevance and application of the programme, the recognition of trainer expertise and the influence on future PD varied significantly. The results suggest that teachers from different areas responded differently to the training, highlighting the crucial role of context in shaping learning experiences and outcomes. Suburban teachers consistently reported higher satisfaction levels across the five levels of evaluation. Factors such as the relevance and utility of the programme to their professional needs, the quality of community engagement and the suitable scaffolding for skill development were likely contributors to this. The comparison between urban and rural teachers revealed more nuanced differences, suggesting the need for further research to better understand these dynamics. This study also underscored the

impact of digital infrastructure and online engagement on the outcomes of the TAGs project, which was predominantly delivered in a virtual format. The positive outcomes among suburban and urban teachers regarding student self-confidence highlight the potential of digital learning when adequately supported.

7. Implications

The results of this study bear significant implications for various stakeholders involved in teacher PD, curriculum design, policymaking and other initiatives related to English language education. For educational practitioners and administrators, the results serve as a call to action to develop PD programmes that are nuanced and context-specific. The findings highlight the importance of considering the local context of teachers when designing PD programmes. The significantly higher satisfaction among suburban teachers suggests that such programmes should account for the specific socio-educational context of teachers.

For instance, educational authorities should consider integrating these findings into official PD guidelines, specifying the need for contextual customisation in PD modules. This might involve tailoring programme content and methodologies to cater more directly to the unique challenges and opportunities teachers face in their specific environments. The differential satisfaction levels across urban, suburban and rural zones underpin the need for adopting a more differentiated, context-sensitive approach in policy formulation and programme design.

Policy implications also emerge strongly from these results. Policymakers should consider the geographical disparities in teacher satisfaction when crafting new guidelines for teacher PD. This might involve infrastructural improvements in rural areas, class-size reduction in urban zones, or support for more established CoP in suburban regions. Institutional leaders may use these findings to enhance support mechanisms for their staff engaging in PD initiatives. Given the significant role of institutional support in teachers' satisfaction, leaders should consider providing appropriate resources, recognition and solutions for challenge resolution.

The study underscores the vital role of reliable and robust digital infrastructure in facilitating successful online learning initiatives. This could lead to policy adjustments that prioritise funding and support for educational technology infrastructure, especially in areas that showed lower satisfaction levels. Digital platform providers can gain insights into the types of support and features that would be most beneficial to teachers in different contexts, informing the ongoing development and improvement of their platforms. The results could serve as a benchmark for educational policymakers, providing empirical evidence that can guide future policies on PD.

By considering these implications, the research not only brings academic contributions but also offers actionable insights that educational authorities can implement directly into PD policies and practices.

8. Limitations

The study's findings are based on a sample from Vietnam, which may limit the generalisability of the findings to other cultural or geographical contexts.

However, the results provide valuable insights into the role of geographical location in the efficacy of PD initiatives. While the study categorised participants into urban, suburban and rural groups, it is important to acknowledge the considerable diversity within these categories. Factors such as community culture, resource availability and school policies, among others, can vary greatly even within a single category and might impact the results. The study gathered data at a single point in time, immediately following the TAGs project. This may limit the ability to evaluate the long-term impacts and sustainability of the perceived benefits. Although the study gathered comprehensive data on teachers' satisfaction, it did not explore other potential benefits or drawbacks of the TAGs project. Finally, the variations in satisfaction levels among teachers from urban, suburban and rural areas were linked to various factors within the theoretical frameworks that form the foundation of this study. Nonetheless, it is crucial to acknowledge that these factors might not be clearly depicted through contrasting visuals or descriptions.

9. Recommendations for Further Studies

Considering that suburban teachers expressed greater satisfaction with the TAGs project, future research could delve deeper into the specific socio-educational context of suburban areas. Understanding what makes these settings uniquely conducive to such PD initiatives could help enhance their design and implementation. Complementary studies could focus on understanding the challenges of implementing the TAGs project or similar initiatives in urban and rural contexts. This could shed light on potential barriers to success and suggest strategies to overcome them. A longitudinal study tracking the PD of teachers over time could offer further insights into the enduring effects of the TAGs project. This might reveal how initial reactions to the project translate into long-term benefits for teachers and their students. A comparative study examining the efficacy of the TAGs project in different countries or cultures could further contribute to the understanding of the influence of context in PD initiatives. While this study utilised the adult learning theory, the CoP theory and the ZPD theory, future research could expand or diversify the theoretical frameworks used. This might provide a richer or alternative understanding of the findings.

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