A qualitative case study of constructivist teaching at a high school in a northern area of Vietnam

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Article Info

ABSTRACT

This study aims to identify the English high school teachers' beliefs at a high school in the northern region of Vietnam regarding constructivist teaching (CT) and their actual classroom practices (CP). This paper summarizes results from a five-year Ph.D. study conducted with seven high-school English teachers within a qualitative case study research design with the help of three data collection instruments, including semi-structured and stimulated recall interviews and direct classroom observations. Thematic analysis using MAXQDA was chosen for data analysis. The findings uncovered themes that emerged from the data, which might lay the foundation for classifying teachers into three groups: adaptive originators (AOs), neutral pragmatists (NPs), and traditional conservers (TCs). Most TCs' teaching philosophies were teacher-centered and supportive of conventional teaching techniques. Still, the NPs acknowledged that instructional strategies needed to be changed. The AOs sought to change how teachers used CT; they actively put strategy into place to bring about meaningful change. These results were valuable references for high school teachers to assist their students with better constructivist instruction, thus enhancing the quality of teaching and learning English in the 4.0 era.

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1. INTRODUCTION

Over the past few decades, teacher educators have emphasized the need to develop more efficient ways to give classroom teachers innovative teaching ideas, leading to educational improvements. These efforts include better preparation in content area knowledge, teaching strategies, and classroom management [1]. As a result, upgrading and preparing for the teaching profession encompasses a variety of actions that are part of the reform of teacher education in the Vietnamese setting [2]. According to the Education Law, "teachers hold a vital position in society, are honored by society, and play a leading part in ensuring the quality of education" [3]. Creating effective teachers is one of the most fundamental duties of teacher education programs. Educational research has demonstrated that constructivism can help teachers create more student-centered classroom environments and increase the visibility of their students' learning [4], [5]. "A constructivist approach aims to help pupils interpret, create, and reorganize knowledge in active and individual ways" [6]. Furthermore, the theory states that learning is a "building process by active students interacting with the social and physical world" that is interpretive and recursive [7].

In Vietnam, teacher education reforms have generally promoted a shift from a teacher-centered, knowledge-transmission-oriented classroom to a more student-centered one. Constructivist teaching (CT), which encourages students to create information independently, is a recent educational revolution that requires teachers to stray from traditional knowledge transfer. It is evident that in the constructivist class, the focus shifts from the teacher's voice to the pupils' voices. A classroom is no longer where the teacher acts as a knowledge transmitter and pours information into passive pupils. In such classes, pupils are motivated to join the learning activities to build their knowledge actively, thus enthusiastically getting them involved in the lessons. Learners' knowledge construction is believed to be constructed by connecting with prior knowledge through CT techniques. The teacher's primary duty in a constructivist classroom is to help students generate meaning through meaningful and active experiences; unlike traditional classrooms, where teachers' instructions depend on textbooks, pupils are motivated to share their beliefs and viewpoints. As Witfelt [8] stated, the teacher's role in CT is to be a facilitator who provides guidance and encourages the pupils to collaborate, discovers the pupils' unique abilities, and observes the pupils' duties to give help if needed. The CT approach assumes that instead of the two sides in the learning process, a teacher and pupils need effective interaction and collaboration towards achieving a common goal. Therefore, this study investigates how high school teachers' perceptions of CT have changed and how they apply CT strategies in the English classroom. The main goal of this study is to investigate why it is so difficult to bring about CT change in Vietnamese high schools. The following queries were answered to achieve these goals:

i)   What perspectives do English teachers in high schools have regarding constructivist instruction? How do these beliefs affect their classroom practices?
ii)   To what degree do these teachers perceive the need for change in constructivist teaching practices?
iii) What conditions could be required to encourage constructivist practices?

2.   LITERATURE REVIEW
2.1. English teaching and learning in Vietnam
In Vietnam, Confucian heritage culture can reinforce and represent existing understandings of the teacher's status, work, and the teacher-student relationship. Notably, cultural characteristics affect teachers' beliefs about their work, teacher-student relationships, classroom mechanisms, and environments, so they directly affect the quality of their education [9]–[11]. Based on this presumption, the teachers will engage in pertinent behaviors, activities, and professional judgments that will likely impact the goals of instruction and learning they want to achieve and the qualities of classroom quality they wish to emphasize. The geographical makeup of the nation and the way of life of the Vietnamese people had an impact on their indigenous culture, which assimilated and modified the cultural ideals of Confucianism, Taoism, and Buddhism over the more than a thousand years that China ruled the region [12]–[14]. Also, Western ideals have affected indigenous Vietnamese culture through French hegemony, American invasion, and globalization [15].

Since Confucian culture and teachings originated in China, the Vietnamese have demonstrated frequent regard for knowledge and, consequently, for those who supply it, also known as senior teachers or teachers [9]. Knowledge is regarded as more precious than wealth materials because people believe that knowledge can bring them many things, and teachers are also highly regarded as the standard "mirror" of a moral teacher. During that period, numerous Vietnamese proverbs and folktales highly emphasize the importance of teachers, such as "*Một chữ là Thầy, nửa chữ cũng là Thầy*" (One word may make a teacher; even half a word can accomplish the same) or "*Không Thầy, đố mày làm nên*" (You may do nothing without teachers). On the one hand, these ideas have a good impact on education, particularly the dynamic between teachers and students. On the other hand, respect for knowledge and teachers motivate people to learn by all means and stimulate pupils' motivation and passion for learning. However, according to Vygotsky's theory of social constructivism, such a relationship may hinder the development of learners' social skills, creativity, collaboration, communication, and critical thinking skills [16]. In such a way, pupils have gradually become passive and obedient listeners who only hear and do not contribute to the cooperative and interaction task [17].

Teaching and studying English at all levels has been "a dilemma facing recent Vietnamese governments" [18] since English was added to the national curriculum. For a very long period, English language instruction (ELT) has favored the grammar-translation technique, in which "teachers and textbooks are considered authoritative sources of knowledge" [19]. However, because grammar and vocabulary are the primary areas of concentration in English language instruction, language is treated more like a study subject than a tool for efficient communication [20]. This conventional memory-based method of teaching English "often makes no sense in context and is preferred over meaningful communication" [20]. This setting does not strongly emphasize the value of cultural education. Other factors also contributed to Vietnam's problems with teaching and learning. First, in an EFL setting, students are limited to using English. Second, learners struggle with speaking and listening skills due to a lack of teaching methodologies, large class numbers,

teachers' lack of experience, and restricted English classes [21], [22]. After many years of learning English at schools, Vietnamese learners "cannot use even simple sentences for communication purposes" [22]. In this case, they may be successful users of grammar and vocabulary but need more confidence when speaking to foreigners [23]. Despite the Vietnam Ministry of Education and Training remarkable attempts, it is believed that English education in the Vietnamese context has yet to live up to the expectations of policymakers and pupils [24]. The fundamental objectives of the national program have not been met by English education in the Vietnamese setting without considerable revisions and improvements in the curriculum. The standard of teaching and studying foreign languages must still satisfy the needs of the nation's growth [25].

2.2. Constructivist teaching

Constructivism has been regarded as "a powerful force in language education" and has remarkably become the leading theoretical view in the field of education innovation [26], [27]. It is acknowledged that constructivism provides "a logical and a useful framework for comprehending and interpreting teaching and learning events." This model uses constructivism "to construct a classroom that may maximize pupils' performance" [28]. The community should provide the atmosphere, difficulties, and support required to promote mathematical creation" [29]. Teachers' ideas about teaching and learning will either help or impede the adoption of innovative curricula [30]. Thus, assessing and addressing teachers' intellectual and pedagogical views is crucial before the reform attempt. Figure 1 illustrates the connection between educational views, epistemological beliefs, and the application of CT approaches.

According to previous studies, teachers' epistemological ideas about knowledge might impact their teaching strategies and lesson preparation [30]. Deng *et al.* [31] asserted that academics should pay particular attention to teachers' perceived beliefs by focusing on knowledge development in the present educational reform environment. The innovation-driven curriculum requires a constructivist epistemology that views knowledge as built on contextual information and personal experiences. A further conventional approach to education is that information is imparted to pupils by experienced teachers and subject matter experts [31]. There is little doubt that teachers' perspectives on knowledge influence their teaching.

2.3. Educational change

Combining the change style indicator (CSI) by Musselwhite and Ingram [32] with three conceptual frameworks, including Wenger [33] theory of communities of practice (COP), complex adaptive systems (CAS) by Stacey [34], and Fullan [35] theory of educational change (TEC), provided a comprehensive and in-depth basis for understanding the transformation of education in the context of CT in Vietnam's high schools. The study's hypotheses of educational reform are shown in Table 1, which reveals how essential factors interact in changing things. Additionally, they highlight the circumstances most likely to encourage long-term educational reform in CT secondary schools in Vietnam.
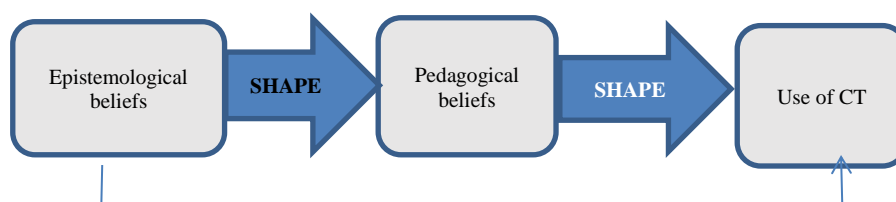

Figure 1. The relationship between teachers' beliefs, and the use of CT

Table 1. Theories of educational change (EC) used in the study

Theories of EC	Aims	Implications
1. The theory of complex adaptive systems (CAS) [34]	- To communicate the requirement of viewing educational transformation as a multifaceted process.	- To succeed, change leaders need to understand the necessary social and contextual conditions to balance new behavior patterns.
2. Fullan's theory of educational change (TEC) [35]	- To clarify, any transformation in education must "struggle directly with existing cultures in which new values and practices may be required."	- This perspective may focus on bringing about a transformational educational shift in pedagogical culture regarding behavior and beliefs.
3. Wenger's theory of communities of practice (TCP) [33]	- TCP serves as a repository for knowledge generation, sharing, and development, offering opportunities for innovation.	- It is imperative to consider educational establishments such as social institutions that give meaning to social interactions between individuals.

This study's paradigm suggests three different teaching groups, including the traditional conservators (TCs), the neutral pragmatists (NPs), and the adaptive originators (AOs), as shown in Figure 2. As shown in this figure, the first are the traditional conservers, who always hold conventional views and are unwilling to change. The next group is the adaptive originators, who are willing and ready for change and innovation. The last one is the group that sits on the fence; they are hesitant to change. In this study, this division of teachers' beliefs was adopted from this figure.
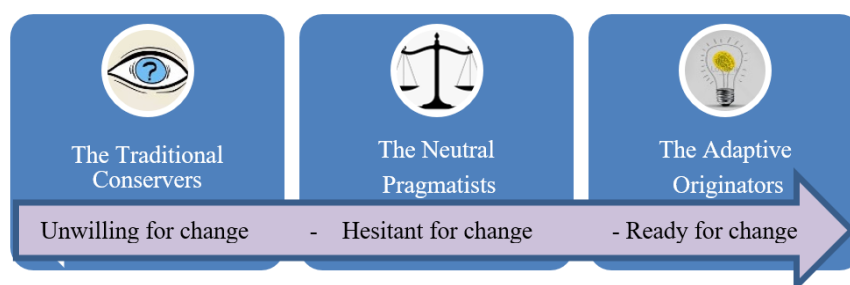

Figure 2. A model of participants' beliefs regarding changes to CT in Vietnamese high schools

3.   RESEARCH METHOD

To maintain anonymity, the study was conducted at School Hero, a public high school in Thai Nguyen province, a hilly region of northern Vietnam. The views of seven high school teachers regarding CT and their actual practices in high schools in Thai Nguyen were investigated in this study. All the teachers, ranging between 25 and 45, received their degrees from universities where they underwent four years of training to become English teachers at high schools. The researchers mainly focused on the teachers' opinions and experiences using CT in real-world settings. Table 2 depicts the design of the study.

Table 2. Research design

The feature	Descriptions	The rationale for the study
Research focus	- Identify high-school English teachers' beliefs and their practices of CT.	- Identify the issue and lay the groundwork for future research and changes.
Research design	- Qualitative case study	- Acquire detailed descriptions to comprehend and analyze the event under the study.
Participants selection	- Purposive selection of participants	- Identify participants' instructive experiences and beliefs for the study.
Data gathering methods	- Interviews including open semi-structured and stimulated recall ones - Classroom observations;	- Acquire abundant data and triangulation to boost the study's credibility and provide answers to the research questions.
Unit of analysis	- Phenomenon aspects and thematic analysis	- Understand and interpret the case in depth.
Conclusions and recommendation	- Give the beneficiaries a foundation on which to apply the results.	- Improve practice - Undertake further research.

Adapted from [36]

In this study, the qualitative technique of theme analysis was employed to examine the data and to analyze and describe it further; this procedure entails grouping the data into clusters [37]. After considering the interview information, the researchers classified, consolidated, searched for patterns, and analyzed the collected data [37]. Generic categories were derived from the literature and research objectives to code the data for the current study deductively. Thus, the first method of data categorization in this investigation was based on a deductive technique. This suggests that the classification was predicated on initial categories derived from the original research objectives, which are similar to those employed by Phipps and Borg [38] and were indicated in CT literature [39], e.g., i) knowledge is constructed; ii) motivation is vital to learning; iii) teacher's roles, and iv) students' roles.

The researchers conducted data analysis in four steps, namely "cut-and-paste" techniques [40] to group all the chunks of data in the same category [41], which was adapted from Hewson [42]. First, the interview data were used to examine and determine the individual teachers' terms and phrases. Second, each category of teachers' views about CT was described, and commonalities were found among those ideas using the cut-and-paste method. Then, the observational data was analyzed to understand teachers' classroom

practices regarding CT and pinpoint significant CT occurrences connected to teachers' stated views. Once more, important episodes were copied and pasted into the subcategories. Then, observational and interview data were contrasted and compared to tabulate the data [43]. This was done to check for individual and collective classroom behavior patterns and how they connected to teachers' expressed views [44]. The stimulated recall interviews were evaluated to understand the fundamental causes of teachers' classroom behavior. This was accomplished by identifying the words and phrases that certain teachers utilized. After that, patterns were carefully chosen into broad categories to match the study's research aims [45]. The broad categories relevant to teachers' beliefs in CT for the current research include, for example, knowledge is constructed, motivation is vital to learning, teacher's roles, and learners' roles. There were subgroups beneath each of these major categories. For instance, in the category "motivation is vital to learning," there were sub-categories such as "learning to pass the exam" or "learning for good marks."

This study used MAXQDA for data analysis [46] to reduce time and facilitate the organization and retrieval of coded data. All data sources from the observations and interviews were given to MAXQDA. By using MAXQDA to code the data, the researchers found it easier to analyze the cases. After coding the data for a single participant, the researchers qualitatively analyzed that person's data. While coding, the researchers took notes on analytical points or paragraphs to include in the report later, as shown in Figure 3, which depicts an example of the initial codes of teachers' and pupils' roles that emerged from the observation data, which helped the researchers synthesize and analyze the data quickly and systematically.
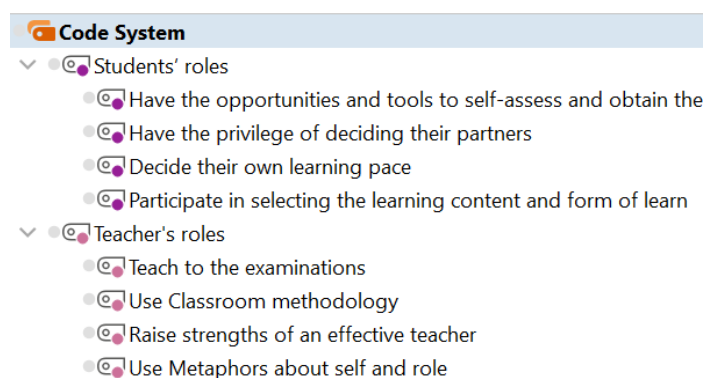

Figure 3. Initial codes of teachers' and pupils' roles from the observation data

After having initial codes attuned to the tenets of CT, the researchers searched for similarities and differences among those codes. Next, under appropriate prior themes, the researchers categorized the relevant code chunks, such as keywords or phrases in the interviews and relevant episodes of the observation data. Finally, the researchers constructed the themes with their emergent sub-themes from those pieces of code, as shown in Tables 3 and 4.

After completing all transcription and coding, this study conducted a qualitative analysis of each participant's semi-structured, observational, and flashback interviews. According to Patton [47], "case analysis includes arranging data by specific cases for extensive investigation and comparison." An initial step in comparing instances is to analyze the data for each case. Before the examples are grouped by subject in an inductive technique, the researchers might generate individual instances to concentrate on and thoroughly comprehend each case [47]. Case-by-case analysis aids in identifying the themes and patterns that link various events [47]. Then, a ten-to-fifteen-page report was written for each participant in the case study that included rigorous analysis of all data for the participants.

Table 3. A sample of searching themes from the interview data

Excerpts	Themes and sub-themes
Willingness [and] getting pupils involved in the lesson are important [in learning English] [T6.I1.22]	- Motivation learning
I think giving pupils practical experiences boosts learning [T7.I1.13]	- Authentic learning
They should actively interact in pairs/groups, and contribute ideas to help improve their communication competence. [T6.I1.12]	- The role of learners

Table 4. A sample of searching themes from the observation data

Classroom observation transcript and field notes	Themes and sub-themes of collaboration learning
i) After the group finished [presenting the group's work], T6 encouraged the other groups to ask questions. "How many times did the teacher ask the groups?"	i) Encouraging the groups to give feedback to the presenting group
ii) The fourth group member thanked and answered the question. Then, the whole class applauded the group.	ii) Responding to a question (a group)
iii) T6 added some explanations for the answers the group has given.	iii) Clarifying answers
iv) Groups were invited to submit the outcomes of their conversation by T6. The first-row group was given, but it was not yet prepared. He repeatedly inquired about their readiness.	iv) Offering and appointing groups to present

4.   RESULTS AND DISCUSSION
4.1. Findings and discussions for research question 1
4.1.1. Theme 1: teachers' beliefs and their actual practices about pre-existing knowledge

It can be challenging to extract learners' past notions and utilize them to generate new ones because TCs and NPs hesitated to do so. On the other hand, the AOs are adamant that it is crucial to elicit prior information from students because they understand that knowledge is best acquired and constructed through previous learning. Even more unexpectedly, the TCs expressed concern that reviewing the past lesson would take too long and that the students (Ss) would only sometimes remember what they already knew. Simply transferring their ideas to the pupils was the popular teaching method for the TCs and NPs, who have different teaching strategies, even if they both believe in prior knowledge. While the TCs ignored recalling students' experiences, one NP explained new topics to the learners through drawings and diagrams. They did not use examples from their area to illustrate the ideas. While one NP used instances from ordinary life to introduce new concepts to the class, the researchers found that most pupils could not offer their instances of the topics, and most pupils sought understanding from their teachers. This remark aligns with the findings of the 2003-2007 Action Plan reports, which pointed out a teacher-centered approach and a lack of engagement. The papers also suggested that conventional scientific instruction in Vietnamese high schools does not connect pupils' existing knowledge, abilities, and interests to new ones [48]. The researchers observed that "most students in the AOs' lesson could forecast results and use real-world examples to clarify new concepts." In brief, even though all of the teachers in the research had a generally favorable belief toward prior knowledge, there are three different groups where the teachers' actual behavior diverged dramatically.

4.1.2. Theme 2: teachers' beliefs and their actual practices about motivation learning

The results pointed to a contradiction in teachers' perceptions of student motivation. While the TCs and NPs believed pupils were more driven to pass the exam than to learn the language, the AOs disagreed. The AOs also underlined the necessity for pupils to be motivated to learn the language and that learning should be enjoyable, as documented by Erdoğan [49] and Borg [45]. They all clarified that for lessons to be pleasant, students must actively participate in the classroom. On the other hand, data from the stimulated recall interviews conducted by the NPs and TCs showed that recurring students often lacked motivation to study and were unwilling to participate in class activities. They also believed that some pupils' motivation for learning English might be exam-focused. This result aligns with findings from other studies, such as those by the typical authors [38], [45]. TCs and NPs frequently believe that rewards compromise intrinsic motivation, as was covered in the previous section [50]. In actuality, teachers claim they are compelling. When applied appropriately, rewards may persuade learners to act a certain way. They may even help to foster a feeling of community among teachers and pupils. The results imply that one TC, for instance, thought utilizing extrinsic incentives was helpful in learner autonomy and motivation. She turned this notion into reality by offering "gifts" to pupils in the classroom anytime she wished to encourage them to be more autonomous in their learning. This strategy appears to be effective since, in the observed classroom, pupils are engaged and receptive. Because they encourage behavioral compliance, these incentives frequently provide results immediately [51]. However, this commitment lacks the complete engagement necessary for optimal learning and well-being on both a cognitive and emotional level [52].

As a point of control in the classroom, the NPs and TCs also used incentives and a concentration on grades and scores in addition to extrinsic rewards. This teaching approach may promote student learning because extrinsic incentives are driven by extrinsic control. Thus, teaching methods were primarily shaped by the teachers' intentions. As was previously said, many teachers promoted the notion of autonomy as a goal, believing that if they taught their classes well, their pupils might develop into autonomous learners who were ready for independent study and established for life. A more practical approach to motivation, however, could be to adopt a concept that is more suited to the AOs, where self-construction and assistance create an atmosphere motivating learning. In conclusion, the NPs and TCs in this study thought pupils' motivation to

learn was mainly based on grades (external control). The AOs nonetheless stated that they want their pupils to be organically motivated.

4.1.3. Theme 3: teachers' beliefs and their actual practices about teacher's roles

According to this study's findings, the AOs utilized many metaphors to describe their jobs as evidence that teachers may perceive themselves as taking on multiple roles in the classroom. The AOs' usage of metaphors like "facilitator," "guide," "friend," "counselor," and "family member" suggests that their responsibility was to instruct and assist pupils in their day-to-day lives. In contrast, the TCs used the metaphors of grammar analyst and knowledge transmitters to explain their roles. The grammar analyst and metaphor knowledge transmitter suggested a teacher who rules the classroom. The metaphors "narrator and knowledge provider" were also employed by the NPs to characterize their job, which would once again suggest that their primary duties in the classroom consisted of providing pupils with a crucial resource and fostering their academic development. Playing a supportive role presented some exciting ideas due to the AOs' conversation with the pupils. The AOs also allowed pupils to speak more English since they were considered possessors of fresh information gained via their studies, which aligns with the notions about active learning mentioned earlier. Most of the prospective Turkish teachers surveyed [53] believed their function as knowledge producers qualified them to teach. This conclusion conflicts with their findings. Therefore, pupils are passive recipients of knowledge. Despite the NPs' claims that they had gradually adopted communicative, student-centered teaching methods instead of teacher-dominant, grammar-oriented ones, lesson inspections revealed that instruction was unquestionably teacher-dominant and intensely focused on grammar. Teachers' inclination for teacher-dominant approaches may stem from their desire to maintain peace and order. The TCs described the teacher's function as one of the sources of knowledge. According to this view of the teacher's duty, pupils were passive information consumers. This is comparable to the control-focused individuals in Mann's study, who identified as "manager or controller" and "policeman," respectively, and who expressed control as a worry [54]. These results are consistent with Vietnamese society, which holds teachers as the primary and final arbiters of their pupils' academic progress.

4.1.4. Theme 4: teachers' beliefs and their actual practices about learners' roles

The most highly regarded aspect of constructivism in classrooms was the roles of the learners. According to the observation data from this study, while the AOs and NPs held the same belief that students should be at the center of the teaching-learning process and play a vital role as the leading actor, the TCs felt that learning appeared to be passive, while the teacher was active. One NP held onto their views on the traditional teaching approach, which did not allow students to freely choose their language use or suggest course content and activities, even if they had a positive view of the roles that learners should play. The teachers in the interview primarily credited their students' inadequate English language proficiency as the foundation for their ideas. The results about the roles of the learners do not seem to line up with those of other earlier research [55], [56] where the teachers thought favorably of the CT technique.

4.2. Findings and discussions for research question 2

The data analysis highlighted several findings in answer to the second study question about teachers' perspectives on the need for change. First, the results regarding the necessity and conformity of change as perceived by teachers showed that most participants, both AOs and NPs, thought the idea of change was appropriate and suitable in general. These results demonstrated that AOs and certain NPs already know the educational environment must improve. The results also demonstrate the relatively progressive views of the AOs and some NPs in this study, who believe that a learning environment should be vibrant and dynamic, interested in ongoing professional development, and aware of the demands of the teaching profession and the shifting global landscape. This advances curricular reform by forcing educators to be dynamic and involved in their development. Interestingly, these results contradict of other studies [57], [58], who found that teachers generally negatively perceived curriculum change and reform in their studies in schools in the Netherlands and Korea because they did not support the intended CT reform.

Nevertheless, the participants felt that the new curriculum was unworkable and impractical because pedagogical and logistical considerations needed to be made, as was covered in the second section, pertinent to teachers' perception of the practicality of change. This highlights the necessity of taking into account the educational realities of that society in any curriculum reform for it to be effective. These results align with other research [59], who discovered that unjustified adjustments had a detrimental impact on performance in his investigation of the Libyan environment. According to Weber [60] in analysis of curricular development in South Africa, teachers must be directly involved in ideas for change. To make change a reality, they must learn to take responsibility for it, even for suggestions made by the state or other authoritative authorities. Furthermore, in investigating curriculum reform in developing countries, such as Vietnam, study by

Montero-Sieburth [61] found that "effective and innovative practices promote drive change and manage teacher-led curriculum." Spillane *et al.* [62], who reviewed studies on implementing educational policies, teachers' inability to participate in planning might result in accidental performance. This might be because successful reform implementation requires more excellent information, comprehension, and abilities.

Teachers' and pupils' readiness for the change and the system's readiness for change are also covered. The research findings support the notion that instructors must acquire the knowledge, abilities, and skills required to implement change in the classroom successfully. Cohen and Hill [63] made a similar observation. They claimed that it is unreasonable to expect teachers to adopt new pedagogical approaches without sufficient training and education on the significance of change. Such adjustments frequently result in the curriculum's mandate not being applied properly, which undermines its effectiveness.

4.3. Findings and discussions for research question 3
4.3.1. Domain 1: teachers' awareness of chances for change
According to the previous study literature [64]–[71], good leadership and direction are essential for educational reform initiatives. These factors are also very effective in implementing curricular modifications. These positions-such as department heads or directors-are frequently filled by school principals. Following Ha *et al.* [72], "in schools, the principal has a unique position to influence the implementation of any changes to the curriculum and the impact on quality." Therefore, the head assumes these directing and leading responsibilities in this capacity. The current study's findings demonstrate that, to effectively carry out their leadership duties as a change leader, the principal, director, or department head must pay close attention to and be receptive to the needs of the general public.

4.3.2. Domain 2: teachers' thoughts on obstacles to change
Similar to numerous other research studies examining the limitations of CT methods [73]–[75], the study's findings demonstrated that test systems, such as the university admission exam and the general education graduation exam, had significantly reduced any bias against CT performance. Exams were found to be both a factor influencing the teaching strategies used by instructors and an obstacle impeding their ability to apply the curriculum [6], [36], [76], [77]. Grammar is the main focus of essential tests in Vietnam, and this confirms the results of multiple prior research [78], [79], which showed that students and teachers were primarily concerned with exam results, placing tremendous pressure on them and impacting their instruction. Secondly, because the training sessions offered to assist participants in the current study were neither regular nor practicable, the participants voiced displeasure with them. This highlights the importance, necessity, and relevance of teacher preparation programs. The importance of first training's quality and relevance was also underlined by several researchers [62], [67], so that it would become a teacher's default skill set. While Vietnam's education policies have long highlighted the importance of producing high-quality teachers, in actuality, teacher training programs have not been very successful in fulfilling the needs of teachers. The opinions of high school teachers about their demands for professional development are, in fact, not well-studied. The research confirms the necessity for teacher preparation programs that adapt to the constantly evolving needs of the modern world, particularly the lack of new curricula.

4.3.3. Domain 3: teachers' perceptions of necessary conditions to support CT practices
The participants' comments indicate that institutional support is necessary for a multifaceted and challenging process like curricular revision. Financial resources must be spent on teacher development, tools, and classroom setup to provide this support. The participants' replies revealed their admiration and happiness with the organization's work and the financial assistance given. It should be emphasized that many Vietnamese educational institutions do not typically operate in this manner.

5.   CONCLUSION
The present investigation has substantially contributed to the pertinent theory, methodology, and practice literature. In terms of theoretical contributions, the current study is the first of its kind in Vietnam to examine CT methods and beliefs among high school teachers from three different participant groups, specifically the AOs, NPs, and TCs, and their views on the prerequisites for improved CT methods and their worries about the necessity for change. Accordingly, the findings from the study identify the nature of language teachers' ideas, how those beliefs are implemented in the classroom, and how teachers feel about modifications that would improve CT methods. Concerning methodological contributions, a case study research approach will examine how teachers think about constructivism and how they teach in the classroom. The present study has included information from several sources to produce comprehensive and in-depth accounts of the understudied field. The analytical strategy used in the current study adds to the body of knowledge on teacher perception and constructivist instruction. Outstanding concerns can be discovered

while doing an inductive and deductive examination of classroom observational data. It demonstrates a more thorough and precise comprehension of what the teacher does in their educational setting.

Several limitations limited the scope of this investigation. For starters, the study's design limited the sample size and composition. This single case study examines the perspectives of only seven participants, and the situation cannot be duplicated or generalized. However, no attempt at generalization is made within a constructivist-interpretive paradigm. The subsequent descriptions of teachers' classroom methods were based on observations of a single unit. Teachers' practices may have differed from their usual routines during the study period. The presence of the researchers in the classroom and the teachers' perceived goals of the study may have contributed to changing their methods. This study aims to comprehend CT implementation through high school teachers' opinions and experiences. Thus, the study focused on a specific component of teachers' CT ideas and how those views were mirrored in teachers' instructional strategies. Therefore, the researchers suggest the following to understand further how CT is used in Vietnam. In light of this, it is also advised to undertake empirical research that will come to findings based on seen and measured phenomena and offer numerical data that is easily generalizable across case studies and study sites.

REFERENCES

[1]   S. M. Wilson, R. E. Floden, and J. Ferrini-Mundy, "Teacher preparation research: an insider's view from the outside," *Journal of Teacher Education*, vol. 53, no. 3, pp. 190–204, May 2002, doi: 10.1177/0022487102053003002.

[2]   N. W. Namunga and R. N. Otunga, "Teacher education as a driver for sustainable development in Kenya," *International Journal of Humanities and Social Science*, vol. 2, no. 5, pp. 228–234, 2012.

[3]   Law on Education Vietnam. "Law No. 43/2019/QH14, Article 66."

[4]   M. B. Carlin, "Improving high school students' performance via discovery learning, collaboration and technology," *T.H.E. Journal*, vol. 24, no. 10, pp. 62–65, 1997.

[5]   D. G. Deeds and C. S. Allen, "A new paradigm in integrated math and science courses," *Journal of College Science Teaching*, vol. 30, no. 3, pp. 178–184, 2000.

[6]   M. Gordon, "The misuses and effective uses of constructivist teaching," *Teachers and Teaching: Theory and Practice*, vol. 15, no. 6, pp. 737–746, Nov. 2009, doi: 10.1080/13540600903357058.

[7]   C. T. Fosnot, *Constructivism, theory, perspectives, and practice*. New York: Teachers College Press, 1996.

[8]   C. Witfelt, "Educational multimedia and teachers' needs for new competencies: a study of compulsory school teachers' needs for competence to use educational multimedia," *Educational Media International*, vol. 37, no. 4, pp. 235–241, Jan. 2000, doi: 10.1080/09523980050210420.

[9]   P. Nguyen, C. Terlouw, and A. Pilot, "Culturally appropriate pedagogy: the case of group learning in a Confucian Heritage Culture context," *Intercultural Education*, vol. 17, no. 1, pp. 1–19, Mar. 2006, doi: 10.1080/14675980500502172.

[10]   P. T. H. Thanh, "Issues to consider when implementing student-centred learning practices at Asian higher education institutions," *Journal of Higher Education Policy and Management*, vol. 33, no. 5, pp. 519–528, Oct. 2011, doi: 10.1080/1360080X.2011.605226.

[11]   H. M. Le, "Another textbook project? The implementation of Escuela Nueva in Vietnam," *Educational Research for Policy and Practice*, vol. 17, no. 3, pp. 223–239, Jul. 2018, doi: 10.1007/s10671-018-9230-x.

[12]   N. T. Hung, "Vietnam: cultural background for ESL/EFL teachers," *The Review of Vietnamese Studies*, vol. 2, no. 1, pp. 11–17, 2002.

[13]   N. T. Tran, *A search for Vietnamese culture*. (in Vietnamese), 1996.

[14]   T. H. Ngo, "An investigation into students' motivation to learn English in higher education in Vietnam," Ph.D. dissertation, Queensland University of Technology, Brisbane, Australia, 2015.

[15]   P. L. Huong and G. W. Fry, "Education and economic, political, and social change in Vietnam," *Educational Research for Policy and Practice*, vol. 3, no. 3, pp. 199–222, Jan. 2004, doi: 10.1007/s10671-005-0678-0.

[16]   L. Vygotsky, *Mind in society: the development of psychological functions*. Cambridge, Massachusetts: Harvard University Press, 1978.

[17]   T. T. Binh, "A study of the trainer - collaborator role in collaborative interaction between teacher trainers and trainee teachers: the case of English language teacher education in Vietnam," *Elted*, vol. 15, pp. 7–14, 2012.

[18]   S. Wright, "Language education and foreign relations in Vietnam," in *Language in Use: A Reader*, P. Griffiths, A. J. Merrison, and A. Bloomer Eds., London: Routledge, 2010, pp. 211–226.

[19]   M. Cortazzi and L. Jin, "The culture the learner brings: a bridge or a barrier," in *Language learning in Intercultural Perspective: Approaches through drama and ethnography*, M. Byram and M. Fleming Eds., Cambridge: Cambridge University Press, 1998, pp. 98–118.

[20]   A. Maley, "Squaring the circle – reconciling materials as constraint with materials as empowerment," in *Materials Development in Language Teaching*, Cambridge: Cambridge University Press, 2011, pp. 379–402, doi: 10.1017/9781139042789.020.

[21]   T. T. Hoang, "Primary teachers' understanding of the pedagogical approaches in the compulsory textbooks for teaching Vietnamese language," Ph.D. dissertation, La Trobe University, Melbourne, Australia, 2011.

[22]   S. I. K. Gonen and S. Saglam, "Teaching culture in the FL classroom: teachers ' perspectives," *International Journal of Global Education*, vol. 1, no. 3, pp. 26–46, 2012.

[23]   V. X. Nguyen, "English language teaching in Vietnam today: policy, practice and constraints," in *English language teaching in East Asia today*, H. W. Kam and R. Y. L. Wong Eds., Singapore: Times Media Private, 2003, pp. 455-474.

[24]   K. M. Ngoc and N. Iwashita, "A comparison of learners' and teachers' attitudes toward communicative language teaching at two universities in Vietnam," *University of Sydney Papers in TESOL*, vol. 7, pp. 25–49, 2012.

[25]   H. V. Vân, "The development of the ten-year English textbook series for Vietnamese schools under the National Foreign Language 2020 project: a cross-cultural collaborative experience," *VNU Journal of Science: Foreign Studies*, vol. 31, no. 3, pp. 1–17, 2015.

[26]   K. Tobin, and D. Tippins, "Constructivism as a referent for teaching and learning," in *The Practice of Constructivism in Science Education*, K. Tobin (Ed.). Washington: AAAS Press, 1993, pp. 3–21.

[27] L. P. Steffe and J. E. Gale *Constructivism in education*, 1st ed. Mahwah, New Jersey: Routledge, 1995, doi: 10.4324/9780203052600.

[28] K. Tobin, "Referents for making sense of science teaching," *International Journal of Science Education*, vol. 15, no. 3, pp. 241–254, May 1993, doi: 10.1080/0950069930150302.

[29] A. J. Baroody and H. P. Ginsburg, "Children's mathematical learning: a cognitive view," in *Journal for research in* mathematics *education monograph: Vol. 4. Constructivist views on the teaching and learning of mathematics,* R. B. Davis, C. A. Maher, and N. Noddings Eds., Reston: National Council of Teachers of Mathematics, 1990, pp. 51–210.

[30] H. Fives and M. M. Buehl, "Teachers' beliefs, in the context of policy reform," *Policy Insights from the Behavioral and Brain Sciences*, vol. 3, no. 1, pp. 114–121, Jan. 2016, doi: 10.1177/2372732215623554.

[31] Q. Deng, D. Ramsköld, B. Reinius, and R. Sandberg, "Single-cell RNA-seq reveals dynamic, random monoallelic gene expression in mammalian cells," *Science*, vol. 343, no. 6167, pp. 193–196, Jan. 2014, doi: 10.1126/science.1245316.

[32] C. Musselwhite and R. D. Ingram, *Change style indicator: facilitator's guide*. Greensboro, NC: Discovery Learning, 2003.

[33] E. Wenger, "Communities of practice and social learning systems," *Organization*, vol. 7, no. 2, pp. 225–246, May 2000, doi: 10.1177/135050840072002.

[34] R. D. Stacey, *Strategic management and organisational dynamics: the challenge of complexity to ways of thinking about organisations*. Harlow, England: Financial Times Prentice Hall, 2007

[35] M. Fullan, *The new meaning of educational change*. New York: Routledge, 2007.

[36] J. L. Nzilano, "Influences and outcomes of social constructivist curriculum implementation on tutors' beliefs and practices in teacher education colleges in Tanzania," Ph.D. dissertation, Victoria University of Wellington, Wellington, New Zealand, 2015.

[37] C. Glesne, *Becoming qualitative researchers: an introduction*, 3rd ed. New York, NY: Pearson Education, Inc, 2006

[38] S. Phipps and S. Borg, "Exploring tensions between teachers' grammar teaching beliefs and practices," *System*, vol. 37, no. 3, pp. 380–390, Sep. 2009, doi: 10.1016/j.system.2009.03.002.

[39] R. Ellis, "Current issues in the teaching of grammar: an SLA perspective," *TESOL Quarterly*, vol. 40, no. 1, pp. 83–107, Mar. 2006, doi: 10.2307/40264512.

[40] Y. S. Lincoln, E. G. Guba, and J. J. Pilotta, "Naturalistic inquiry," *International Journal of Intercultural Relations*, vol. 9, no. 4, pp. 438–439, Jan. 1985, doi: 10.1016/0147-1767(85)90062-8.

[41] G. G. Almarza, "Student foreign language teacher's knowledge growth," in *Teacher learning in language teaching*, D. Freeman and J. C. Richards Eds., Cambridge: Cambridge University Press, 1996, pp. 50–78.

[42] P. W. Hewson and M. G. Hewson, "An appropriate conception of teaching science: a view from studies of science learning," *Science Education*, vol. 72, no. 5, pp. 597–614, Oct. 1988, doi: 10.1002/sce.3730720506.

[43] L. V. Canh, "Form-focused instruction: a case study of Vietnamese teachers' beliefs and practices," Ph.D. dissertation, The University of Waikato, Hamilton, New Zealand, 2011.

[44] C. Marshall and G. B. Rossman, *Designing qualitative research*, 3rd ed. SAGE Publications, 1990.

[45] S. Borg, "Second language grammar teaching: practices and rationales," *Ilha do Desterro A Journal of English Language, Literatures in English and Cultural Studies*, no. 41, pp. 155–183, 2001.

[46] U. Kuckartz and S. Rädiker, *Analyzing qualitative data with MAXQDA: text, audio, and video*. Cham: Springer International Publishing, 2019, doi: 10.1007/978-3-030-15671-8.

[47] M. Q. Patton, *How to use qualitative methods in evaluation*. Newbury Park, CA: SAGE Publications, 1987.

[48] Vietnam Ministry of Education and Training (MoET), "Teaching and learning foreign languages in the national education system, period 2008 to 2020," Decision No. 1400, 2008. [Online]. Available: https://www.scribd.com/document/386798302/Teaching-and-Learning-Foreign-Languages-in-the-National-Education-System-Period-2008-2020

[49] V. Erdoğan, "Contribution of error analysis to foreign language teaching," *Mersin Üniversitesi Eğiitim Fakültesi Dergisi*, vol. 1, no. 2, pp. 261–270, 2005.

[50] E. L. Deci, R. Koestner, and R. M. Ryan, "Extrinsic rewards and intrinsic motivation in education: reconsidered once again," *Review of Educational Research*, vol. 71, no. 1, pp. 1–27, Mar. 2001, doi: 10.3102/00346543071001001.

[51] R. M. Ryan and E. L. Deci, "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being," *American Psychologist*, vol. 55, no. 1, pp. 68–78, 2000, doi: 10.1037/0003-066X.55.1.68.

[52] H. Jang, J. Reeve, and E. L. Deci, "Engaging students in learning activities: it is not autonomy support or structure but autonomy support and structure," *Journal of Educational Psychology*, vol. 102, no. 3, pp. 588–600, Aug. 2010, doi: 10.1037/a0019682.

[53] A. Saban, B. N. Kocbeker, and A. Saban, "Prospective teachers' conceptions of teaching and learning revealed through metaphor analysis," *Learning and Instruction*, vol. 17, no. 2, pp. 123–139, Apr. 2007, doi: 10.1016/j.learninstruc.2007.01.003.

[54] D. Mann, *Creating a lean culture: tools to sustain lean conversions, third edition*. Portland, OR: Productivity Press, 2005.

[55] C. Pitikornpuangpetch and K. Suwanarak, "Teachers' beliefs and teaching practices about communicative language teaching (CLT) in a Thai EFL context," *LEARN Journal: Language Education and Acquisition Research Network*, vol. 14, no. 2, pp. 1–27, 2021.

[56] A. A. Tootkaboni, "Teachers' beliefs and practices towards communicative language teaching in the expanding circle," *Revista Signos*, vol. 52, no. 100, pp. 265–289, Aug. 2019, doi: 10.4067/S0718-09342019000200265.

[57] K. D. Könings, S. Brand-Gruwel, and J. J. G. van Merriënboer, "Teachers' perspectives on innovations: implications for educational design," *Teaching and Teacher Education*, vol. 23, no. 6, pp. 985–997, Aug. 2007, doi: 10.1016/j.tate.2006.06.004.

[58] I. C. Choi, "The impact of EFL testing on EFL education in Korea," *Language Testing*, vol. 25, no. 1, pp. 39–62, Jan. 2008, doi: 10.1177/0265532207083744.

[59] S. M. O. Saad, "Effective factors in the implementation of ELT curriculum innovations," *Scientific Research Journal (SCIRJ)*, vol. 1, no. 5, pp. 14–21, 2013.

[60] S. Weber, "Visual images in research," in *Handbook of the Arts in Qualitative Research: Perspectives, Methodologies, Examples, and Issues*, Thousand Oaks CA, USA: SAGE Publications, Inc., 2008, pp. 42–54, doi: 10.4135/9781452226545.n4.

[61] M. Montero-Sieburth, "Models and practice of curriculum change in developing countries," *Comparative Education Review*, vol. 36, no. 2, pp. 175–193, May 1992, doi: 10.1086/447098.

[62] J. P. Spillane, B. J. Reiser, and T. Reimer, "Policy implementation and cognition: reframing and refocusing implementation research," *Review of Educational Research*, vol. 72, no. 3, pp. 387–431, Sep. 2002, doi: 10.3102/00346543072003387.

[63] D. K. Cohen and H. C. Hill, *Learning policy: when state education reform works*. New Haven, CT, USA: Yale University Press, 2001, doi: 10.12987/yale/9780300089479.001.0001.

[64] T. R. Guskey, "Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation," *Teaching and Teacher Education*, vol. 4, no. 1, pp. 63–69, Jan. 1988, doi: 10.1016/0742-051X(88)90025-X.

[65] T. R. Guskey, "Attitude and perceptual change in teachers," *International Journal of Educational Research*, vol. 13, no. 4, pp. 439–453, Jan. 1989, doi: 10.1016/0883-0355(89)90039-6.

[66] T. R. Guskey, "Professional development and teacher change," *Teachers and Teaching: Theory and Practice*, vol. 8, no. 3, pp. 381–391, Aug. 2002, doi: 10.1080/135406002100000512.

[67] D. Carless, "Collaborative EFL teaching in primary schools," *ELT Journal*, vol. 60, no. 4, pp. 328–335, Oct. 2006, doi: 10.1093/elt/ccl023.
[68] J. M. Lamie, *Evaluating change in English language teaching*. London: Palgrave Macmillan UK, 2005.
[69] M. Iemjinda, "Curriculum innovation and English as a foreign language (EFL) teacher development," *Educational Journal of Thailand*, vol. 1, no. 1, pp. 9–20, 2007.
[70] M. Fullan, *Leading in a culture of change*. San Francisco: Jossey-Bass, 2001.
[71] M. Wedell, *Planning for educational change: putting people and their contexts first*. London: Continuum International Publishing Group, 2009.
[72] A. S. C. Ha, J. C. K. Lee, D. W. K. Chan, and R. K. W. Sum, "Teachers' perceptions of in-service teacher training to support curriculum change in physical education: the Hong Kong experience," *Sport, Education and Society*, vol. 9, no. 3, pp. 421–438, Nov. 2004, doi: 10.1080/13573320412331302467.
[73] V. Mellado, "The classroom practice of preservice teachers and their conceptions of teaching and learning science," *Science Education*, vol. 82, no. 2, pp. 197–214, Apr. 1998, doi: 10.1002/(SICI)1098-237X(199804)82:2<197::AID-SCE5>3.0.CO;2-9.
[74] K. Kasapoğlu, "Relations between classroom teachers attitudes toward change, perceptions of 'constructivist' curriculum change and implementation of constructivist teaching and learning activities in class at primary school level," M.S. thesis, Middle East Technical University, Ankara, Türkiye, 2010.
[75] P. H. Chibani, "Towards a conceptual framework for effective mathematics teaching in Lebanon: a multiple case-study," Ph.D. dissertation, Saint Joseph University of Beirut, Beirut, Lebanon, 2017.
[76] E. Y. Feyzioğlu, "Science teachers' beliefs as barriers to implementation of constructivist-based education reform," *Journal of Baltic Science Education*, vol. 11, no. 4, pp. 302–317, Dec. 2012, doi: 10.33225/jbse/12.11.302.
[77] N. Aldamigh, "Ontario teachers' understanding and practices of reform instruction: a case study of constructivism," M.S. thesis, The University of Western Ontario, London, ON, Canada, 2018.
[78] H. Noble and J. Smith, "Issues of validity and reliability in qualitative research," *Evidence-Based Nursing*, vol. 18, no. 2, pp. 34–35, Feb. 2015, doi: 10.1136/eb-2015-102054.
[79] S. Ahmad, "Inconsistencies in English language teaching in Pakistan: a comparison between public and private institutions," *European Journal of Business and Management*, vol. 4, no. 15, pp. 95–106, 2012.

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