

# Educational change: Teachers' Beliefs about Constructivist Teaching among distinct groups of participants

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**Abstract-** This thesis aims at investigating the beliefs of seven English high-school teachers about constructivist teaching and their classroom practices at a high school in a Northern area of Vietnam. Its purpose is to illuminate the conditions affecting their ability and willingness to reform teaching practices at their schools. Three distinct groups of participants are identified: Traditional Conservers, Neutral Pragmatists, and Adaptive Originators. For the Traditional Conservers, beliefs about teaching were strongly teacher-centered, supportive of traditional education methods, and shaped by beliefs that students should be obedient and passive learners. These participants had a limited understanding of the range of approaches to constructivist teaching: they were unwilling to change how they activate constructivist teaching in practice. For the Neutral Pragmatists, however, the need to reform teaching practices was recognized. These participants expressed a willingness to change their own teaching practices, but they felt constrained from doing so because of a perceived lack of expertise and because they saw that many more hours of work would be required to do so effectively. This group, therefore, had implemented a few significant changes. The Adaptive Originators aspired to reform how teachers utilized constructivist teaching in practice: they actively implemented measures to achieve effective reform. They were more inclined than any other participants to value the importance of constructivist teaching. They also claimed to be strongly supportive of the role and significance of constructivist teaching.

**Index Terms-** educational change, constructivist teaching, traditional conservers, neutral pragmatists, adaptive originators.

## I. INTRODUCTION

Reforms in education in general and teacher education in particular in Vietnam have typically encouraged a change from teacher-centered and transmission-oriented models to more student-centered. Recent education reform entails teachers departing from traditional knowledge transmission to constructivist teaching, where students are encouraged to construct knowledge through inquiry. In other words, in the

constructivist classroom, the focus shifts from teachers to students. A classroom is no longer where the teacher acts as an expert and pours knowledge into passive students. In such classes, students are motivated to participate in the learning activities to construct their knowledge actively, thus keeping them engaged for extended periods. Since knowledge construction requires connecting with prior knowledge, constructivist teaching draws on students' prior knowledge and experiences. In such a learning environment, the teacher's primary role in constructivist classrooms is to assist students in creating meaning through active and relevant experiences. Students are encouraged to share their ideas, unlike traditional classrooms where instruction is mainly based on textbooks.

Constructivism has been regarded as a practical approach to assisting teachers in improving student achievement. It requires teachers to step off the stage, relinquish some of their power, and release the textbooks to allow their students to be actively engaged and take some responsibility for their learning". Moreover, Constructivism enables learners to actively participate in learning by acquiring capabilities, such as autonomous learning and self-evaluation. From this aspect, the constructivist approach involves how learners reconstruct knowledge rather than accept a piece of information as a given. Besides, the key stakeholders in this transition process are teachers; therefore, if teachers are willing to change according to the proposed new educational principles, the reforms will have a greater chance of success. However, most reform ideas and practices are determined top-down and still need to create more opportunities for practical training and teacher support. Moreover, even if teachers want to change according to newly proposed educational principles, they have prior beliefs about the nature of knowledge, teaching, and learning that reduce the incorporation of new instructional practices. Because of these beliefs, teachers need extensive in-service training covering the new reform ideas and pedagogies.

## II. LITERATURE REVIEW

**Roles of teachers and learners in a constructivist teaching classroom**

In a constructivist classroom, the teacher's role changes from a "transmitter" of knowledge to a 'facilitator' of knowledge. To do this, the teacher must grasp the old knowledge of the learners and help them clarify ideas, provide logical explanations, challenge misconceptions, guide experiments, predict results and draw inferences. Singh & Yaduvanshi believe that teachers should ask questions to test students' ideas, provide feedback, explore new ideas, and encourage them to comment on answers and explanations provided by other students. Teachers can ask students to use evidence to explain ideas, apply their notions to phenomena, summarize results, and represent them symbolically. Teachers must also encourage students to think independently, develop logical explanations, and test hypotheses. Therefore, the teacher should focus on guiding students by asking questions to help them develop their conclusions on the topic.

Parker suggests that good teachers encourage students to create knowledge based on prior knowledge and relate that knowledge to the environment in which they live. He adds that constructivist teachers teach from a whole and undivided self while evoking connection among their students. In contrast, in a traditional classroom, the teacher is the one in control of the learning environment. He/she acts as a guide, dictator, and lecturer and works for specific and predetermined outcomes. Teachers

view learners as "knowledge gaps" that need to be filled with information (Novak, pp. 24-25). Accordingly, teachers consider lesson content as the most important way to acquire knowledge and try their best for learners to master the content through practice, practice, and memorization.

In traditional classrooms, the learning environment is often competitive. The most common seating arrangement is in rows. The teacher acts as the facilitator of the class, whereas, in the constructive classroom, The teacher acts as a mediator, facilitator, or coach and focuses on assisting learners in developing and assessing their understanding and learning. Teachers strive to create the best possible learning environment and make learning as easy as possible (Ayers, Sawyer & Dinham, as cited in Killen). In constructivist learning, teachers are expected to create a classroom environment that helps provide meaningful learning experiences and allows learners to hypothesize, manipulate, set questions, investigate, and imagine. Learners must use their experiences, information, and perceptions to construct knowledge and meaning. Jonassen (p. 34-37) and Brooks and Brooks (1999) outline vital differences between traditional and constructivist classroom teaching activities. These activities are presented in Table 1.

**Table 1. Comparing the activities of a teacher in the traditional and constructivist classroom**

<b>Focal point</b>	<b>Teacher in traditional classroom</b>	<b>Teacher in constructivist classroom</b>
<b>Learner</b>	The teacher assumes that the learner is a blank slate and tries to fill his/her mind with lots of information.	The teacher sees the learner as a knowledge constructor or a thinker.
<b>Classroom activities</b>	The teacher abides by a fixed curriculum and expects a correct answer using a standard method.	The teacher believes that asking questions to the learner is extraordinarily significant and values the learners' point of view.
<b>Learning activities</b>	The teacher emphasizes learning activities that are based on textbooks and workbooks.	Teacher emphasizes learning activities based on primary data sources and manipulative materials and asks the learners to work in small groups. Teachers construct learning opportunities by posing contradictions, presenting new information, and asking questions.
<b>Teachers' behavior</b>	The teacher behaves in a monitory approach, usually stands at the front of the class and directly distributes the information to learners.	Teacher emphasizes learning activities based on primary data sources and manipulative materials and asks the learners to work in small groups. Teachers construct learning opportunities by posing contradictions, presenting new information, and asking questions.
<b>Learner response</b>	The teacher usually expects direct and correct answers from the learners.	The teacher asks learners for opinions and views after reading the specific content.
<b>Assessment of learning</b>	The teacher considers assessing learners' learning separate from teaching and prefers to evaluate it at the end of the year/course.	The teacher considers that assessment of learners' learning is intertwined with teaching and regularly observes learners' working through their presentations, projects, and portfolios.
<b>Classroom environment</b>	The teacher emphasizes that learners must work alone to learn and gives little attention to their social development.	The teacher emphasizes that learners prominently work in pairs or groups and gives proper attention to their social development by promoting teamwork, establishing interpersonal relationships, and working in collaboration.

<b>Learner grouping</b>	The teacher groups learners according to their age and assigns the projects randomly.	The teacher groups learners according to their interests and abilities to conduct different projects.
<b>Teaching learning methods</b>	The teacher prominently uses teacher-centric methods such as lectures and demonstrations.	The teacher uses learner-centric methods such as concept mapping, experiential learning, and collaborative learning.

**Reasons for educational change**

Education or schooling has provided people in our culture with the knowledge and skills to be quite successful over the last 100 years. However, according to Renate Caine and Geoffrey Caine (1997), now the world is changing so fast that the amount of information being created and the amount of data available to us is mind jarring. Significantly, in the era of 4.0 information technology revolutionary, many ideas need to be updated before they are even published, and products are obsolete as soon as they hit the market.

Also concluded by Caine and Caine, "traditional sources of information for students are fundamentally inappropriate. Irrespective of whether textbooks are influential, only some can be the primary source of essential and current information. Similarly, even teachers constantly updating their professional expertise can only keep pace with a small fragment of what is becoming available. (p.46)".

In today's classroom, students must learn how to access knowledge, process information, and make meaning out of what they have learnt. It will not suffice to have the teacher deliver information. The instructional goal is to "help students become better problem posers and problem solvers." (Sparks & Hirsh, 1997, p.10).

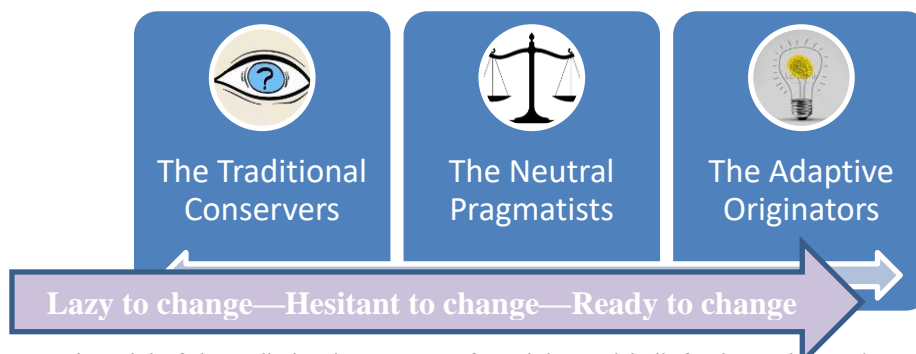
**A proposed model of three distinctive groups of participants' beliefs**

The Change Style indicator (CSI) was selected for this study after reviewing relevant literature. The Three Approaches to leading change, Conservator, Pragmatist, and Originator, provide a framework to help leaders explore their attitudes toward change. Conservators tend to change gradually and methodically. In the face of change, conservers are often cautious, disciplined, and organized. These people honor established traditions and practices. They accept structure and like gradual change.

Originators are risk-takers and need to accept the status quo more easily. Originators may look impractical, disorganized, undisciplined, and unusual, but they are original thinkers. These people will likely challenge accepted assumptions and like to accept risk and uncertainty. They like extensive, rapid, and radical change.

Pragmatists may appear practical, reasonable, and flexible, but they are also noncommittal. They prefer change that emphasizes workable outcomes rather than changes focused on structures. Ultimately, the pragmatists fall between the originators and the conservatives, leading change from the middle - keeping what is booming and creating new initiatives.

In this study, a proposed model of three distinctive groups of participants could be identified: The Traditional Conservers, The Flexible Pragmatists and the Adaptive Originators.



**Figure 1. A proposed model of three distinctive groups of participants' beliefs about change in constructivist teaching at high schools in Vietnam**

**III. MAJOR FINDINGS**

In order to understand the beliefs of the participants regarding constructivist teaching (CT), it is necessary to explore what they believed and regarded as the tenet of CT, how they perceived their teaching role, and what their actual practices were. When participants expressed their beliefs, they revealed hidden assumptions about CT. Three distinct categories of participants emerged from the interview and observation data. Hereafter these categories were labeled: "The Traditional Conservers" (two

participants), "The Neutral Pragmatists" (three participants), and "The Adaptive Originators" (two participants). The beliefs and practices of the three groups of participants regarding CT were discussed sequentially.

The first group of participants was identified as the "Traditional Conservers" (TCs). The "Traditional Conservers" can be called "traditionalists." The "Traditional Conservers" are similar to Carnall's (1995) model of people that must often experience change when they have no choice but to confront and face it. Denial is the first stage, where people reject the need for change. Defense is the next stage, where people see the inevitable

change but still actively resist it. The “Traditional Conservers” in this study were participants who, whether they saw the need for a change in constructivist teaching or not, refused to change constructivist teaching because change threatens beliefs they hold dear.

The second group of participants was identified as the “**Neutral Pragmatists**” (NPs). The “**Neutral Pragmatists**” in this study were participants who were “contradictory to change.” These teachers tend to say they are learners and present evidence to that effect; however, they also articulate problems with new learning. This means that they may or may not be implementers of new ideas. In other words, NPs’ are “hesitant to change” and tend to be negative to new learning. Therefore, they do not implement new ideas; if they do, it is done superficially.

The last group of participants was identified as the “**Adaptive Originators**” (AOs). The “**Adaptive Originators**” in this study were participants who were “open to change.” These teachers consider themselves as learners and are open-minded when presented with new professional development material. They also pursue their own teaching and experiment with new ideas in their classrooms.

With regard to **Beliefs about Knowledge construction/Prior knowledge**, the Traditional Conservers (TCs) expressed their rather favorable commitment to the tenet of constructivist teaching (CT) regarding certain aspects of recalling students’ prior knowledge. One TC indicated they take into consideration students’ previous knowledge when planning lessons, but checking the old lesson is not their typical habit. Such a belief was evidently illustrated in the following excerpts.

*“I believe that activating students’ pre-existing knowledge may help them to clarify the topic and understand the concept, but I have enough time to check their prior knowledge through homework because I have forty-five students in my class [laughing], so I often ignore this activity.” [T1.I2.01]*

The **Neutral Pragmatists** (NPs) considered students’ prior knowledge when planning lessons. However, they also complained that eliciting learners’ previous ideas and using them to develop new concepts are sometimes difficult. The following excerpts confirm this belief.

*Most lessons began with a review of the learners’ previous knowledge of the concepts but failed to use such knowledge to drive the other phases of the lesson. This made it difficult for the learners to perceive the link between their prior knowledge and the new concept. Consequently, their ability to make predictions is limited. [T3.I2.01]*

During the interview, the **Adaptive Originators** (AOs) indicated in their reflections that they take into consideration students’ prior knowledge when planning lessons. This was confirmed in the interviews.

*“I believe that activating students’ pre-existing knowledge may help them to clarify the topic and understand the concept.” [T6.I2.05]*

*During my lecture presentation, I remind students of the previous part and then I lecture new knowledge so that students are able to use both already learned and new knowledge. [T7.I2.03]*

In terms of **Collaboration learning**, TCs believed that interaction was an essential element in creating opportunities for mutual understanding and generating feedback:

*“In my view of point, students can learn from their friends’ new words..., and they can see their friends’ mistakes and help their friends; they can recognize the gap” [T1.I1.07].*

Although TCs expressed their belief that the use of pair or group work was one of the significant characteristics of constructivist teaching, their classroom practices (enacted beliefs) were not in line with their stated views. Whole-class education was still prevalent, and their use of pair or group work was limited in the lessons I observed.

Teacher 1 highlighted the importance of good interaction in a group in the initial interview. She said,

*“In groups, members should interact well so that they can produce something good.” [T1.I1.07].*

Although the **Neutral Pragmatists** (NPs) acknowledged that working in groups brought many benefits to their lesson, they needed more time to implement teamwork activities in their class due to the materials they had to finish in a semester. T3 mentioned several times during the initial interviews that he had problems with it. He commented:

*If I implement cooperative learning like what I got from the [cooperative learning] training, I could not finish the material. The time is not enough. That’s right, the time. The ideal one is that we should use cooperative learning with all the materials. I could not do it. I select some chapters [in the textbook] for cooperative learning, not all chapters. [T3.I2.05]*

The AOs believed that interaction is necessary in the English classroom. T6 particularly stressed that without interaction, “there is not communication” (TGIBa-1). T7 also emphasized its importance in the classroom saying, “in a classroom you have to interact with someone; you have to speak with someone and there must be interaction in the classroom” [T6.I2.03]. For this teacher, “interaction helps students to produce or to perform what they have studied,” so that they can perform the language outside the classroom [T7.I2.04]. Both of them reported that they often generated opportunities for students to practice English in the classroom or at home.

*From my point of view, pair and group activities should take place regularly at the certain teaching stages such as while-and post-stages and in most of the class hours. [T6.I2.04]*

With reference to **Active learning**, the TCs in the interviews emphasized the significance of active learning contributing to effective communication classes, and expressed their high CT orientation toward this CT tenet, which was measured by the frequency they employed such activities, the benefits that these activities offered them in communicative classes. However, they believed that,

*The teachers should still act as “authority” to impose the content of the lesson and activities. .... and the teachers’ role as an imparter of knowledge is very important. [T1.I1.11]*

*In my opinion, in a language class, the teachers act as a transmitter of knowledge and a controller of what goes on in class. [T2.I1.13]*

Findings from the interviews and observations uncovered that the NPs held a strong belief of active learning, which had been part of their lesson plans and would be sustained if more time was provided.

T3 was undoubtedly one of the NPs who appeared to try to involve the students in the lesson. He believed that:

*Active learning could allow students to contribute their ideas to what was presented to them [T3.I2.07].*

The AOs often saw active learning as an approach that relinquishes teacher control and encourages learners to take more responsibility for their learning.

T6 holds the idea that active learning occurs when students take responsibility for their own learning:

*"I think students have to learn actively, and that's when they master it and keep reading. Active learning hurts; failure is a mother's success. Effort and time needed, effort from themselves." [T6.I.2.09]*

Regarding **Beliefs about Teacher's roles**, TCs espoused a traditional view of teaching as transmitting knowledge because they stated that they had to look for ways to facilitate learning and for most of them ensuring learners' success in examinations remained their priority.

Considering belief that the role of the teacher was as a knowledge provider, T1 was concerned about how effectively she presented the knowledge. She was worried about her ability to explain the content to a level to her student.

T1 believed that high school students lacked "base knowledge" and that the first step of teaching was "to give them information" because she believed that students came to the learning experience without any "base knowledge," facilitating did not make sense to her:

*The word "facilitator" does not mean to me. I mean, it is the movement, be a supporter. I don't like that word because when you facilitate, the kids already know what they're doing, and you're just directing them in a specific direction. And at this level, you have to teach it [and] then facilitate. So it should be two steps. You have to give them information first, make connections, and then enable them to learn more deeply, but we have to be the purveyors of knowledge, at least basic knowledge. Copy, then allow them to expand and expand on that knowledge. . . . At this stage, they don't have a good base as they need or should be. . . So, you need to present and then facilitate. [T1.I2.15]*

Findings from the interviews showed that NPs still believed that knowledge is given by the authority under the teacher's guidance.

T3 said that he was willing to give up his informant role. Although he admitted that the new form of teaching consisted solely of transferring knowledge authority from teachers to other sources, students were more responsible for their learning. At the same time, he still needed to "*take on the role of teacher and provide activities and student guidance*". [T3.I2.28]. He also added that, *...the teacher's role is to think of different ways to teach the material, you know, through various kinds of book activities, you know, making lesson plans, making models, designing teaching materials, and doing these projects involving applying information technology in teaching and getting up and say and things like that. That consists of doing the lecture sometimes and being the moderator. You know, sometimes being an innocent bystander, where you let them figure it out for themselves. . . . Then the next part of the lesson could be where they go, and you know, they have to design the model of the lesson. [T3.I2.29].*

The AOs believed that high school teachers' primary roles should be facilitating students' learning and providing resources to assist their learning. When asked to describe their roles, all the participants used metaphors to elucidate the roles that a teacher

plays in the classroom. They stated that the role of the teachers was described as the facilitators and instructors who are proactive in studying the content and knowledge and then finding the appropriate methods, time or place to integrate them into their lessons.

One AO noted that,

*Because students bring unique, diverse previous experiences and knowledge into the classroom, teachers, rather than impart knowledge, should help students to create meaning and understanding. [T6.I.2.27]*

The AOs believed that having teachers act as facilitators or provide resources could positively influence student learning. In addition, as a learning facilitator and learning resource provider, it is essential for teachers to get to know their students well, and building relationships with students can be significant.

#### IV. CONCLUSION

In sum, the Traditional Conservers were closed to change concerning constructivist teaching practices. Members of this group generally held traditional values, beliefs, and attitudes about teaching and learning. The Neutral Pragmatists, however, had developed some understanding of the need for constructivist teaching reform and were interested in implementing changes to adopt more contemporary constructivist teaching practices. However, their motivation to implement these changes depended on the level of support their employer-provided and the extent to which they could see practical results in student learning after implementing changes. Finally, the Adaptive Originators were the most open to change. They reported instigating changes in their constructivist teaching practices regardless of the extent of institutional support available. They were strongly motivated by a desire to improve the quality of teaching and learning at high schools. They were highly supportive of using constructivist teaching methods in this regard.

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