Critical Pedagogy and Inquiry-Based Learning: Alternative Pedagogies for Critical Thinking Courses

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Abstract

Education should be a dynamic and evolving process aimed at preparing students to meet the changing needs of society. In their attempts to avoid static condition, university members in working groups are constantly tasked with organizing new courses in their curricula to meet the changing times. The premise of this study is that in cases when new courses enter the curriculum with much time spent on designing and outlining syllabuses, there also needs to be adequate attention given to identifying appropriate pedagogies for teachers to teach the courses. This paper addresses courses designed to develop students critical thinking skills as a component of English language and literature departments. The claim is made that when syllabuses are designed with the purpose of developing critical thinking skills, they require pedagogies that contrast with the approaches of those teachers who rely on traditional, transmission-based models of teaching in their classes. To assist teachers to reconceptualize their instruction to meet the needs of new courses aimed at critical thinking skills, professional development is needed. In this study, two alternative pedagogies, critical pedagogy as a theoretical framework and inquiry-based learning as a cohering method are presented as effective means to implement the new courses. In addition, descriptions and examples of problem-based learning and the technique of scaffolding are given as complementary to administering the organizing theory of critical pedagogy and inquiry-based learning methods into the classroom in practice. Through writing about the concepts associated with alternative pedagogies discussed in this study, the reader can be engaged in professional discourse that will further enhance their teacher development. It will help those who have relied heavily on transmission-type approaches to reconceptualize their teaching toward finding ways to better inform their instruction in practice to meet the needs of courses designed to develop critical thinking skills.

Keywords: pedagogy / critical thinking skills / transmission-based models / inquiry-based learning / professional development

Introduction

The universe is transformation, life is opinion—Marcus Aurelius' in Meditations, IV.3

Education in the 21st century is a dynamic process that is in constant change to meet the growing and ever-changing needs of a rapidly developing world. University curricula reflect these changes as courses are designed to meet new demands of society. To keep up with these changing times, in Japan, universities assign on-going working groups with the purpose of designing new courses. In this paper, the aim is to particularly focus on courses in English departments that are aimed at developing students' critical thinking skills. The etymology of thinking critically, comes from the Greek word *kritikos*, meaning to be a 'critic', which implies having the ability to form reasoned judgements. Although John Dewey, the American Education philosopher, conceptualized the term more often as "reflective thinking", he defined it as an "…[A]ctive, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends" (1910, p.6).Dewey's definition indicates that the development of critical thinking skills requires pedagogies in which students are active learners involved in a discovery based, dynamic and analytically reflective, on-going learning process. A process in which learners do not quickly draw conclusions from unreflective thinking, but are "persistent", working things through, and holding their judgements until they carefully can form ideas based on sound reasoning from results of their inquiries. In practice, this implies a focus on teaching students not 'what' to think, but 'how' to think.

However, a dilemma occurs in curriculum implementation when courses designed to further critical thinking skills (i.e., reflecting thinking) are more suitable for exploratory, collaborative, small group-type, interactive activities and student-centered approaches, which are in direct contrast to transmission-based, lecture-driven pedagogies, which are often conducted in the university classroom. Thus, even though curriculum planners may have dutifully outlined syllabuses for the goals (aims and purposes) of new critical thinking courses with textbooks and supplemental ma-

terials to carry them out, often considerations for the need of professional development to teach these courses with appropriate or alternative discovery-based pedagogies have been ignored.

The position of this study is to emphasize that when planning new courses, adequate attention in teacher professional development should be given to complementary, alternative pedagogical approaches. In particular, those courses aimed at critical thinking skills would be better served by teachers having knowledge of two cohering areas of teaching; critical pedagogy (CP) and inquiry-based learning (IBL). First, the theoretical framework of CP will be discussed. Then, IBL is presented as a deeper learning, discovery-based method for classroom instruction as opposed to the transmission model of teaching. Finally, the paper will further address how incorporating understandings of CP and IBL into the professional development of university faculty can form appropriate alternative pedagogies implemented at the classroom level by discussing project-based learning (PBL) and the technique of scaffolding.

Critical Pedagogy

The core educational principle of CP is to foster social justice and societal reform, in the classroom as well as in the wider society. Perhaps, more of an educational philosophy than a pedagogy (Crookes & Lehner, 1998), CP places agency on the learner and begins with "the basic assumption that the human vocation is to take action which changes the world for the improvement of life conditions" (Crawford, 1978, p. 2). Therefore, in CP, learners are active participants in their learning process for purposes of empowerment to make the world a better place. Dewey (1916, 1938) had argued for a progressive and democratic view of education that promoted the common good, in which learners were taught problem solving skills and how to think critically, through a collaborative, active learning by doing manner to rise above their predicaments. Dewey opposed the role of a teacher as an authoritarian that was complemented by transmission-based teaching. He argued that this approach forced learners into the role of being passive receptors of knowledge, fronted by the teacher who transmitted information for them to memorize. Dewey referred to this scene metaphorically as the 'spectator theory' of education (1938) to stress his argument for the necessity for active learning.

The social improvement and learner empowerment aspects of CP are also rooted in the work of Paulo Freire, the Brazilian educator. In his seminal work, *Pedagogy of the Oppressed* (1970), Freire fought for an active learning educational process that would empower poor farmers in Brazil with the skills that would help

them overcome their marginalized and oppressed status. Freire felt a transformation of the educational system was needed to break up the status quo of society that reinforced a false belief unconsciously held by the oppressed that someday their oppressors would free them from their oppression. To overcome this passive state of affairs, Freire argued that the role of education should be to empower individuals through critical literacy training to become active learners with the necessary skills, beliefs and awareness that they alone could transform their social status by pulling themselves out of their state of oppression. An important concept found in Freire's *Pedagogy of the Oppressed* is that schooling is a microcosm of the wider society that it exists in. This view coincides again with Dewey that learning must be transformative, dynamic, meaningful and purposeful to reflect the realities students face outside of the classrooms in their communities and in the world.

At a first glance, it may appear that the political nature of CP to overcome the exploitation of the oppressed in society through social transformation may not seem applicable to Japan with a fairly stable middle class society. However, Ooiwa-Yoshizawa posits that even in Japan, people come from different backgrounds of society "…and the struggles within micro-relations of power always exist" (p.24). She adds CP can play an informative and perhaps a transformative role in Japanese education by having students become "… aware of diversity, witness, and experience an example of power-shifting, and hopefully take these ideas outside of the classroom" (p.25). Okano and Tsuchiya (1999) have also made the argument that two camps, *consensus theory* and *conflict theory*, exist in Japanese education. The former maintains the role of a status quo school culture is to foster stability and harmony within society. On the other hand, there is a conflicted view that the consensus stratum forces learners to accept the dominant ideology, rewarding certain students who fit the status quo model of education while marginalizing the others who do not fit into it.

To what degree consensus theory and conflict theory play a role in Japanese education, and how much of an impact they have are matters for another study. Nonetheless, there are guiding principles in CP that cohere with the direction that English Language Teaching (ELT) is taking in universities. In the past, at the outset of the Meiji era, the emphasis was placed on grammar translation to understand ideas, and technical knowledge coming out of the industrial revolution in the West. Although grammar translation methods focusing on accuracy of language structures are still largely prevalent among the practices of teachers because it offers an efficient recipe for teachers to follow and to train teachers as well (Williams & Bur-

den, 1997), it officially gave way to placing a focus on communicative approaches when the Ministry of Education began to call for and prioritize the development of students' communicative abilities in its Course of Study for English from the late 1990s. At present, due to the needs of the 21st century, grammar translation and development of communicative abilities focusing on linguistic fluency are now integrated with approaches conducive to CP, such as global literacy, developing critical awareness, critical thinking and active participation to improve matters in a globalized society.

Theoretical Framework of CP in Practice

A representation of the ideas of CP grounded in the work of Freire in an ELT classroom can be seen in an early study (Crawford, 1978, 90–91, 99; cited in Crookes, 1998, 320-321) taken from a list of 20 principles associated with it. Here are 10 relative to this paper:

a) the purpose of education is to develop critical thinking by presenting [students'] situation to them as a problem so that they can perceive, reflect and act on it;
b) the content of curriculum derives from the life situation of the learners as expressed in the themes of their reality;
c) dialogue forms the content of the educational situation;
d) the organization of curriculum recognizes the class as a social entity and resource;
e) the learners produce their own learning materials;
f) the task of planning is first to organize generative themes and second to organize subject matter as it relates to those themes;
g) the teacher participates as a learner among learners;
h) the teacher contributes his/her ideas, experiences, opinions, and perceptions to the dialogical process;
i) the teacher's function is one of posing problems;
j) the students possess the right to and power of decision making.

The list above provides conceptualizations of how CP can be applied in the classroom from the perspective of kinds of activities, learners' role and teachers' role. Design of activities can be seen in a), b), c) and d). Activities are organized and made relevant by making them meaningful to the learners' lived realities a), b). The co-constructed, learner empowerment nature of CP can be seen in c) and d) as an impetus for designing meaningful activities by acknowledging and giving voice to the

learners' social situations and experiences and knowledge that come from them. In e) and j) again the active and empowering role of learners in their learning process, which are strongly reflected in CP, are presented. Complementary to the kinds of activities and learners' roles are the co-constructed functions of teachers as facilitators and contributors of their knowledge and expertise.

The list importantly gives relevance to the concept of CP in practice at the classroom level. Crooke writes, "[A] sense of the real relevance of critical pedagogies is enhanced if they can be seen as practical, and if an understanding of what is additionally needed to put them into practice can be obtained" (2009, p.1). Following Crooke, where CP could be informative as a guiding framework for teachers, inquiry-based learning fills in for "what is additionally needed" as a teaching method to better inform how to implement CP theoretical framework in practice.

Inquiry-based Learning

The meaning of 'knowing' has shifted from being able to remember and repeat information to being able to find and use it." (National Research Council, 2007)

The methodological concept of IBL in education can be historically traced to the ancient Greek philosopher, Socrates. His approach to education was to engage learners through dialogue, specifically by posing probing questions that were disarmingly simple. In doing so, he was able to show how commonly held assumptions were either not logical or flawed. This discovery-based, inductive dialogic approach to learning, known today as the Socratic method, provided students with the discipline to actively work out or bring forth preconceived thoughts through a persistent and reflective process that deepened their understanding. (The etymology of the word education comes from the Latin form of educare, which means to bring out.) The method of dialogic inquiry used by Socrates and his forerunners, such as Dewey and Freire, is in direct contrast to the traditional transmission model of education that is still largely used today. Socrates, although a very wise scholar, purposefully did not teach from a traditionalist, authoritative position as *a sage on the stage*, but *as a guide on the side*. His method is much more relevant to the facilitative role of teachers in CP and IBL.

The historical roots of IBL are rooted in the educational views of Dewey (1938) because as discussed previously, he was opposed to traditional teaching approaches that required students to remember disconnected facts. He placed more value on the

knowing process, a dynamic discovery approach to learning that engaged students by providing them with opportunities to discover solutions to problems that they often formulated on their own rather than be spoon fed facts about topics that may have seemed disconnected to their lives. Dewey was strongly opposed to the authoritarian teaching approach using an overreliance on acquiring facts through transmission of knowledge from a teacher positioned in front of the classroom. He felt as alluded to previously that this style created a static, 'students as spectators' passive learning environment. Actually, a way to visualize IBL is to see it as a counter method to the traditional teacher centered approach, in which teachers, in a monological manner, transmit knowledge to learners, who become passive receptors of information. Freire in his criticism of the transmission-based pedagogies referred to this deposit of information process as the banking model of education approach (1970). Sawyer (2006) summarized assumptions made about that nature of learning that underpinned the transmission of knowledge approach:

- Knowledge is a collection of facts about the world and procedures for how to solve problems.
- The goal of schooling is to get these facts and procedures into the student's head.
- Teachers know these facts and procedures and their job is to transmit them to students.
- Simpler facts and procedures should be learned first.
- The way to determine the success of schooling is to test the students to see how many facts and procedures they have acquired. (p. 1)

The transmission model of education as presented above takes the view that the nature of learning is a linear and fixed process. Knowledge is presented to the students in pre-determined content, in which facts are to be memorized and recited. The teacher's role is to be knowledable of the facts and present them. Then, in a reductionist manner, break them down into manageable tasks, and transmit them to the learners through teacher-centered, one-way, monologic instruction. The measure of student retention of these facts is by discrete tests.

On the other hand, IBL in coherence with CP employs a problem-solving approach, which positions students in a deeper learning active role though dialogic inquiry as they actively take part in a learning process situated in finding solutions to problems. In its departure from transmission-based pedagogies, IBL focuses on

“learning that enables critical thinking, flexible problem solving, and the transfer of skills and use of knowledge in new situations” (Darling-Hammond, 2008, p. 2). The principles associated with the concept of ‘deep learning’ that the Ministry of Education in Japan supports, finds its home in IBL. Below is a chart showing the differences between deep learning and traditional, transmission model of instruction.

[Learning Knowledge Deeply]	[Traditional Practice]
Deep learning requires that learners relate new ideas and concepts to previous knowledge and experience.	Learners treat course material as unrelated to what they already know.
Deep learning requires that learners integrate their knowledge into interrelated conceptual systems.	Learners treat course material as disconnected bits of knowledge.
Deep learning requires that learners look for patterns and underlying principles.	Learners memorize facts and carry out procedures without understanding how or why.
Deep learning requires that learners evaluate new ideas and relate them to conclusions.	Learners have difficulty making sense of new ideas that are different from what they encountered in the textbook.
Deep learning requires that learners understand the process of dialogue through which knowledge is created and can examine the logic of an argument critically.	Learners treat facts and procedures as static knowledge, handed down from an all-knowing authority.
Deep learning requires that learners reflect on their own understanding and their own process of learning.	Learners memorize without reflecting on the purpose or on their own learning strategies.

(Sawyer, 2006, p. 4)

The comparison of IBL driven, deep learning approaches and traditional, transmission-pedagogies show the distinct differences between them. In the IBL deeper learning approach, students are active participants in the knowing process while critically reflecting on that process. They are constructing knowledge from past experi-

ences and creating knowledge through interacting with new ideas. The deep learning aspect illustrates the dynamic nature of learning that encapsulates IBL. The elements of deep learning also cohere with principles of CP, empowering the learners to play an active role in their learning process as opposed to passive roles listed in the traditional practices. Although deeper learning is aimed at the individual delving further into the learning process through constructing new knowledge from past notions and experiences, it is enhanced socially during interaction with others, collectively working together for a shared goal or purpose.

It is important to note that IBL can be seen as a social pedagogy and project-based learning (PBL) incorporates the social, collective, nature of IBL. PBL is most effective when it involves group learning to "explore meaningful problems, identifying what participants need to know in order to solve the problem, and coming up with strategies for [productive] solutions" (Barron & Darling-Hammond, 2008, p. 43). Students are presented with a challenging question or problem to solve; inquiry is sustained over several classes; reflection and revision are encouraged as part of the learning process, and students are given voices to their work by presenting their solutions, which materialize as products or outcomes of their work to other members in the class. PBL is thus student centered and importantly, the teacher performs the role as a facilitator (Buck Institute for Education, 2022).

Following Dewey's constructivist 'learning by doing' and Freire's learner empowerment views of education that involve students in projects that relate to their lived experiences, topics for PBL go beyond the classroom. They are based on real life problems that students face in the wider society. For example, as later shown in this study, giving students the project of solving a globalization supply chain problem can further develop critical thinking skills. As Barron and Darling-Hammond (2008) found in studies they documented that involving students in problem solving activities can produce robust logical thinking skills, coherent explanations and forming accurate hypotheses. Empowering students by giving them more agency in their learning process through solving real life problems and coupled with a sustained focus on discovering solutions to them, make PBL an important component of the CP theoretical framework and the IBL method.

Challenges of Implementing CP and IBL in the Classroom

This study has offered descriptions of CP and IBL as alternative pedagogies to meet the aims of courses that focus on develop students' critical thinking skills. However, the differing nature of alternative pedagogies discussed in this paper to the traditional

'banking deposit' transmission approaches are problematic; they present obstacles for implementation because the latter are deeply entrenched in educational culture of both students and teachers. As Ewald wrote when writing about implementing CP in language learning (2016),

> The learners do not usually participate as actors on the process but rather are acted upon while playing the role of an object. The students then fulfill their perceived part in the educational process, which has evolved through their experiences in the introductory language classroom. Therefore, at this early state of language learners' development, critical pedagogy and its applied practice need to be fostered in the minds and methods of students and teachers (p. 276).

The problem as stated above is that when implementing IBL, learners as students are not used to being in roles that transform them from passive to active agents in their learning process. Simultaneously, teachers are unfamiliar with performing as facilitators in their students' learning process and shedding their authoritative, teacher centered roles. For as Crawford (1978) stated "...their experiential history with a banking method interferes with their ability to implement problem-posing" (p. 171-172), and to address this problem. Crawford further added "...[T]he most effective means of training problem-posing teachers is to teach them by a problem-posing methodology and curriculum" (p. 171-172). What the author would like to add as a premise of this paper is that not only inclusion of courses that effect change in pedagogies of teachers are needed, but importantly, professional development of teachers aimed at helping them teach newly designed courses is essential. Therefore, for the alternative roles of both teachers and students to take place, a necessary step would be for teachers to reconceptualize their approaches by becoming familiar with CP and IBL to better inform their instruction. Reconceptualization of practice can occur through implementing appropriate professional development to prepare teachers to teach newly designed courses.

The Role of Professional Development

The concepts discussed in this paper of CP and IBL with using PBL offer alternative pedagogies for faculty to use when appropriate. These concepts represent areas of professional discourse that teachers should be aware of for implementing courses designed for furthering critical thinking skills. Freeman posited (1996) that when

teachers engage in professional discourse, it can lead to new understandings; they can reconceptualize their teaching approaches in ways that better inform what they do in the classroom. Moreover, teachers are more willing to adapt new changes in their instruction when they see it in practice (Guskey, 2002) or at least clearly see it modeled in a plausible way with workable techniques. An essential technique in the professional development of teachers to implement a course in a curriculum aimed at developing critical thinking skills using CP and IBL is scaffolding.

Scaffolding

Scaffolding first emerged through the work of Jerome Bruner, child developmental psychologist. Following the work of Vygotsky (1938) that learning development occurs through social interaction, Bruner based his research on the constructivist nature of learning. Through social interaction, learning is constructed and given meaning. In a study on elementary school age children (Wood, Bruner & Ross, 1976), it was found that when they were given a series of temporary supports to complete tasks with the help of adults i.e., parents or teachers, learning was enhanced. As the child was able to stand on his/her own accomplishing the tasks, the previous supports were removed. Bruner coined the term "scaffolding" as a metaphor from construction sites, in which workers remove scaffolded supports as they move on to the next step of the construction process.

The concept of scaffolding in education expanded from use in elementary school to the classroom at all levels and can be understood to mean that teaching itself is scaffolding (Tharp and Gallimore, 1988; also see Takegami, 2022, for a fuller treatment of the concept). The technique of scaffolding is a tool for teachers to use that helps students complete a task they could not do on their own. Through understanding the techniques of scaffolding, teachers become aware that in order for students to reach goals of a lesson that certain steps are needed to give the students adequate support to accomplish a task. Tharp and Gallimore renamed the teacher's role in scaffolding as 'assisting performance' in six areas: modeling, contingency management, feedback, instructing, questioning and cognitive structuring (1988).

- *Modeling* involves the teacher demonstrating aspects of a task that the students are being asked to do;
- *Contingency management* requires that the teacher understand the level of their learners and what they are capable of doing at each stage of a task;
- *Feedback* is giving students input on their work not only about what they

produced but also formatively giving support to what they can do in the next stage;

- *Instructing* entails giving clear and coherent directions throughout the various tasks the students are asked to do;
- *Questioning* means not only asking students assessment questions to test for comprehension, but also asking assisted, open-ended questions beyond the studied text that advance the learners thought processes.
- *Cognitive structuring* is perhaps the most significant aspect of scaffolding or assisting performance. Through cognitive structuring, the teacher gives students an organizational framework to guide students to complete a task. For example, giving students the framework for a 5-paragraph essay having three parts (Introduction, body [3 paragraphs] and conclusion) is an example.

Tharp and Gallimore's depiction of the various types of assisting student performance provide clear roles for teachers to carry out scaffolding. Browne, Hough, and Schwab (2009) saw the benefit of using scaffolding in their critical thinking course and wrote,

> …[S]caffolding, which, as both a pedagogical technique and a process, provides a structure for critical thinking… Integral to scaffolding is the social interaction between the learner and instructor. Together, they develop a mutual understanding of the activity and its goals, thereby sharing ownership of the process (p.115).

In turn, the teacher provides support for the students during the process using scaffolding techniques and procedures as outlined above. Moreover, the roles of assisting performance and the facilitating steps of scaffolding during the learning process and developing a mutual understanding and sharing ownership cohere with the principles of CP and IBL. Therefore, if teachers with the help of faculty professional development sessions can grasp the concept of scaffolding and incorporate it into their instruction, they will already be applying appropriate alternative pedagogies to advance the critical thinking skills of their students.

Below is an example the author used in her class and it is illustrative of how scaffolded tasks can be used as supports to help students reach the final project learning potential goal applying a CP theoretical framework, using an IBL method and

incorporating a PBL-based activity. In contrast to the transmission model that breaks down the delivery of instruction into reductive chunks for memorization, with each step of scaffolding, the activities further challenge learners to meet their learning potential. The use of the term *learning potential* infers the goals are above what the learner can do on their own at the outset of the task, but through the support of scaffolded steps are able to reach their learning potential. Vygotsky (1938) referred to this area of learning potential as the zone of proximal development (ZPD). A series of scaffolding activities are used to assist students to reach the PBL learning potential goal in step (8) to solve a stated problem (step 4). The steps are numbered bottom-up to illustrate the constructed steps needed to climb to reach the learning potential goal. The topic is about the globalization, which goes beyond the classroom because it a real-life concern of society; and therefore, for students as well. For example, there is a negative impact when one problem along the supply chain occurs and effects other parts. This is called the domino effect and can have severe repercussions, especially for developing countries. The topic to be explored is stated in Step 4 and some of the reading materials (Step 3) were partially generated from a course textbook on globalization, but the actual scaffolded steps are the author's.

Step 8 Learning potential goal to deeper understanding of the positive and negative impacts of globally made products.

Step 7 Students write an essay reflecting on what they learned from their inquiry and the inquiries of other students given in presentations.

Step 6 Computer slide or poster presentation showing negative and positive impacts of globally produced products.

(While groups are presenting, other members evaluate their performance with evaluation sheets to be used as feedback for presenting groups)

Step 5 Worksheet with categories for students to consider when organizing the information, they found on the topic. Students are reminded to use text and visuals in presentations.

- Catch Phrase (title)
- Show your reason to choose your global product.

- Describe your product and where the areas of the world are that contribute to its supply chain production.
- Present the positive and negative impacts you found.
- Describe what you learned that should be done to avoid the negative "domino" impact.
- Form concrete questions you could ask the audience to get positive conclusions from them about how to avoid the negative impacts.

Step 4 Problem: Under globalization, more and more products are made globally with components of a product made in different countries. There are positive and negative aspects of global production and supply chain management.

Step 3 Reading materials are given to students on the topic of globalization using the products of jeans and cell phones.

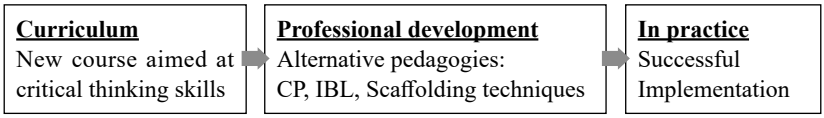
- References are also given to students to search for information. Students also are encouraged to search for information on their own.

Step 2 Mind mapping activity is given to generate students background knowledge, asking them to write anything they know about the topic globalization.

Step 1 A short dictation is given to introduce the topic of globalization:

- *There are no passengers on spaceship Earth; we are all the crew.*

The above scaffolded problem posing activity is grounded in ideas from CP, IBL and PBL. It would be useful to share with teachers. For if teachers are heavily influenced by the way they were taught, those who learned from transmission-based pedagogies would need to see models of alternative approaches to teaching. Moreover, the example itself illustrates the use of modeling and cognitive structuring, two of the six types of assisting performance that Tharp and Gallimore list. Introducing scaffolding techniques and the role it plays in IBL occur in the pedagogical professional development of faculty, which is significant to the successful implementation of newly designed courses as shown below.



Throughout this study, the intention of the author is to emphasize the need to consider professional development to prepare teachers to carry out appropriate pedagogies that complement the course design and content goals. The chart illustrates the flow of introducing a new course and having it implemented with success through adding the components of professional development and the significant role of scaffolding.

Conclusion

The premise of this study is that when syllabuses of courses are being designed to develop students 'critical thinking skills', there must be more agency given to learners, which implies that the flow of courses need to be more dynamic, interactive and problem-posing. These courses require changes in pedagogies of teachers, who should be given appropriate training to avoid a mismatch between traditional, transmission-type teaching approaches and those that require alternative pedagogies for new course designs and goals. Two particular areas of pedagogy, CP as a theoretical framework and IBL as a cohering method were discussed. The emphasis on learners' being active participants in their learning process, and giving them opportunities to do reflective thinking by working out problems to find solutions to real life problems through persistence are two juxtaposing areas of the representative pedagogies. In addition, two subcomponents, PBL and scaffolding were presented as a method and a tool to implement critical thinking courses in practice respectively. For course planners to see their intentions of newly designed courses to be carried out, they need to consider that appropriate teacher development must take place. Finally, teachers at all levels from elementary school to university need to be willing to make changes in their teaching approaches. Learning is dynamic and ever changing; therefore, teacher development should be an ongoing journey with meeting new challenges along the way. Confucius said, *Our greatest glory is not in never falling, but in rising every time we fall*. For Confucius, a great teacher, there was always room to fail upwards, to try, and we can infer, not to give up, but to be persistent, forever searching for better ways to teach in one's professional development journey as a teacher.

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