

11-2013

How To Enable Asian Teachers To Empower Students To Adopt Student-Centred Learning

Thanh Thi Hong Pham
School of Education, University of Queensland, Australia

Peter Renshaw
University of Queensland

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>



Part of the [Curriculum and Instruction Commons](#), and the [Teacher Education and Professional Development Commons](#)

Recommended Citation

Pham, T. T., & Renshaw, P. (2013). How To Enable Asian Teachers To Empower Students To Adopt Student-Centred Learning. *Australian Journal of Teacher Education*, 38(11). <https://doi.org/10.14221/ajte.2013v38n11.4>

This Journal Article is posted at Research Online.
<https://ro.ecu.edu.au/ajte/vol38/iss11/5>

How To Enable Asian Teachers To Empower Students To Adopt Student-Centred Learning

Thanh Thi Hong Pham
Peter Renshaw
University of Queensland

Abstract: Asian teachers' reluctance to empower students has been claimed to be an significant barrier preventing their students from practising student-centred learning. To promote student-centredness in Asian classrooms, this study aimed to develop strategies that could enable Asian teachers to delegate part of their authority to students. Twelve college teachers and six hundred and fifteen Vietnamese college students participated in this one-semester study. The results revealed that 'artificial' innovations such as forming group work and regularly questioning students in class did not mean empowering students in active learning. Students were only positioned and given opportunities to engage in proper student-centredness when Asian teachers were able to promote students' complex knowledge, minimize individual instruction but maximize group supervision, employing formative assessment and adopting complimentary verbal behaviours. The study strongly suggested that reformers need to take teachers' comments into consideration to design culturally appropriate strategies that could assist teachers to make real changes.

Introduction

The literature presents two main perspectives about Asian students' learning approaches. The first argues that Asian students are rote and/or surface learners (Ballard & Clanchy, 1994; Burns, 1991; Gow & Kember, 1990; Ramsden, 1992; Robertson, Line, Jones & Thomas, 2000; Samuelowicz, 1987). Freire (1993) describes this approach to learning as the "banking concept of education" which means that students are "receptacles" and "filled" with the "content of the teachers narration" (p. 1). Various researchers have argued that this approach to learning is not effective (Gow & Kember, 1990; Robertson, Line, Jones & Thomas, 2000). However, a number of studies have, in fact, shown that many Asian students are very successful at Western institutions and consistently outperform their Western counterparts on international examinations (Biggs, 1998; Jensen, Hunter, Sonnemann & Burns, 2012). Therefore, various researchers have questioned the stereotyped perception which sees Asian students as 'mindless machines' and claim that learning approaches adopted by Asian students should not be analysed and understood based on the logic of thought adopted by Westerners. Specifically, researchers supporting this second perspective (e.g., Biggs, 1998, 1996; Pratt, Kelly & Wong, 1999; Watkins, 1996; Renshaw & Volet, 1995; Tang, 1991; Gow & Kember, 1990) explain that when facing an academic task, Western and Asian students actually have the same primary goal of trying to reach understanding, but Asian students use memorisation, rehearsal and repetition as a means to achieve this goal in a distinct way – a concept which Westerners find difficult to understand. Although the use of repetition and memorisation strategies by Western students has been found to indicate a surface approach to learning, the use of these same strategies by Asian students does not necessarily indicate that they are adopting a surface approach (Renshaw &

Volet, 1995). The studies of Tang (1991) and Gow and Kember (1990) both found while Western students attempt to relate the new information to previous or other knowledge or to make sense of the new information in the light of personal or real life experiences, Asian learners only seem to understand information contained within the text, or supplied by the lecturer. They may not incorporate elaborative processes such as critically analysing the new information or relating it to other subject matter or to the real world. Unfortunately, it is lack of these critical thinking skills, in-depth conceptual understanding, real-world problem-solving abilities, and communication skills that limit Asian students in today's global economy (Darling-Hammond & Falk, 1997; Newmann & Associates, 1996; Shepard, 2000). Therefore, Asian countries have recently tried to change the traditional teacher-directed learning approach to student-centred learning practices such as active learning, collaborative learning, inquiry-based learning, cooperative learning, small group learning and project-based learning. This is because there is mounting evidence demonstrating that these learning practices can help students effectively develop the kind of knowledge and skills that Asian students often lack as aforementioned (Cooper, MacGregor, Smith & Robinson, 2000; Handelsman et al., 2004).

In attempting to achieve this change, every year Asian governments spend millions of dollars in staff development such as organising workshops and conferences to train teachers in student-centred practice. They have also funded and sent thousands of teachers overseas to learn about student-centredness. It is not an exaggeration to say that Asian teachers have been through the 'school wars' where, over the last two decades, they have faced constant demands to change not only what they are teaching but also how they are teaching. Noticeably, Asian educators and researchers tend to be interested in appropriating Western philosophies and practices instead of developing their own in the belief that this short cut could, according to Phuong-Mai (2008), enable them to skip the painfully long research stage and be able to quickly modernise the education systems.

Unfortunately, in spite of these continuous efforts, the image of Asian classrooms is still seen as passive, non-participative and teacher-dominated (Adamson, Kwan & Chan, 2000; Luke et al., 2005; Jackson, 2002; Jones, 2007). Resistance to change occurred mainly because Asian teachers often found it hard to accept Western-developed student-centred practices that possess many values contrasting with their deeply held beliefs of teaching (Phuong-Mai, 2008). For instance, the main philosophy of student-centredness is to encourage students' participatory and active learning (Dewey, 1963), empower students to think independently, construct their own knowledge and draw their own conclusions (Brooks & Brooks, 1993; Eggen & Kauchak, 2001; Holt & Kysilka, 2006; Kornell & Bjork, 2007) and develop students as critical thinkers (Shor, 1992; Brookfield, 1995). In contrast, Asian teachers are, to a large extent, still influenced by Confucian philosophy that constructs teachers as authority figures who can decide what and how students should learn. As a consequence, students should accept and follow teachers' authoritative knowledge (Brick, 1991; Jin & Cortazzi, 1995).

It is clear that Asian nations have modernised and westernised their economy and society significantly during the last century. However, there remains a significant historical Confucian legacy embedded in the mind-set of the peoples developed over many centuries. Therefore, Alt (1994) and Jia (2001) claim that many Confucian values still play dominant roles in Asian life today despite the striking inroads of modernisation and westernisation. Due to the deeply entrenched Confucian hierarchical cultures, Asian teachers are often explicitly and implicitly required to implement whatever educational reform is launched by the top whether they support it or not. This has led to the situation where many reforms have not been taken seriously by Asian teachers. Phuong-Mai (2008), for instance, found that despite continuous pressure for change in teaching, Vietnamese teachers tend to implement cooperative learning only on special occasions, for decoration, when their class has visitors (e.g., the headmaster, inspectors, their colleagues). This explains why only minor and short-

term changes in some classrooms are often seen but innovations that result in major and long-lasting change within the school organisation are rarely evident.

The ineffectiveness of many educational reforms in Asian countries during the last decade clearly demonstrates that simply importing and imposing a new practice on Asian teachers does not guarantee success. Reformers need to take teachers' voices, especially their cultural beliefs in teaching and learning into consideration. This is a 'need' because teaching and learning processes, according to Renshaw (2002), cannot be analysed in isolation from the values that are privileged in a culture at any particular historical moment. Unfortunately, the current trends in educational reforms in Asian countries reveal that educators and researchers tend to be interested only in the outcomes but do not pay attention to and take sufficient care of the impact of local cultures. This is why Ng (2009) strongly urges that reform in the Asia Pacific region (Asian nations included) must employ a more participatory and negotiated approach that allows voices of different stakeholders to be raised.

To improve the present situation, this study aimed to explore how to take the voices of Asian college teachers into consideration in order to develop strategies for them to promote student-centredness effectively. The study was guided by two main questions:

1. How effectively do Asian college teachers implement student-centred practice?
2. What strategies assist Asian college teachers to implement student-centred practice effectively?

Methodology

Design Research

The study was conducted within a design-based research methodology. Design research addresses both theory and practice – it can be summarised as an approach to educational research that regards theory as fundamental to understanding and improving practice in local contexts. It focuses on consideration of local unique contexts and treats the change process, not as a technical challenge but as a central part of the research process that needs to be investigated collaboratively with participants through cycles of planning, implementation, collection of evidence and revision. The development of the strategies in the present study was based on a thoughtful consideration of various factors including heritages of Confucian cultures, institutional constraints, and especially Asian teachers' beliefs about teaching and learning. These strategies were, therefore, not simply theoretical but demonstrably applicable.

Participants

The study involved twelve college teachers from two universities in Vietnam. The participating teachers had 1-10 years of teaching experience. All the teachers were volunteers and many regarded the opportunity to participate in the study as a way of extending their professional knowledge by learning new skills. Twelve classes consisting of six hundred and fifteen second-year students (males = 306, females = 309; mean age for males = 18.86 years and mean age for females = 18.68 years) also participated in the study. These students were from the classes of these twelve teachers. At the beginning of the study, all participants were given a consent form and explained that participation was voluntary and anonymous. Data from all sources were de-identified and the analysis was only based on aggregated data.

Context

The courses used in the study had been traditionally taught in a similar format for many years. Lectures were delivered in a standard lecture hall with slides and each student was provided with a hard copy. Usually teachers only had enough time to complete the required content of the lessons. Therefore, students' questions were not encouraged and were answered by either repeating the lecture notes or deflecting the question to a future time. In order to encourage the participating teachers to promote student-centredness, the researchers introduced them to, and then trained them in the application of different student-centred learning techniques. The study was implemented in two phases, as detailed below.

Phase 1

At the start of the intervention, a one-day workshop was organised to train all teacher participants with skills to implement basic student-centred activities such as forming small groups (size and composition), setting tasks and expectations for student behaviours, clarifying individual and group responsibilities, monitoring both the process and outcomes of the group experience and how the teachers should perform their roles in student-centred learning classes. Depending on the nature of each lesson, the teachers could intersperse lecturing with different student-centred activities. The teachers were introduced to and instructed in the use of the main student-centred activities as follows.

- **Multiple-choice tests:** The teachers prepared short multiple-choice tests that covered content of and beyond each lesson. The students were asked to work in small groups to complete the tests after each part of the lesson or at the end of each lesson. This aimed to test their conceptual understanding.
- **Questioning formulation strategy:** Whenever the students worked on the readings, they were required to work in small groups. Group members helped each other to understand the readings not simply by summarising a set of facts given in the text but by formulating a set of questions about the text. The students were encouraged to formulate as many clear questions as possible including both questions from within the text and questions that were related to the text but were not discussed in it.
- **In-class questions:** The teachers posed a more general question to the class and asked the students to discuss this with their group members before the teachers solicited responses from several groups.
- **Journal article discussion:** On some occasions, the teachers devoted an entire class period to discussing a recent relevant journal article, which the teachers had provided for the students to read prior to class with a specific set of questions to answer.
- **Case studies:** After covering the key concepts of the chapter, the students read cases from the textbook, then worked in their groups to discuss the case using the questions provided. This was followed by a whole-class discussion.
- **Student presentation with class discussion:** The students prepared a term paper in groups, then gave a class presentation. The students were encouraged to foster a class discussion as 20% or 30% of their presentation assessment depended on their class discussion stimulating good questions as well as answers.

Data Collection Methods

Audiotapes

The teachers and two focus groups in each class were audio-taped for the full class period three times during the second half of each phase. This aimed to identify how the teachers interacted with their students and how students interacted with each other and with the teachers during lessons.

Observations

Observations were undertaken of all participating teachers and the two focus groups in each class. The teachers and the focus groups were observed once per week by the researcher and an assistant for a period of 30 minutes. Two groups were chosen from each classroom for audiotapes and observations as Gillies (2006) has shown that it is possible to obtain a representative sample of the students' discourse across classes by sampling the discussions of two groups from each class.

Analysis

Audiotapes

Students' Verbal Behaviours

The students' verbal behaviours were identified on a schedule adapted from Cohen and Intili (1982). The schedule identified eight categories of the students' verbal behaviours: task-related talk (i.e., talking about their work; responding to the teacher's question); non-task related talk (i.e., talking about their families); engages with others around the topic (i.e., affirming another student's response); interrupts (i.e., using negative disruption to the discussion); short responses (i.e., using unelaborated responses); elaborations (i.e., providing detailed help including reasons and justifications); questions (i.e., asking each other tentative, challenging, open and closed questions); and directions (i.e., guiding each other's new ideas). Students' verbal behaviours were coded according to frequency across the recorded group session. A total of 96 h of students' verbal behaviours was collected across the two phases. An assistant, who was experienced in coding discourse, coded a common 6 h of students' verbal behaviours and inter-rater agreement was 100%.

Teachers' Verbal Behaviours

The teachers' verbal behaviours were identified based on a schedule adapted from Cohen and Intili (1982) but modified to suit the purpose of this study. The schedule identified five categories of the teachers' verbal behaviours including demonstrating control (i.e., instructing and directing); extending the activities (i.e., explaining the current lessons and giving comments on students' previous work and skills); disciplining (i.e., controlling students' behaviours, reprimands directed at students); mediating learning (i.e., using questions to challenge and scaffold children's learning); encouraging (i.e., praising students). These categories of verbal behaviours were coded according to frequency across recorded class session and represent 100% of each teacher's talk during that session. A total of 36 h of teachers' verbal behaviours was taped across the two phases. The same assistant (as mentioned previously) coded a common 3 h of audiotape. When there were any coding disagreements, the assistant and the researchers reviewed their coding until there was 100% agreement.

Observations

Student Observations

Observations were only applied to two focus groups in each class. The observation schedule was adapted from Gillies and Haynes (2011) to measure Behaviour States. The schedule contained four Behaviour State categories: working with other students (i.e., talking with or listening to other students); individual on-task behaviour (i.e., working alone on task); off-task behaviour (i.e., not either participating in group activities or working individually); and waiting for the teacher (i.e., either raising hands or calling the teacher for help). These behaviour patterns were coded for frequency and the frequency was converted into percentage.

Teacher Observations

The observations aimed to count the number of different individuals contacted by each teacher during each 30-min period and the language used by the teachers in speaking to those individuals.

Results

Audiotapes

Teachers' verbal behaviours were coded and the frequency of each type of verbal interaction is presented in Table 1.

Behaviours	n = 12
	Total
1. Demonstrating control	28
2. Extending the activities	8
3. Disciplining	15
4. Mediating learning	22
5. Encouraging	14

Table 1: Frequency of teachers' verbal behaviours in Phase 1

Similarly, verbal behaviours of the students were coded and the frequency of each type of verbal interaction is presented in Table 2.

Behaviours	n = 120
	Frequency
1. Task-related talk	74
2. Non-task related talk	29
3. Engages with others around the topic	59
4. Interrupts	38
5. Short responses	29
6. Elaborations	19
7. Questions	21
8. Directions	27

Table 2: Frequency of the students' verbal interactions in the focus groups in Phase 1

Observations

Behaviour patterns of the students were coded for frequency and the frequency was converted into percentage as presented in Table 3.

Behaviours	n = 120
Working with other students	45%
Individual on-task behaviours	30%
Off-task behaviours	11%
Waiting for teacher	14%

Table 3: Percentage of behaviour states of the students in the focus groups in Phase 1

More Autonomy

On the surface, it was, in general, seen that the teachers tried to employ different discussion practices and active tasks. For instance, in each lesson the students were asked to do a range of group practices such as gauging each other's understanding of the readings via a set of questions and discussing how to formulate the questions correctly and how to find information to answer peers' questions. It appeared that these activities helped the students work cooperatively with each other well because the observation findings showed that the students had 45% of their behaviour states classified as "working with other students". This was the highest percentage compared to other states. The teachers also tried to reduce lecturing by interspersing different techniques to mediate the students' learning. For instance, instead of lecturing the whole class, the teachers sometimes asked the groups to take a turn to present the readings in front of the class as a formal presentation, then challenged the presenting group by posing complex questions. When the presenting groups could not answer questions raised by other groups, the teachers jumped in to help by giving the presenters useful hints to find the answers. After each part of the lesson, the teachers reinforced the students' understandings by summarising key ideas. The teachers were involved in many mediating learning behaviours as shown in the audiotaped findings which revealed that the teachers had 22 behaviours classified as mediating the students' learning. This was the second highest number compared to other behaviours.

However, after undertaking a deeper investigation into all verbal interactions and behaviours, the researcher found that in Phase 1 student-centredness had not actually been adopted and applied appropriately by both the teachers and students. There were two points

in particular which demonstrated this argument. The first was that the teachers had not truly changed their authoritative teaching style and empowered students to engage in the learning process as active and independent learners. The second was that the teachers did not extend the students' activities and promote higher-order knowledge.

The Teachers Still Performed Authoritative Teaching Styles

There was, in fact, no dramatic change in teaching and learning activities. It was still textbook-based and the teachers dominated the process. The teachers followed the same format in every lesson: explaining and illustrating the new lessons, setting exercises, leading the students to complete the tasks in the textbook, guiding the pace and content of each activity and finishing lessons. When working in groups, the students were often required to review those sections that they had learned and had been explained by the teachers with the main purpose of helping them memorise the text better. The teachers and students did not intend to use student-centred learning activities as a tool to promote the students' creative and high-level knowledge. This contrasts with philosophies and principles of student-centredness that aim to encourage students to develop their own knowledge, and encourage them to become creative (Eggen & Kauchak, 2001; Holt & Kysilka, 2006; Kornell & Bjork, 2007).

Furthermore, in many cases the teachers thought they did use student-centred practice to gauge the students' deep understanding but they actually did not. The scenario below was an example.

Scenario 1: In one lesson, Mrs Lan, a history teacher, was talking about the topic "Problems of the overwhelmed importation of products made in China in Vietnam". She told the class "These days we see products made in China everywhere in Vietnam. This phenomenon has both advantages and disadvantages. Discuss with your group and list three advantages and three disadvantages. Then, explain why?" In this case, the teacher thought the students were asked to develop their complex knowledge by answering the question "Explain why?". However, this question actually did not adequately promote students' inquiry learning because all groups had almost similar reasons. They all listed three main advantages and the reasons as 'cheap' (because Chinese products are often half price compared to Vietnamese ones), 'attractive' (because Chinese products are nicely designed and colourful), and 'convenient' (because Chinese products can be bought anywhere). Three main disadvantages of Chinese products and the reasons were: (1) Vietnamese products sell slowly because the Vietnamese tend to use goods made in China; (2) The Vietnamese are betrayed because of low quality Chinese products; and (3) Many Chinese foods are unhealthy. After the first two or three groups presented their products, the other groups appeared bored and simply said "We had similar ideas". Then, the teacher moved to the next topic. Obviously, the teacher thought she was using inquiry-based learning but she actually only stopped at scaffolding the surface level because the case given was not challenging enough to encourage the students to adopt an inquiry thinking process. The students were implicitly 'guided' to give nearly uniform answers.

The domination of the teachers in the learning process was also reflected by the high number of instructing and directing verbal behaviours performed by the teachers (28 behaviours – this is the highest number compared to other verbal behaviours). Compared to "encouraging verbal behaviours", surprisingly the teachers used instructing and directing verbal behaviours at twice the frequency than they praised and expressed spontaneous emotion to encourage the students. This finding agreed with the results of a study conducted by Gillies (2004a) who found that when teachers engaged in a large number of lecturing and disciplinary verbal behaviours, they often used fewer encouraging and mediated-learning behaviours and vice versa.

When observing in the class the researchers found that, because the teachers were the only ones who taught new knowledge and chose the right answer, the students seemed very dependent on the teachers whenever they faced a problem. They always waited for the teachers to come over to confirm their choice of difficult multiple-choice questions, to be a referee if their group had conflicts, to evaluate information if some group members presented new information and to model the solving process for a problem. This was why the observation findings show that 12% of the students' behaviour patterns involved "waiting for teacher" behaviours. The hierarchical authority that the teachers exerted over the students was also seen through the way the teachers responded to the students. Whenever the students raised questions or expressed their own opinions, the teachers seemed willing to listen but rarely encouraged the students to explore the answers themselves. The teachers often adopted a variety of strategies to get the students to follow their decisions. For instance, when the teachers talked, the students mandatorily stopped all they were doing to listen to the teachers. When the students expressed their own ideas or offered a new way to solve a problem, the teachers listened but then further advised them to follow the standard formats that would be used in exams.

Below is an exemplary conversation between the teacher and a student. Although the teacher complemented the students on working out a creative strategy, she eventually steered the student to the conventional technique to deal with the exam.

The teacher (T): Would you think the text could be understood more easily if they are summarised via dots?

The student (S): I've tried to present it by a graphic that could show the numbers very nicely and clearly. You can see.

T: Fantastic: I never thought that you could find this way. However, if you take an exam, you need to think about whether you have enough time to draw a graphic.

In summary, although the teachers did appear to promote the students' autonomy, they were still the main instructor who decided almost all learning activities in the class. The students did not have much power when choosing what they liked or disliked doing. Such an authoritative teaching style prevented the students from actively engaging in the student-centred learning process significantly. Prince (2004) and Di Vesta and Smith (1979) claim that the defining feature of active student-centredness is to promote thoughtful engagement on the part of the student and enable students to develop deep understanding of what is learned; simply introducing activities into the classroom and requiring students to practise does not mean active student-centred learning has been implemented. If the students were limited to only learning facts and low-level knowledge, they could do this, even do better, in Asian traditional teacher-centred classes because one of the main purposes of teacher-domination lecturing is to train students with skills of mastering the content and recalling facts (Pratt, 1992).

The teachers did not extend the students' activities and promote high-level knowledge

One of the main principles of student-centredness is to give students opportunities to teach and share information with each other, which enables them to not only review the current lesson but also achieve deeper understanding and gain new knowledge (Alexander, Daffinrud, Lewis & Millar, 1995; Biggs, 1999; Dole & Sinatra, 1998). Johnson and Johnson (1999) even claim that cooperative learners can exceed the teacher's knowledge if they work in cooperative learning groups effectively. Therefore, the researcher expected that the teachers could stimulate the students to develop complex knowledge by extending their activities. This could be achieved by challenging students with argumentative, comparative and analytic questions or scaffolding their ideas by reminding them about prior knowledge or simplifying tasks and then encouraging them to develop explanations of and connections

between new and previous information. To achieve this expectation, before each lesson the researcher and the teachers worked together to prepare a list of complex questions which would provoke further inquiry by the students.

However, the result showed that the teachers rarely used these comprehensive and extended questions to scaffold the students' ideas. Specifically, the teachers had only 8 verbal behaviours classified as "extending the activities". This was the lowest number compared to other verbal behaviours. This may have happened because all teachers spent a lot of time moving around the classroom to answer individual students' questions and solve group conflicts. Whenever the students had a problem (i.e. getting stuck with a question, being confused about the ideas presented by their partners), they raised their hand to call the teacher. To respond to all students' inquiries, the teachers often responded to each student very abruptly and quickly by telling them facts or directions but not challenging them with complicated questions. After reviewing the audiotape transcript of a lesson, the researcher found that half of the interactions between the teachers and students were over in less than 10 seconds. To have enough time to answer the students' questions, the teachers also rarely followed the original procedures of student-centred activities properly. Instead, they tended to either override or simplify time-consuming activities. For instance, they rarely gave groups enough time to have long and thoughtful discussions.

The teachers explained they needed to limit the time spent on students' group work and questions because they must complete the curriculum to prepare the students for upcoming exams. No matter what and how the teachers taught, they needed to complete the textbook because all exams were based on these textbooks. There was no occasion during the lessons observed where the students had any choice of the content, and most of their work, including topics for group practice, was drawn directly from the textbooks that are published by the Ministry of Education and Training. Asian teachers' reputations are often measured by their students' success on textbook-based exams (Pong-Wing-Yan & Chow, 2002; Phuong-Mai, 2008; Gow & Kember, 1990; Morris, 1985). Therefore, to ensure everyone understood the lessons accurately and could provide the correct answers on the exam, the teacher found that a quick way was a 'right answer' approach. This explained why they often quickly told the students the right answers instead of allowing them to work it out for themselves. It seems that the learning concepts in Asian nations are still contained in the Confucian classics, which are "studied, memorized, and then expounded at the examinations" (Hu, 1960, p. 412).

To summarise, in Phase 1 although student-centred activities were brought to the classes, the teachers and students had not actually been involved in these practices effectively. To improve this situation, at the start of Phase 2 the researchers organised the second workshop. The main purpose of the workshop was to create opportunities for the teachers to discuss the problems facing them in Phase 1 and develop ways to work out strategies to solve these problems. The researchers also brought to the workshop comments that the teachers and students raised in informal conversations during the course. In general, the main issues considered were how to enable the students to be more engaged in the learning process and how to develop their higher-order knowledge. Both the researchers and the teachers discussed with each other thoughtfully and endeavoured to make use of each other's strengths. Specifically, the researchers introduced the teachers to effective strategies reported in the literature. In return, the teachers worked out solutions that they thought were feasible in a real-life context based on their teaching experience. The researchers specifically pointed out and analysed situations in which the teachers had not incorporated student-centred learning techniques effectively in Phase 1 and discussed with the teachers how to deal with similar situations Phase 2 more democratically. To ensure the teachers could apply the change, the researchers used the teachers attending this workshop as a real class and asked them to practise newly-developed techniques. In sum, the main strategies developed and brought to Phase 2 are:

1. To promote the students' deep and complex knowledge, the teachers tried to limit giving direct and detailed instruction but maximise scaffolding the students' responses and facilitating group discussions. To make this change, the teachers needed to move from supervising individuals to instructing groups because such a movement would give them more time to create tasks and activities that could gauge the students' complicated knowledge. The researchers employed this logic because, as discussed in Phase 1, the teachers tended to design only those tasks and activities that mainly required factual and recalled knowledge because they were developed easily and quickly. In their Phase 1 observations, the researchers found that the teachers wasted a lot of time supervising the students individually. The analysis of audiotaped lessons reported that the teachers rarely used "các em" (plural noun 'you') but mostly used "em" (single noun 'you') when responding to the students. This indicates that the majority of their interactions took place with individual students but not with a group.

2. To give the teachers more time to develop activities that could promote the students' higher-order knowledge, the students were instructed to develop complex questions by themselves to challenge each other instead of passively receiving these questions from the teachers as happened in Phase 1. Specifically, they were asked to apply the Think-Tel Why (King, 1997) with five types of questions including review questions, probing questions, hint questions, intelligent-thinking questions, and self-monitoring as they took turns questioning each other during group discussion. This strategy also aimed to assist the students to develop their argumentative, analytic and comparative knowledge and become more active in the learning process.

3. The students were not allowed to approach the teachers whenever they wanted. They were told that they first needed to engage in thoughtful discussion with each other in their group on any topic given. If the whole group could not solve the problem, a group member (working as a secretary) took note of the problem. Then when the teacher came over to help, the teacher randomly appointed a group member to present the problem out loud. This requires all group members to share information equally and work with each other wholeheartedly to ensure that everyone understood the group discussions and problems. This ensures that any randomly-called member could be able to answer the teacher's questions. This practice requires the students to study independent of the teacher. This technique also helped give less able students a greater opportunity to improve their understanding by actively engaging in group discussions. This idea was supported by Vygotsky (1978) who claims that participating in social interaction only, via watching or observing passively, does not help improve cognition as much as actively representing thinking/ideas in language. The crucial step which students need to take in order to develop independent intellectual functioning is to use speech as a means of making sense of experiences with other participants (Renshaw, 1992).

4. To encourage and condition the students to adopt more active and deeper learning practices, assessment practice was also redesigned. Specifically, instead of using only one end-semester assessment as initially planned, formative assessment practices like short essays and group projects were incorporated during Phase 2. These practices aimed to gauge the understanding level of the students, and also to provide opportunities for discussion and peer instruction. Importantly, these formative assessment practices were seen as preparation for the final exam because their content was closely related to what would be tested. Therefore, it was expected that the students would perform on the final exam better after they practised these formative assessment practices. In this way the teachers and students were encouraged to see assessment as a tool to promote on-going learning but not a method to evaluate the final outcomes.

5. Last but not least, the teachers were also encouraged to use more complimentary verbal behaviours. This was considered necessary because Turner and Patrick (2004) emphasised that teachers' encouragement and support had a great influence on students'

patterns of participation. In the Asian context, this type of verbal behaviour could have an even stronger effect on students because there was evidence showing that Asian students are very much influenced by teachers' appraisals. For instance, Niles (1995) claims that social praise might be the most potent force that could motivate Asian students to maximise their efforts to achieve better outcomes. This implies that to encourage students to be more involved in their own learning process, teachers should use verbal praises frequently. Ironically, in Phase 1 the teachers used only 14 encouraging verbal behaviours. This was the second smallest number compared to other types of verbal behaviours. Therefore, in Phase 2 the teachers were advised to compliment the students more frequently. If the teachers provided a high level of complimentary appreciation of the student's self-learning work, they would also be willingly delegating part of their authority to the student. This is a crucial prerequisite to promoting student-centredness

Phase 2

Procedures

Entering Phase 2, all teaching and learning activities were designed in the same format used in Phase 1 but involved changes as discussed above.

Results

Audiotapes

Verbal behaviours of the teachers were coded and the frequency of each type of these verbal interactions is presented in Table 5.6.

Behaviours	n = 12
	Total
1. Demonstrating control	18
2. Extending the activities	28
3. Disciplining	12
4. Mediating learning	35
5. Encouraging	22

Table 4: Frequency of teachers' verbal behaviours in Phase 2

Verbal behaviours of the students were coded and the frequency of each type of these verbal interactions is presented in Table 5.7.

	n = 120
	Frequency
Behaviours	
1. Task-related talk	70
2. Non-task related talk	20
3. Engages with others around the topic	77
4. Interrupts	25
5. Short responses	23
6. Elaborations	27
7. Questions	18
8. Directions	20

Table 5. Frequency of the students' verbal interactions in the focus groups in Phase 2

Observations

The students' behaviour patterns were coded for frequency and the frequency was converted into percentage and is presented in Table 5.8.

Behaviours	n = 120
Working with other students	70%
Individual on-task behaviours	8%
Off-task behaviours	16%
Waiting for teacher	6%

Table 6. Percentage of behaviour states of the students in the focus groups in Phase 2

Changes on the Teachers' Side

In general, the pattern of interactions that emerged made it clear the teachers engaged in more verbal behaviours which are generally regarded as helpful and supportive of group endeavours than they did in Phase 1. They had more time to listen and observe the students' discussions and used various techniques to extend their activities. The teachers paid particular attention to connecting the content of the current and previous lessons, challenging the students' questions to enable them to find their own answers, and giving the students hints to develop and challenge each other with complicated questions. It was a surprise to see a dramatic increase in "Extending the activities" verbal behaviours that the teachers performed in Phase 2 (28 in Phase 2 compared to 8 in Phase 1). Similarly, the teachers' mediating learning and encouraging verbal behaviours also increased markedly in Phase 2 (from 22 in Phase 1 to 35 in Phase 2 and from 14 in Phase 1 to 22 in Phase 2, respectively). It was very nice to see that the teachers created a very different studying atmosphere. They complimented the students very frequently by encouraging words that were never or rarely seen in Phase 1. Some samples of these words were "*Good. What you are saying shows that you've got what I said*", "*Yeah. That's what I am looking for*", "*You see you've discovered a couple of things that the author figuratively implies and only smart readers could understand*". Galton et al. (1999) and Mercer et al. (1999) claim that the use of such language is important for learning because it enables ways of scaffolding dialogues so that students learn to engage with others on the issues at hand. By contrast, the teachers' verbal behaviours involved fewer controlling and disciplining verbal behaviours (18 in Phase 2 compared to 28 in Phase 1 and 12 in Phase

2 compared to 15 in Phase 1, respectively). The researchers also found that when the teachers used mediating-learning and encouraging verbal behaviours, their manner and tone became very soft, friendly and personal. The teachers often smiled and joked with the students when listening to their answers.

Importantly, in Phase 2 the observations provided some indications that the teachers were willing to empower the students to develop their organisational ability. They no longer ran around to manage group conflicts and answer the students' questions. Instead, before group tasks, the students were clearly instructed in what they needed to do and the teachers only examined the final product provided by the group leader. The researchers had several informal talks with the teachers during the lesson breaks and knew that the teachers had started to realise that to gauge the students' high-level cognition, they should only focus on facilitating the students' understanding and reduce their involvement in such tasks as controlling groups and dividing and assigning tasks to group members.

In general, although the students were still mainly required to follow the tasks designed in the textbook instead of choosing their own, changes in the teachers' practices did appear to promote the students' autonomy. Littlewood (1999) claims that by this method the teacher has given students a sense of "reactive autonomy" that "does not create its own directions but, once a direction has been initiated, enables learners to organise their resources autonomously in order to reach their goal" (p. 75). Interestingly, to encourage the students to improve each other's work, the teachers strongly encouraged critical judgments. They even gave bonus marks to those individuals and groups who provided most high-quality feedback. This action reflected a significantly radical change because as Pratt (1992) and Saito and Fujita (2004) claim that criticism is traditionally not encouraged in Asian classes.

Changes on the Students' Side

It was interesting to see that the students' language patterns also underwent significant change. Their verbal behaviours involved fewer behaviours that are seen as unsupportive of group discussions. Specifically, the students reduced questioning, short responses and interrupting verbal behaviours (from 21, 29 and 38 in Phase 1 to 18, 23 and 25 in Phase 2, respectively). In contrast, they increased elaborative verbal behaviours from 19 in Phase 1 to 29 in Phase 2. These behaviours are generally seen as evidence reflecting effective and productive interactions among group members. It appeared that the change in the students' verbal behaviours might have partially emerged from the types of reciprocal interactions that the teachers adopted when interacting with the students. Palinscar and Brown (1988), Palinscar and Herrenkohl (2002) and Gillies (2006) noted that when teachers use strategies and questions to encourage students to develop deep understandings about an issue, students will need to use complex knowledge like argumentative, elaborative and analytic skills to find the answer. According to the authors, the teachers' mediated-learning interactions may have triggered similar responses in the students so they learned through social modelling to provide more explanations and detailed responses to other students' requests for help or their perceived need for help.

The observations also revealed that there was a marked change in the students' behaviours reflecting that the students used each other as a studying source rather than entirely depending on the teachers. In detail, they had a marked increase in behaviours classified as "Working with other students" (from 45% in Phase 1 to 70% in Phase 2). In contrast, "Individual on-task behaviours" categories decreased (from 23% in Phase 1 to 8% in Phase 2). Surprisingly, the regulation forcing students to work with each other before seeking assistance from the teachers seemed to have a very influential effect on the students as, compared to Phase 1, the students engaged in only half the number of "Waiting for teacher" behaviours (6% in Phase 2 compared to 12% in Phase 1). It was noted that the students' off-

task behaviours in this phase slightly increased (16% in Phase 2 compared to 11% in Phase 1). This increase may have occurred because in this phase the students were not allowed to approach the teachers for help as an individual but needed to do this as a representative of his/her group. Therefore, there were many moments when some groups could not work out their joint agreement, they started having some chats as a short rest while waiting for the teacher.

Discussion and Conclusion

To implement student-centredness in Asian classrooms successfully, there must be changes at different levels. Of ultimate importance, the teachers' willingness and ability to change their teaching conceptions and classroom practices in order to adopt a student-centred approach is crucial in mediation and bringing about success in constructivist learning reform. This is because, as Richards (1998) claims, what teachers think and believe determines all the activities and actions they perform in the classroom. Hence, to promote student-centredness, the key issue that reformers need to address is how to assist Asian teachers to shift their beliefs and conceptions from seeing learning as a process of regurgitating information given in class, on tests, quizzes and from what the teacher says (Freire, 1993) to viewing learning as a process of promoting critical thinking and emancipatory learning. Brookfields (1995) explains that when teachers are able to make this shift, they will encourage students to explore new understanding and find their own way to control their own learning process. This change is crucially important to developing deep learning. Sharing a similar point of view, Smyth (1993) claims that to make the change, teachers should and need to engage in reflective practice. This is a process where teachers empower students to give their voice to the reasons that lie behind what they do.

Beliefs are comparatively static, and the core of these beliefs can be difficult to change, but not impossible (Nespor, 1987; Peacock, 2001; Raths, 2001). An effective approach that could help and enable teachers to change their thoughts and actions in teaching and learning, according to Freeman (1999), is to participate in teacher-training courses. Freeman found that teachers' instructions can be influenced by teaching methods learnt through their teacher-training course. This occurs because teaching is not simply following a recipe. When teachers are introduced to a new method, they may have different views on a method and consequently make necessary changes to improve their teaching. This view is compatible with the concepts described in Vygotsky's cultural-historical theory. Brookfields (2011), for instance, argues that both teachers and students can be taught to become critical thinkers when they are instructed with techniques of how to achieve this. In his book, Brookfields has also provided various techniques to train learners to become critical thinkers in various disciplines.

In Vietnam and many other Asian countries, assisting teachers to know about and becoming familiar with student-centredness in training workshops is an optimal method because instructions and guidelines for the use of student-centredness in these countries are often lacking in both quantity and quality (Phuong-Mai, 2008). However, as aforementioned elsewhere in this paper, despite the huge efforts Asian governments have put into training their teaching staff at hundreds of workshops, the traditional teacher-centredness in Asian classrooms has not changed much.

The findings of the present study revealed that simply placing teachers in workshops, teaching them the new practice and then requiring them to transfer it to their students did not guarantee any change because what is said in papers is often inadequate in preparing the teachers for the reality. Training workshops should not be organised only once at the beginning of each intervention to teach the teachers the new practice. More effectively, several workshops need to be held during the implementation process to create opportunities

for teachers to speak out and discuss difficulties facing them. Then, techniques that could help teachers adjust their practices in a culturally appropriate way must be developed. This aims to keep teachers interested in carrying out the reform.

For instance, in Phase 1 although the participating teachers were required, and agreed, to reduce their lecturing and adopt student-centred learning practices, they did not actually change their role as the authoritative knowledge provider. This problem occurred because the teachers were unable to change their traditional concepts that the students were far from self-sufficient in their learning and that they needed to depend upon the teachers in their quest for knowledge. Consequently, the teachers tried to “spoon-feed” the students with the right answers by busily running about the class to answer every single question that the students raised. If the teachers were consistently required to change this authoritative supervision habit, they were very likely to withdraw from the study (meaning reject the reform). To avoid this problem from happening, the technique in Phase 2 was to assist the teachers to move from supervising individuals to facilitating groups. The teachers were also assured that they could engage in making a decision if group members could not reach a consensus (this technique showed the teachers that all their power had not been removed). The results obtained in Phase 2 demonstrated that the teachers were happy with this adjustment and subsequently delegated more authority to the students.

Similarly, when the teachers were asked to apply and develop complicated activities to promote the students’ high-level knowledge, they did not comply because they realised this task was not mandatory but was very time-consuming. From their point of view, it was more important to focus on completing the curriculum to help their students deal with coming exams. To solve this problem, the researchers provided precise instruction to the teachers, providing techniques to create complex questions which the students could use within their group to gauge their deep knowledge. This technique could give the teachers more time so that they could develop comprehensive tasks to extend the students’ activities. Bloom’s Taxonomy indicates that this technique provided the students with a good opportunity to practice and develop their complicated knowledge. Unfortunately, organising workshops to train teachers or help them remove barriers emerging during the implementation process is often difficult because this activity requires funding, time, appropriate infrastructure and material and intellectual sources.

As underpinned by design-based research, in the present study more formal workshops and meetings should have been organised so that the researchers and the teachers could cooperatively work out timely solutions to solve problems occurring during the intervention process. This would then have helped the teachers and students deploy student-centred practices more effectively. However, the teachers’ workload did not allow them to meet more regularly. This was a limitation this study owned.

Finally, findings of the present study revealed that to influence Asian teachers to adopt student-centredness, reformers also need to pay attention to the impact of assessment on the new practice. Results in Phase 1 reported that the teachers did not pay much attention to group activities because they wanted to spend time completing the curriculum to prepare their students for exams. This was a ‘must’ because in Asian countries teachers’ success is often measured by their students’ exam scores and grades. ‘Good’ teachers still need to ensure that students will perform well in examinations. Chan (2001) claims that in Asian classrooms constructivist teachers’ views of qualitative gains in understanding and intrinsic interest in the subject must also include the condition that their students do not fall behind in examination results. This was why many Hong Kong teachers acknowledged learning facilitation was essentially constructivist but most of them still adopted an examination preparation teaching concept (Tang, 2001). Watkins and Biggs (2001) and Wong (2003) explain Asian teachers tend to make this safe choice because at the end of the day, despite all of the sweet talking of educational ideals and instructional inventions, what administrators, parents, and even officials that advocate for education reforms are really concerned about are

students' exam results. And teachers know it very well. Students know it well, too. Asian students have been well recognised as being highly alert to teachers' cues and examination requirements that may lead to achieving high scores (Biggs & Watkins, 1996). Students are very sensitive to what they perceive as teachers' 'real' demands. If teachers' 'real' demands are to complete the curriculum to prepare them well for exams in order to get high scores, they will focus on finishing the required lessons first no matter what other learning practices teachers ask of them.

These are two exemplary techniques the present study attempted to develop to enable the teachers to adopt student-centredness properly and effectively. Such techniques were powerful in terms of keeping the teachers interested in implementing the reform. Findings of the present study once again demonstrated that to encourage and persuade Asian teachers to implement the reform, reformers should not simply impose the new practice on teachers and students. It would certainly be more effective and culturally appropriate if reformers and researchers could investigate what prevents the teachers from implementing the reform, then develop strategies to enable them to overcome the barriers. This would require frequent negotiations among and mutual support of people at different levels of the implementation process.

Finally, despite the contributions the study has attempted to make, the study faced several limitations. First, the participating teachers were only officially trained in two workshops. Such short training barely helped the teacher participants familiarize themselves with basic student-centred learning principles and activities. Second, the study recruited participants from colleges in the South of Vietnam. Hence, the results obtained may only correctly represent the southern part and not suitably represent other parts of the country. This is because Vietnam is characterised by cultural differences in different parts of the country – the South, Central and North. In reality, these three parts own many different cultural characteristics including daily practices, beliefs, languages and ways of working. Finally, the study used Vietnam as a case study to represent other Asian countries. While many Asian countries share the same predominant Confucian cultural values, these cultures have now changed to different degrees subject to social, cultural, economic and political developments in each part of the country. Consequently, the empirical findings in this study may not always apply to other Asian contexts. This is a gap that future research should fill. More studies should be conducted to investigate the extent that findings of this study can generalise.

References

- Adamson, B., Kwan, T., & Chan, K. K. (Eds.) (2000). *Changing the curriculum: the impact of reform on primary schooling in Hong Kong*. Hong Kong SAR, China: Hong Kong University Press.
- Alexander, B. B., Daffinrud, S. M., Lewis, H. A., & Millar, S. B. (1995). Executive summary: Final evaluation of report: Math 130, Arithmetical problem solving, learning through evaluation, adaptation and dissemination (LEAD) of education reform. Retrieved from <http://homepages.cae.wisc.edu/~lead/> on 11 February 2006.
- Alt, W. (1994). Revisiting the shop of Confucius. *Asian Philosophy*, 4(1) 81-88.
<http://dx.doi.org/10.1080/09552369408575390>
- Antil, R. L., Jenkins, R., J., Wayne, K. S., & Vadasy, F. P. (1998). Cooperative learning: Prevalence, conceptualizations, and the relation between research and practice. *American Educational Research Journal*, 35, 419-454.
<http://dx.doi.org/10.3102/00028312035003419>
- Ballard, B., & Clanchy, J. (1994). *Study abroad: A manual for Asian students*. Kuala Lumpur: Longmans.

- Biggs, J. (1999). *Teaching for quality learning at university: What the student does*. Buckingham, Open University Press.
- Biggs, J. B. (1996). Western misconceptions of the Confucian-heritage learning culture. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner: cultural, psychological, and contextual influences* (pp. 45-67). Hong Kong: CERC and ACER.
- Biggs, J. B. (1998). Learning from the Confucian Heritage: So size doesn't matter? *International Journal of Educational Research*, 29, 723-738.
[http://dx.doi.org/10.1016/S0883-0355\(98\)00060-3](http://dx.doi.org/10.1016/S0883-0355(98)00060-3)
- Biggs, J., & Watkins, D. (1996). The Chinese learner in retrospect. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner: cultural, psychological, and contextual influences* (pp. 269- 285). Hong Kong: CERC and ACER.
- Brick, J. (1991). *China: A handbook in intercultural communication*. Sydney: Macquarie University.
- Brookfield, S. D. (1995). *Becoming a critically reflective teacher*. San Francisco: Jossey-Bass.
- Brooks, J., & Brooks, M. (1993). *The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Burns, R. B. (1991). Study and stress among first year overseas students in an Australian University. *Higher Education Research and Development*, 10(1), 61-77.
<http://dx.doi.org/10.1080/0729436910100106>
- Chan, C. K. K. (2001). Promoting learning and understanding through constructivist approaches for Chinese learners. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychology and pedagogical perspectives* (pp. 181-203). Hong Kong: CERC, The University of Hong Kong.
- Cohen, E., & Intili, J. A. (1982). *Interdependence and management in bilingual classrooms*. Final report. Stanford University California, Centre for Educational Research at Stanford.
- Cooper, J. L., MacGregor, J., Smith, K. A., & Robinson, P. (2000). *Implementing Small-Group Instruction: Insights from Successful Practitioners*. *New Directions in Teaching and Learning*, 81, 64-76.
- Darling-Hammond, L. & Falk, B. (1997). Policy for authentic assessment. In A. Lin Goodwin (Ed.), *Assessment for equity and inclusion: Embracing all our children*. New York and London: Routledge.
- Dewey, J. (1993). *How we think: A Restatement of the relation of reflective thinking to the educative process*. Chicago: Henry Regnery.
- Di Vesta, F., & Smith, D. (1979). The pausing principle: Increasing the efficiency of memory for ongoing events. *Contemporary Educational Psychology*, 4(3), 288-296.
[http://dx.doi.org/10.1016/0361-476X\(79\)90048-1](http://dx.doi.org/10.1016/0361-476X(79)90048-1)
- Dole, J., & Sinatra, G. (1998). Reconceptualizing change in the cognitive construction of knowledge. *Educational Psychologist*, 33(2/3), 109-128.
- Eggen, P., & Kauchak D. (2001). *Educational psychology: Windows on classrooms*. New Jersey: Prentice Hall Inc.
- Freire, P. (1993). *Pedagogy of the oppressed*. New York: Continuum.
- Galton, M., Hargreaves, L., Comber, C., Wall, D., & Pell, T. (1999). Changes in patterns of teacher interaction in primary classrooms: 1976-96. *British Journal of Educational Research*, 25, 23-37. <http://dx.doi.org/10.1080/0141192990250103>
- Gillies, R. (2004a). The effects of communication training on teachers' and students' verbal behaviours during cooperative learning. *International Journal of Educational Research*, 41(3), 257-279. <http://dx.doi.org/10.1016/j.ijer.2005.07.004>
- Gillies, R. (2006). Teachers' and students' verbal behaviours during cooperative and small-group learning. *British Journal of Educational Psychology*, 76(2), 271-287.
<http://dx.doi.org/10.1348/000709905X52337> PMID:16719964

- Gillies, R. M., & Haynes, M. (2011). Increasing explanatory behaviour, problem-solving, and reasoning within classes using cooperative group work. *Instructional Science: An International Journal of the Learning Sciences*, 39(3), 349-366.
<http://dx.doi.org/10.1007/s11251-010-9130-9>
- Gow, L., & Kember, D. (1990). Does higher education promote independent learning? *Higher Education*, 19(3), 307-322. <http://dx.doi.org/10.1007/BF00133895>
- Handelsman, J., Ebert-May, D., Beichner, R., Bruns, P., Chang, A., DeHaan, R., et al. (2004). Scientific teaching. *Science*, 304(5670), 521-522.
<http://dx.doi.org/10.1126/science.1096022> PMID:15105480
- Holt, L. C., & Kysilka, M. (2006). *Instructional patterns: Strategies for maximizing student learning*. Thousand Oaks, CA: SAGE.
- Hu, C. T. (1960). *China: Its people, its society, its culture*. New Haven: HRAF Press.
- Jackson, D. (2002). *Understanding the role of enquiry: collaborative enquiry for school improvement purposes*. Nottingham: National College for school leadership.
- Jensen, B., Hunter, A., Sonnemann, J., & Burns, T. (2012). *Catching up: learning from the best school systems in East Asia*. Grattan Institute: Australia.
- Jia, W. (2001). *The remaking of the Chinese character and identity in the 21st century*. London: Ablex Publishing.
- Jin, L. X., & Cortazzi, M. (1995). A cultural synergy model for academic language use. In P. Bruthiaux, T. Boswood & B. Du-Babcock (Eds.), *Explorations in English for professional communication* (pp. 41-56). University of Hong Kong, Hong Kong.
- Johnson, D. W., & Johnson, R. T. (1999). *Learning together and alone*. London: Allyn and Bacon.
- Pong-Wing-Yan., & Chow, J. (2002). On the pedagogy of examination in Hong Kong. *Teaching and teacher education*, 18, 139-149. [http://dx.doi.org/10.1016/S0742-051X\(01\)00059-2](http://dx.doi.org/10.1016/S0742-051X(01)00059-2)
- Jones, L. (2007). *The student-centred classroom*. New York: Cambridge University Press.
- King, A. (1997). ASK to THINK & TEL WHY: A model of transactive peer tutoring for scaffolding higher-level complex learning. *Educational Psychologist*, 32(4), 221-235.
http://dx.doi.org/10.1207/s15326985ep3204_3
- Kornell, N., & Bjork, R. A. (2007). The promise and perils of self-regulated study. *Psychonomic Bulletin & Review*, 14(2), 219-224.
<http://dx.doi.org/10.3758/BF03194055>
- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20(1), 71-94. <http://dx.doi.org/10.1093/applin/20.1.71>
- Luke, A., Rahim, R. A., Koh, K. H., Lau, S., Ismail, M., & Hogan, D. (2005). *Innovation and enterprise in classroom practice: A discussion of enabling and disabling pedagogical factors in P5 and S3 classrooms*. Singapore: Centre for Research in Instruction and Practice.
- Mercer, N., Wegerif, R., & Dawes, L. (1999). Children's talk and the development of reasoning in the classroom. *British Journal of Educational Research*, 25(1), 95-112.
<http://dx.doi.org/10.1080/0141192990250107>
- Morris, P. (1985). Teachers' perceptions of the barriers to the implementation of a pedagogic innovation: A South East Asian case study. *International Review of Education*, 31(1), 3-18. <http://dx.doi.org/10.1007/BF02262565>
- Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies*, 19(4), 317-328. <http://dx.doi.org/10.1080/0022027870190403>
- Newmann, F. M., & Associates (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco: Jossey-Bass.
- Ng, C-H. (2009). Exploring the linkage between reforms and learning in the Asia-Pacific region: An Activity Theory perspective. In C-H. Ng & P. D. Renshaw (Eds.),

- Reforming learning: Concepts, issues and practice in the Asia-Pacific region (pp. 3-21). Dordrecht: Kluwer Academic.
- Niles, F. S. (1995). Cultural differences in learning motivation and learning strategies: A comparison of overseas and Australian students at an Australian university. *International Journal Intercultural Relations*, 19(3), 369-385. [http://dx.doi.org/10.1016/0147-1767\(94\)00025-S](http://dx.doi.org/10.1016/0147-1767(94)00025-S)
- Palinscar A., & Brown, A. (1988). Teaching and practicing thinking skills to promote comprehension in the context of group problem solving. *Remedial and Special Education*, 9(1), 53-59. <http://dx.doi.org/10.1177/074193258800900110>
- Palinscar, A.S., & Herrenkohl, L. (2002). Designing collaborative learning contexts. *Theory into Practice*, 41(1), 26-35. http://dx.doi.org/10.1207/s15430421tip4101_5
- Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: A longitudinal study. *System*, 29(2), 177-195. [http://dx.doi.org/10.1016/S0346-251X\(01\)00010-0](http://dx.doi.org/10.1016/S0346-251X(01)00010-0)
- Puong-Mai, N. (2008). *Culture and Cooperation Cooperative Learning in Asian Confucian heritage cultures: The case of Viet Nam*. Netherlands: IVLOS Institute of Education of Utrecht University.
- Celce-Murcia, M., & Freeman, D. L. (1999). *The grammar book: An ESL/EFL teacher's course*. Boston: Heinle.
- Pratt, D. D. (1992). Chinese conceptions of learning and teaching: A westerner's attempt at understanding. *International Journal of Lifelong Education*, 11(4), 301-319. <http://dx.doi.org/10.1080/0260137920110404>
- Pratt, D. D., Kelly, M., & Wong, W. S. S. (1999). Chinese conceptions of 'effective teaching' in Hong Kong: Towards culturally sensitive evaluation of teaching. *International Journal of Lifelong Education*, 18(4), 241-258. <http://dx.doi.org/10.1080/026013799293739a>
- Prince, M. (2004). Does active learning work? A review of the research. *J. Engr. Education*, 93(3), 223-231. <http://dx.doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Ramsden, P. (1992). *Learning to teach in Higher Education*. London: Routledge. <http://dx.doi.org/10.4324/9780203413937>
- Raths, J. (2001). Teachers' beliefs and teaching beliefs. *Early Childhood Research & Practice (ECRP)*, 3(1), 385-391.
- Renshaw, P. (2002). Learning and community. *Australian Educational Researcher*, 29(2), 1-14. <http://dx.doi.org/10.1007/BF03216761>
- Renshaw, P. (1992). Synthesising the individual and the social: Sociocultural theory applied to the mathematics education of young children. Paper presented at the 7th International Congress on Mathematics Education, Quebec City on the 7th August 1992.
- Renshaw, P. D., & Volet, S. E. (1995). South East Asian students at Australian universities: A reappraisal of their tutorial participation and approaches to study. *Australian Educational Researcher*, 22(2), 85-106. <http://dx.doi.org/10.1007/BF03219594>
- Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International students' learning environments and perceptions: A case study using the Delphi Technique. *Higher Education Research and Development*, 19(1), 89-102. <http://dx.doi.org/10.1080/07294360050020499>
- Saito, H., & Fujita, T. (2004). Characteristics and user acceptance of peer rating in EFL writing classrooms. *Language Teaching Research*, 8(1), 31-54. <http://dx.doi.org/10.1191/1362168804lr133oa>
- Samuelowicz, K. (1987). Learning problems of overseas students: two sides of a story. *Higher Education in Research and Development*, 6(2), 121-133. <http://dx.doi.org/10.1080/0729436870060204>
- Smyth, J. (1993). Reflective practice in teacher education. *Australian Journal of teacher Education*, 18(1), Article 2. <http://dx.doi.org/10.14221/ajte.1993v18n1.2>

- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Leadership*, 29(7), 4-14.
- Richards, J. C. (1998). *Beyond training*. New York: Cambridge University Press.
- Shor, I. (1992). *Empowering Education*. London and Chicago: University of Chicago Press.
- Tang, K. C. C. (1991). Spontaneous collaborative learning: a new dimension in student learning experience? Paper presented at the 4th European Association for Research on Learning and Institution Conference, Turku, Finland.
- Tang, T. K. W. (2001). The influence of teacher education on conceptions of teaching and learning. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and pedagogical perspectives* (pp. 219-236). Hong Kong / Melbourne: Comparative Education Research Centre / Australian Council for Educational Research.
- Thanh-Pham, T. H. (2011b). An investigation of perceptions of Vietnamese teachers and students toward cooperative learning. *International Education Studies*, 4(1), 3-12.
- Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Watkins, D., & Biggs, J. (2001). *Teaching the Chinese learner: Psychology and pedagogical perspectives*. Hong Kong: CERC, The University of Hong Kong.
- Watkins, D. (1996). Hong Kong secondary school learners: a developmental perspective. In D. Watkins & J. Biggs (Eds.), *The Chinese learner: Cultural, psychological, and contextual influences*. Hong Kong: Centre for Comparative Research in Education/Camberwell, Victoria: Australian Council for Educational Research.
- Wong, N. Y. (2003). Kaoshi: Huarandiquhuizhibuqu de mengyan. *Hong Kong Economic Journal*, 27 March.