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Thanh Pham Monash University, thanh.t.pham@monash.edu

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Student-Centredness: Exploring the Culturally Appropriate Pedagogical Space In Vietnamese Higher Education Classrooms Using Activity Theory

Thanh Pham Monash University

Abstract: Recently leaders in many Asian countries have advocated for student-centred reform agendas. However, bringing about pedagogical change is not simply a technical issue of implementing practices designed elsewhere but is a more substantive issue concerned with local cultural values and context. Researchers have claimed that to sustain the reform, the initiative needs to be modified integrating local values in a hybrid manner. The present study, involving two lecturers and 100 university students in Vietnam, used third generation of activity theory, to document how the lecturers created bridging and hybrid strategies that combined both traditional teaching practices and novel student-centred practices. These hybrid practices helped students improve their learning outcomes, especially enhance their complex knowledge. Implications for University providers were discussed.

Introduction

Pedagogies of engagement like student-centred inquiry and problem-solving have been widely advocated by educators during the past 30 years (Edgerton, 2001). These pedagogies are seen as increasing student involvement and retention, as well as developing the capacity of graduates to apply knowledge and skills gained in tertiary education programs to work-related contexts (Hallinger & Lu, 2011; Smith, Sheppard, Johnson & Johnson, 2005). Recently in many Asian countries, there is renewed interest among policy-makers in student-centred pedagogies both with regard to schooling systems and the university sector (Jensen *et al.*, 2012). The focus on student-centred pedagogies coincides with the shift from reliance solely on labour-intensive and large-scale forms of industrial production to knowledge-based forms of employment where innovation and problem-solving are key requirements of employees. Policy makers in Asia have drawn upon research evidence suggesting that student-centred pedagogies enable learners to acquire relevant knowledge-economy attributes such as communicative skills, creativity, deep conceptual understanding, complex critical-thinking skills, capacity to work in teams, confidence and positive attitudes toward on-going learning (Handelsman et al., 2004).

Student-centred learning reforms have been widespread across Asia. The Chinese government, for instance, has implemented multiple national curriculum reforms with an emphasis on applying western 'best practice' regarding student-centred learning. They believe this practice could foster active and unique ways of learning, encourage autonomous learning in students, and engage all students in the learning process (Halstead & Zhu, 2009). In Hong Kong, beginning in 2001, the Curriculum Development Council undertook an overhaul of the education

system with the main focus of revising curriculum from teacher-centred pedagogies to studentcentred ones in order to provide learners with interpersonal, communication, critical thinking and argumentative skills (Hong Kong Examination and Assessment Authority, 2003a). Similarly, the Malaysian government announced a national curriculum reform with an emphasis on training learners to be "an active makers of meaning" and "active constructors of knowledge" (Curriculum Development Centre, 1999, p. 9). More powerfully, with the launch in 1997 of the national project, 'Thinking Schools, Learning Nation' (TSLN), the Singaporean government put great pressure on teachers to employ learner-centred approaches to develop students into active learners with critical thinking skills and to develop a creative and critical thinking culture within schools (Law, 2005). Tan and Gopinathan (2000) noted over a decade ago that Singaporean education policymakers, schools, principals, teachers and students are being swept along in an on-going tide of innovation towards student-centredness.

These pedagogical ideals, however, are rarely implemented in a straightforward and consistent manner (Albright & Kramer-Dahl, 2009) because the policies both challenge ingrained teaching and learning practices, and conflict with other policy imperatives. Specifically, teachers in many Asian nations prefer to maintain an expository style of teaching to ensure that their students perform well in high stakes tests to satisfy parental expectations (Pham & Renshaw, 2014). Also, student-centred pedagogies can be in conflict with teaching and learning values in Asian classrooms. For instance, student-centredness places the student in the centre of the learning where they are treated as co-creators in the learning process, as individuals with ideas and issues that deserve attention and consideration (Collins & O'Brien, 2003). In this environment, the teacher has the expertise but accepts that they can learn from students as well. However, Renshaw and Power (2003) argue that classroom practices in the Asian region draw upon long established traditions of respect for teachers and knowledge transmission. The sense of respect between children and adults predisposes the students to be diligent and receptive rather than questioning and creative (Renshaw & Power, 2003), to accept teachers as the definitive source of knowledge and to be hesitant to question or challenge what teachers say (Biggs & Watkins, 1995).

In addition, in learner-centred classrooms where group work and group discussions are predominant practices the teacher's role shifts to that of a coach, advisor and facilitator of students' learning (Blackie, Case & Jawitz, 2010). Although these activities might interest Asian teachers, it is well documented that policy-makers in many Asia nations pressure teachers to achieve quantitative goals such as the amount of knowledge that should be transmitted within the scheduled time to guarantee students' success on textbook-based exams and international tests (Pong-Wing-Yan & Chow, 2002; Phuong-Mai, 2008). Therefore, although Asian teachers may acknowledge constructive teamwork practices are important, they still prefer the lecturing approach so that they can easily fill students with textbook knowledge. Two studies conducted by Watkins and Biggs (2001) and Wong (2003) revealed that Asian teachers give priority to the textbook because they acknowledge that at the end of the day, despite all of the sweet talking of educational ideals and instructional innovations, what administrators, parents, and even officials (who advocate for education reforms) are really concerned about are students' exam results.

Another aspect of student-centredness that is in conflict with Asian learning and teaching culture is the use of peer teaching and assessment. Undoubtedly, opportunities for peer teaching are regarded as one of the main advantages of student-centred pedagogies (Cobb, 1999). However, Asian students may not appreciate this opportunity because many believe that only the teacher can give 'trustworthy' feedback and correct answers. Harshbarger et al. (1986) found

evidence supporting this view when discovering that Korean students insisted on the teacher being the authority on knowledge claims and becoming disturbed if the teacher did not perform their authoritative role. Woodrow and Sham (2001) also found that Chinese students "like to be told what to do by the teacher" (p. 390). The quote of a Chinese student in the study of Jin and Cortazzi (1998) below further illustrates the point. One Chinese student commented in the following manner when Western teachers attempted their version of communicative group work in the class:

Why does the teacher want us to talk together? She can't listen to all of us talking at once. How can I learn by talking to my friend? He only knows what I know. I may learn his mistakes. I want to listen to the teacher, she knows more (Jin & Cortazzi, 1998, p.744).

Such cultural disparities have, to a great extent, hindered the effective implementation of student-centred pedagogies in many Asian countries. Indeed there has been debate about the efficacy of simply grafting these Western educational approaches onto established traditions of learning and teaching. Researchers have found, for example, that new pedagogies transplanted from Western cultures are not sustained because they do not align well with the Asian cultural context (Chan, 2009). Therefore, rather than simply grafting Western pedagogical practices onto Asian teaching and learning traditions, Tsui and Wong (2009) emphasize that ideas borrowed from the West must be integrated both with Asian educational traditions and philosophies and with the situated experience of teachers. For example, Gu Ling Yuan, Deputy Director of the Shanghai Academy of Educational Sciences and the winner of numerous teaching awards, advocated for the 'middle ground' in order to deal with mismatches and conflicts when 'East meets West' (see Gu, Nie & Yi, 2002). This middle ground can be regarded as a 'third space' (Gutiérrez, Baquedano-López & Tejeda, 1999) or a 'boundary zone' as described by activity theorists (Konkola, 2001). It is in the middle ground that teachers can develop bridging and hybrid practices that can be sustained in Asian classrooms. Luke, Freebody, Shun and Gopinathan (2005) provide an example from Singapore where they noted that many successful student-centred reforms in Singapore were achieved because teachers were capable of blending different approaches, weaving together teacher-directed lessons with inquiry and problemsolving pedagogies in their classroom practices.

Purpose of the study

This design-based research study drew upon Activity Theory to investigate how a group of Vietnamese lecturers and students adapted their pedagogical practices, taking into account both traditional practices and contemporary influences, to make student-centred pedagogies more feasible and effective in their classrooms. Specifically, the following questions were examined:

1. How did the lecturers take into account traditional practices and contemporary influences to adjust student-centred pedagogies in the Vietnamese higher education context?

2. What were the impacts of student-centred pedagogies on Vietnamese higher education students' learning?

In the ensuing section, the paper first briefly introduces the concept of 'third space' or 'boundary zone' through the lens of activity theory.

The Third Space/Boundary Zone

Activity Theory has its roots in cultural-historical psychology initiated by Lev Vygosky and further developed by Leont'ev (1978). The theory was subsequently elaborated by European and North American scholars (e.g., Wells & Claxton, 2002). Activity theory has evolved through three generations of research. The concept of the third space/boundary zone is seen as the core of the third generation. The development of the third space is initiated by tensions and conflicts that are brought about when two activity systems interact with each other. Specifically, Engeström (1999) claims that, when two activity systems that work with rules underpinned by different traditions and perspectives interact or are grafted onto each other, various contradictions and tensions are created. To deal with these contradictions and tensions, actors in the activity systems are required to understand multiple perspectives, and develop solutions to solve the disparities between the two activity systems. Solutions in this situation often entail the generation of new hybrid activities or transformed practices that include elements from both activity systems (Konkola, 2001). The space where these hybrid and transformed practices are developed is called the 'third space' or a 'boundary zone', that according to Engeström (2001), is characterised by alternative or competing discourses and points of view. Engeström also claims that the third space affords opportunities for the transformation of conflicts and tensions into rich zones of learning (Engeström, 2001).

As discussed above, Western-based student-centred pedagogies are seen to have various conflicts with the learning goals and cultures in Vietnamese classrooms. To make the student-centred reform accepted and feasible in the local classrooms, therefore, participating teachers and students need to create for themselves a third space, where they can design and adapt student-centred pedagogies that are culturally appropriate to the local context. This empirical study investigated how these adjustments could be done.

Methodology Research Design

The study was conducted within a design-based research methodology (diSessa & Cobb, 2004). 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. Design research complements activity theory that has been used to frame the present study. Both address educational change as a complex multi-dimensional process that needs to be investigated thoroughly with local participants in their contexts of activity. Modifications of student-centred pedagogies in the present study were made based on a thoughtful consideration of various factors including heritages of local cultures, institutional constraints, and especially the teachers' beliefs about teaching and learning arising from their contexts of practice and their own sociocultural history.

Participants

The participants were two lecturers and 100 students from a university in Vietnam. These lecturers and students were engaged in the same unit but were divided into two classes. The first class was taught by a very experienced lecturer who had been teaching in the field for almost twenty years (the Unit coordinator). It is important to note that the Unit coordinator has been recognised for her excellent teaching with many awards and mentored many pre-service teachers in her school. The second class was taught by the researcher who obtained schooling and undergraduate degrees in Vietnam but had been living in Western countries for many years. The researcher joined the course as a visiting lecturer because the School of Education in Vietnam was very keen to implement student-centred pedagogies as educational innovations. This goal matched the researcher's expertise well as she had done various studies on student-centred pedagogies such as cooperative learning and formative assessment in non-Western contexts. The Unit coordinator appeared excited to be involved in the project because she wanted to learn more about student-centredness. At the beginning of the study, all participating students were given a consent form and informed that participation was voluntary and anonymous. The lecturers explained that any data related to any student who did not want to participate in the study would be removed from the corpus of data. However, all students agreed to take part in the study. Data from all sources were de-identified and the analysis was based only on aggregated data.

Introducing Student-Centred Practices in the Unit Context

The unit examined in the study had been traditionally taught in a similar format for many years. Lectures were delivered in a standard lecture hall with slides. Usually teachers only had enough time to complete the required content of the lessons and there was often little time for students' questions during and after the class. In order to promote student-centredness, the researcher introduced the Unit coordinator to the principles and practices of student-centred learning, and then provided intensive workshops where they were assisted to practice the skills of 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 learning how they should perform their roles in student-centred learning classes. Rather than abandoning their current teaching practices entirely, the researcher and the lecturers discussed how they could intersperse lecturing with different student-centred activities (this procedure is explained below in detail). After the workshop the Unit coordinator was also given relevant materials and resources they could consult during the implementation process. These materials were books and publications written by the author and other researchers with regard to constructivist educational innovations.

The semester was divided into Term 1 that consisted of the first 6 weeks and Term 2 consisting of the last 7 weeks. In Term 1, the researcher played the role as the main designer of pedagogical activities in each lesson. Following the induction workshops described above, the Unit coordinator was invited to provide feedback on the proposed plan for the lesson formats. In Term 1 the Unit coordinator allowed the researcher to take the initiative and provided feedback mainly with regard to how to effectively manage the activities within the timeframe of each lesson. However, entering Term 2 there was a shift in the relationships within the design team, especially with the Unit coordinator assuming the initiative and providing more leadership and

guidance (this shift is discussed in detail in the later section on procedures of Term 2). Procedures in each term are detailed below.

Designing Term 1 Pedagogy

The researcher inherited from the previous year the weekly topics taught by the Unit coordinator, then designed student-centred activities to engage students more actively in understanding the main concepts and themes of each topic. These activities were mainly group work, with periods of independent investigation and peer teaching. The researcher used both existing readings and added new materials. All lessons were designed in a seminar format. Before each lesson the students were given several relevant journal articles, with the goal of enabling them to form multiple perspectives on the topics and a more thoughtful understanding of the complexities involved. The students were asked to read the articles prior to each class and when they came to the class, they were asked to discuss the articles in 4-5 member groups. The strategy for scaffolding their inquiries was called the 'questioning formulation strategy' (Koch & Eckstein, 1991) which set students the task of formulating as many clear questions as possible about material in the texts and questions beyond the text, that is, questions that were related to the texts but were not discussed in them. During whole class discussion the lecturers also modelled these 'beyond the text' questions by challenging students to consider and discuss issues not specifically covered in the readings.

Data Collection Methods

Data were collected on: (i) students' performance on mid-term and final assignments; (ii) student and teacher interactions during small group activities as captured on audiotapes; (iii) students' problems and views about their learning in the course as revealed through online discussion forums; and (iv) evaluations and suggestions for improving the course as revealed through interviews with individual students selected from the three classes.

Mid-term and Final Assignments

The students were assessed based on two main assignments, including a mid-term assignment and a final assignment. The requirements of both assignments were similar as the students were asked to draw upon conceptual and theoretical knowledge in analysing a specific education reform policy.

Small Group Interactions Captured on Audiotapes

Three focus groups in each class were audiotaped three times during each term. This provided data on how the lecturers interacted with the students during their group work and how group members assisted each other and gauged each other's understanding of the readings.

Online Discussion Analysis

Discussion threads arising from the students on line postings regarding one lesson in each term were analysed. This aimed to identify how the students and the lecturers interacted during the forum, particularly in terms of supporting and building upon each others' contributions.

Individual Interviews

Ten students selected randomly in each class were invited to participate in interviews during the last week of each term. Each interview lasted between 15-30 minutes. A semi-structured interview scheme with a number of guiding questions was utilized. Examples are: "What did you think about the lessons?" and "What did you think helped you learn best?"

Data Analysis Academic performance

All assignments were marked on a 10-point scale by the researcher and the two lecturers. Each lecturer was responsible for marking their own class based on the rubric criteria provided. To ensure similar marking, three lecturers moderated three randomly selected assignments. The results showed no difference in marking of the three lecturers. All three lecturers also crossmarked 'fail' assignments.

The lecturers' verbal behaviours

The lecturers' verbal behaviours captured in the small group discussion audiotapes were categorised based on a schedule adapted from Cohen and Intili (1982) but modified to suit the purpose of this study. The schedule identified three categories of verbal behaviours including demonstrating control (i.e., lecturing, instructing and directing); extending the activities (i.e., encouraging students to identify similar examples, ideas or analogies; prompting students to expand on ideas and/or provide reasons; and providing extended indirect help by asking a sequence of questions designed to help students consolidate their understandings); and mediating learning (i.e., probing students' ideas, knowledge, and assumptions; seeking clarification of ideas). The frequency of these categories of verbal behaviours were combined across the three groups per class providing a total of 9 hours of interaction for each of the lecturers. An assistant was employed to code 3 hours of audiotape from each of the lecturers' classes. When there were any coding disagreements, the assistant and the researchers reviewed their coding until there was 100% agreement.

Students' discussion analysis

The students' responses to each other in group work in the class and on the online forum were analysed and classified based on six dimensions of knowledge as described in Bloom's taxonomy including being able to remember, understand, apply, analyse, evaluate, and create.

Interviews

All interviews were fully transcribed and translated by a research assistant and checked for accuracy by the first researcher. Subsequently, all data were coded and content analytical procedures (Neuman, 2003) were applied to all interview transcripts. First, data were divided into segments that expressed a meaningful idea (this can be a word, a single sentence or a paragraph) so that annotations and codes could be attached to them. Then codes for similar phenomena identified in the data were combined into more abstract categories. To ensure the reliability of the results, the assistant (as mentioned previously) was employed to help the researchers code the transcripts. The first researcher and the assistant held regular discussions and compared the findings to check the internal agreement and resolve differences.

Results

The student-centred lessons implemented in Term1 were regarded as quite unsuccessful by the Unit coordinator. It is pertinent, however, that the key negative evidence highlighted by the lecturers was how well the students performed on their mid-term assignment, rather than the processes of learning within the groups. The average mark across the two groups was 6.9 out of 10. The Unit coordinator explained that this result was lower than in previous years, and this comparative decline was regarded by her as particularly salient data that required a redesign of the student-centred approach. Two main issues emerged in this term were 'insufficient instructions of the lecturers' and 'limited complex knowledge development of the students'.

Insufficient instructions of the lecturers

The interview results revealed that the students were very concerned about their poor understanding of what Gu (2010) called the 'knowledge points' (the main ideas of each lesson). In general, they appreciated the opportunity to tackle problems and propose solutions with peers. However, they still preferred the teacher to keep a close eye on what they were doing and provide timely intervention to guide their learning. Below is an explanation of one student.

We could read the text by ourselves but sometimes we could not help each other understand the new definitions or the figurative meaning of some concepts. Everything seems very vague to me as I am unsure if what we discuss and agree upon are correct or not, so feel risky when putting these in the assignment.

When working on the readings, many of the students did not understand the theoretical ideas underpinning each article and how they were connected to those conceptual ideas of each weekly lecture. One student expressed his concern as below.

We were provided with lots of readings each week but we could not fully understand the content of each reading, especially how we should use the articles to support key conceptual ideas of each lecture in our essay. I didn't think my peers could help me clarify this connection.

When the interviewees were asked how they learned to cope with exams, all of them mentioned that no matter what they focused on, they first needed to make sure that they understood the key points of each lecture, then they tried to expand their knowledge mainly based on the lecturers' scaffolding and sometimes from peer discussion. One student was aware that they could get high marks if they brought to their assignments unique and complex knowledge. However, as he noted below, they could only know how to approach and achieve this type of knowledge if the lecturers initiated the discussion topic and provided some scaffolding. Below was what he said:

It is important for us to have the opportunity to discern the various aspects, and subsequently be able to combine them. This is because those who are good at making sense of argumentative texts can produce unique quality assignments. That's a crucial point. However, it is hard for us to come up with such complex ideas, so we need to have the teacher's initial guidance.

The data presented in Table 1 below showed that lecturers' verbal behaviours classified as "Extending the activities" and "Mediating learning" were less frequent than their verbal behaviours classified as 'Demonstrating control' (11, 14 and 13, respectively).

Behaviours	The Unit coordinator	Researcher	Total Term 1
Demonstrating control	7	6	13
Extending activities	5	6	11
Mediating learning	7	7	14
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 Table 1: The frequency across lecturers of verbal behaviours in Term 1

The pattern of lecturers' verbal behaviours where *control* exceeds both *extending* or *mediating* may reflect students' resistance to engage in the kinds of higher-level talk expected during group work. This issue is explored below by examining the pattern of verbal interaction between students in the small groups.

Limited complex knowledge development of the students

The students' discussion in two lessons (one in each class) was coded and the frequency of students' verbal interactions is presented in Table 2 below.

Practices	The Unit	Researcher	Frequency and percentage
	coordinator		(%)
Remember	6	4	10
Understand	12	10	22
Apply	6	6	12
Low Level Sub-Total	24	20	44(62%)
Analyse	5	6	11
Evaluate	5	6	11
Create	2	3	5
Higher Level Sub-Total	12	15	27(38%)

Table 2: The frequency of higher- and lower-level verbal interactions between students in Term 1

According to Bloom's taxonomy, six verbal interactions in Table 2 could be grouped into two levels of knowledge. The first level is lower-level knowledge that includes being able to remember, understand and apply. The second level is higher-level knowledge that includes being able to analyse, evaluate and create. An examination of Table 2 showed that in Term 1 the students were involved in a larger percentage of low-knowledge verbal interactions rather than higher-level (62% compared to 38%). The students were mainly concerned with trying to understand basic conceptual knowledge points rather than scaffolding each other to expand their knowledge beyond the texts.

When analysing how the students formulated questions to gauge each other's understanding of the readings, the results showed that although the students could create relevant questions, most tested information in the texts. Very few students could formulate higher-order knowledge testing questions that required their partners to seek what was beyond the texts. Table 3 below reports the number of each type of the questions.

Types of questions	Frequency
Low-level knowledge testing	24 (12 in the Unit coordinator, and 12 in researcher)
questions	
Higher-order knowledge	9 (6 in the Unit coordinator, and 3 in researcher)
testing questions	
Table 2. Normahan of the	nos of quastions formulated by the forms ground in Torm 1

 Table 3: Number of types of questions formulated by the focus groups in Term 1

The findings reported in Table 3 show that the number of questions that tested low-level knowledge was almost three-fold the number testing higher-order knowledge (24 compared to 9).

The interview conducted with ten students in each class at the end of Term 1 revealed various problems facing the students when they practiced the 'Questioning formulation strategy'. The main problems are reported in Table 4 below.

Reasons	Exemplar messages
Not familiar with the	"We are often asked by the teacher but rarely create
technique	questions to ask each other this way".
Do not have time to play	"The teacher does not give us enough to think about how
with the text	to make good questions. We always run out of time
	before completing all activities".
Do not prepare the readings	"Many people do not prepare the readings at home, so we
beforehand	mainly spend time waiting for these people to read first
	before we ask them questions".

 Table 4: Main problems facing the students when practicing the 'Questioning formulation strategy'

To sum up, in Term 1 the students were not familiar with studying independently of the lecturers. They mainly focused on understanding the basic conceptual knowledge rather than constructing complex knowledge. Therefore, before entering Term 2, the Unit coordinator called for several meetings to identify more effective pedagogical practices. The main concern brought to the discussion was how to reconcile student-centred pedagogical practices with the local practices of teaching and learning that were familiar to students and valued by them. Main modifications made in Term 2 were described in the following section.

Designing pedagogical modifications

Activity Theory claims tensions and contradictions that emerge during the implementation process often require actors in the system to adjust their actions if they want to

keep the innovation sustainable (Engestrom, 2001). In the present study, the innovation introduced in Term 1 inevitably raised design challenges created by discontinuities for lecturers and students between old and new pedagogical practices, and tensions between students and lecturers regarding their respective roles and expectations about performance on assignments. The lecturers' different roles and relative status within the institution played a key role in determining how and what changes were made in the design of the course for Term 2. There was a shift in the roles within the design team that established a new leader. Specifically, the Unit coordinator rather than the researcher, became the leader because the Unit coordinator, as the designated course coordinator, was reluctant to support what the researcher might suggest in Term 2 based on the decline in students' assignment results from Term 1. Second, the Unit coordinator was much more experienced in the local context than the researcher. She was recognized by her university colleagues as being an outstanding teacher, and ultimately she was responsible for the students' learning in the course. In contrast, the researcher was a visiting scholar who was primarily interested in this course as a site for design-based research.

The design process between the research team, therefore, actually followed a wellestablished practice in Vietnam where influence is relative to ones status within a professional hierarchy and strategies for change are not negotiated and forged in open discussion but rather offered authoritatively by an esteemed team leader. In this case the Unit coordinator was confident in her local experience to assume the role of team leader and forthright in adjusting the student-centred strategies for Term 2 to include more direction, scaffolding and mandated activities for students to follow. The researcher complied willingly with these suggestions because they too could foresee that students would be more comfortable and satisfied with these adjustments. So after several meetings, the Unit coordinator and the researcher agreed to bring to Term 2 the following bridging strategies between established and novel pedagogies.

Helping students understand the ''knowledge points'' by designing the lessons in a more structured manner

The Unit coordinator explained that she was happy to create more opportunities for student discussion and group work. She emphasised, however, that the lecturers needed to spend a portion of each lesson's time clarifying in a short lecture the 'knowledge points' that the students must obtain in each lesson (Gu, 2010). This strategy aimed to enable the students to at least get a 'pass' because the assessment criteria clearly stated that the students could get a 'pass' if they showed their understanding of key theoretical ideas. The Unit coordinator also added that she felt "it was not right" when the lecturers were not actively involved in helping the students to get a full understanding of the contents that they worked out and wanted the students to achieve from the course. In addition, the Unit coordinator suggested that lecturers needed to be more engaged in scaffolding students in group work. Clear regulations that required the students to be involved and express their ideas verbally were also needed to be set up. Main steps the Unit coordinator suggested were: First, each class was divided into 4-5 member groups each of which was managed by a leader. Whenever groups worked on some readings provided, they needed to summarize key points to make sure very member understood first and then group members took turn to use 'the guided reciprocal peer questioning strategies' with a list of prompting hints provided to ask each other (as detailed in Changes 1 and 2 above). Besides, to help those group members who had fallen behind in group discussion in Term 1, the Unit coordinator suggested

that in Term 2 group discussion should not stop at talking verbally. Instead, the students needed to write down key concepts and ideas extracted from the articles, then keep them as a record of their thinking.

Regarding the online discussion forum, the Unit coordinator also initiated a very structured approach. She suggested that a rule requiring all students to write and respond to their classmates' ideas when something was posted at least once needed to be set up. It was the group leaders' responsibilities to arrange their group members to either volunteer or take turn to contribute the ideas on the forum. Finally, the Unit coordinator claimed that to deepen the students' understanding systematically, the students should take turn to summarise highlighted themes emerging in each week's online discussion (one or two students did each week), then presented the key points of these themes in the following class. This reinforced the students to identify and synthesize different viewpoints. The Unit coordinator also noted that lecturers would not be able to complete all the contents in class due to time-consuming group discussion. Therefore, lecturers and students should discuss those points that were mentioned in the syllabus but not covered in class.

This re-affirmation of the centrality of lecturing was based on a moral argument –the implicit contract between lecturers and students that everyone could pass the course if they had grasped the key theoretical ideas. The moral sensitivity of the Unit coordinator regarding her responsibilities to the students, combined with the unchanged assessment criteria that foregrounded knowledge reproduction, constrained the extent to which the student-centred pedagogy could be adopted.

Helping the students to improve their complex knowledge by providing more detailed instructions

One of the concerns in Term 1 was that the students were not involved in expanding their higher-order knowledge. The Unit coordinator explained that this problem did not surprise her because she believed that the students could only achieve higher-order complex knowledge if they were provided with two conditions. First, the students needed to have clear understanding of basic conceptual knowledge that functioned as a foundation to help them further develop their thought. The Unit coordinator gave a specific example: "Imagine if they do not know how to multiply 10 by 2 (10 x 2), how could they know how to multiply 10 by 2 and then divide by 3 (10 x 2: 3)?" Second, the students were reluctant to include ideas in essays or in discussion that did not originate in texts and the teachers' words. If they were not encouraged, they were not keen on looking for new knowledge. The Unit coordinator then explained that the foremost step for each lecturer was to help the students understand basic and main conceptual 'knowledge points'. Then, the second step was that the lecturers needed to provide the students with more scaffolding and detailed guidance to direct and support the students to investigate and speak out what was not contained in the texts. In these comments the Unit coordinator reveals a hierarchical epistemology underpinning her pedagogy. Her example of multiplication indicates that she endorses the bottom-up and piecemeal formation of complex ideas inherent in Gagne's theory of hierarchical learning (Gagne, 1985). This suggests that fundamentally changing her practices with regard to student-centred pedagogy would require significant transformation of her theoretical approach to learning and teaching.

Australian Journal of Teacher Education

To implement these changes in the way that the students worked on the readings in Term2, instead of devising their own questions for their peers as applied in Term 1, the students were given hints to create questions. The Unit coordinator recommended the guided reciprocal peer questioning strategies originally developed by King (2002) to guide the students. Some sample questions on this list were: "*How would you use ... to ...? Explain why ...? What is the difference between ... and ...?*" The students used these hints to ask and answer each other's questions, including both questions in the articles and questions that were related to the text but were not discussed in them.

Regarding the online discussion, the Unit coordinator also suggested that the lecturers must be more involved in guiding the students' discussion. Specifically, after each lesson each lecturer should initiate the discussion by posting a question about an area that their students seemed to lack clarity. The students were then required to answer and build on each other's ideas to develop explanations to extend the discussion. The lecturers monitored the students' contributions to provide timely intervention to raise the level of thinking and encourage deeper understanding. If the forum became quiet, the lecturers should warm it up by posting questions inviting the students to start new topics. The Unit coordinator shared her experience that using specific examples was a very effective strategy to clarify complicated concepts and ideas for both the reader and presenter. The lecturers were encouraged, therefore, to ask the students to provide as many examples as possible to illustrate any issues they thought were confusing.

The Unit coordinator's recommendations for Term 2 maintained small group and online peer discussions but reinstated much more teacher direction, mandated processes for students to follow, and the centrality of key knowledge points for students to understand and learn for the assignment. These changes are similar to those identified by other researchers, for example, Tsui and Wong (2010) and Pham and Renshaw (2014) who found that Asian students studied more effectively if they were provided with more detailed scaffolding and guidance. Similarly, as presented elsewhere in this paper, Harshbarger et al. (1986, cited in Zhenhui, 2001) found that Korean students insisted the teacher to be the authority and became annoyed if the teacher did not perform their authoritative role. Asian students often felt reluctant to use their peers as a learning source because they often believe that only the teacher can give 'trustworthy' feedback and correct answers (Yang et al., 2006). On the teacher's side, the literature also has reported that Asian teachers tend to believe that they master a profound body of knowledge and can transmit this knowledge to students (Phuong-Mai, 2008). They then assume that they have responsibilities to evaluate students' progress and may become suspicious of peer evaluation. Saito and Fujita (2004) found evidence in their studies to confirm this suspiciousness.

Term 2 Results

Increase in the lecturers' scaffolding and guidance

Clearly, the biggest change involved the lecturers providing the students with detailed guidance to extend their points in group discussion. Instead of only answering the students when being asked (like in Term 1), the lecturers now also actively prompted new ideas to enable group discussion to maintain a lively and progressive direction. The analysis of the lecturers' verbal behaviours in Term 2 presented in Table 5 below demonstrates the increase in all verbal

Behaviours	The Unit	Researcher	Total Term 2
	coordinator		
1. Demonstrating control	5	3	8 (13)*
2. Extending the activities	13	10	23 (11)
4. Mediating learning	15	12	27 (14)

behaviours, especially in those classified as "Extending the activities" and "Mediating learning" performed by the lecturers.

* Term 1 frequency shown in brackets.

 Table 5: The frequency of each type of verbal behaviour in Term 2

These results show that there was a decrease from Term 1 to Term 2 in behaviours classified as "Demonstrating control" (8 in Term 2 compared to 13 in Term 1). By contrast, there was an increase in the lecturers' "Extending the activities" (23 in Term 2 compared to 11 in Term 1) and "Mediating learning" (27 in Term 2 compared to 14 in Term1). The decrease in Term 2 in "Demonstrating control" might be related to the introduction of the lecturing section of the lesson that equipped the students with a good understanding of key concepts. Subsequently, when the lecturers monitored the students' discussion, they did not have to instruct or direct students as often but could focus on guiding the students to expand their understanding and seek knowledge beyond the texts.

When interviewing the students at the end of Term 2, they generally expressed satisfaction with the amount of scaffolding and guidance the lecturers provided them. A message expressing their happiness was:

I feel very comfortable with what I put in my last assignment because at least I am ensured that key conceptual points I present there are correct. This is important because the rubric criteria clearly state that we need to have knowledge of key concepts to get a 'pass'.

Another student reported how her writing had improved under her lecturer's scaffolding. Those scaffolds [thinking prompts] provided by the teacher on the forum are extremely helpful. They guide us how to link things together, then come up with similar or contrasting points across lessons. If we then skilfully present this in the assignment, we are ensured to get a good mark.

Enhancement in complex knowledge of the students

The analysis of the students' group discussion revealed that the students increased the frequency of questions that gauged each other's complex knowledge. The findings presented in Table 6 below showed that the students could formulate almost the same number of each type of questions. However, when comparing these numbers to those in Term 1, it was found that there was a marked decrease in the number of low-level knowledge testing questions in Term 1 (24 (73%) compared to 17 (44%) in Term 2). By contrast, there was a dramatic increase in the number of higher-order knowledge testing questions in Term 1 (9 (27%) compared to 21 (56%) in Term 2).

Types of questions	Number
Low-level knowledge	17 (7 in the Unit coordinator, 10 in Researcher)
testing questions	
Higher-order knowledge	21 (10 in the Unit coordinator, 11 in Researcher)
testing questions	

 Table 6: Number of types of questions the focus groups formulated in Term 2

The improvement in the students' focus on higher-order knowledge was also reflected in the number of verbal interactions classified as higher-order knowledge dimensions that the students were involved in on the online discussions. The frequency of each type of verbal interactions is presented in Table 7 below.

Practices	The Unit coordinator	Researcher	Frequency and percentage (%)
Remember	7	7	14
Understand	12	10	22
Apply	8	7	15
Low Level Sub-Total	27	24	51 (56%)
Analyse	10	7	17
Evaluate	8	6	14
Create	5	4	9
Higher Level Sub-Total	23	17	40 (44%)

 Table 7: The frequency of the students' verbal interactions in Term 2

When comparing the type of verbal interactions in Term 2 with that in Term 1, it was found that in Term 2 the students were engaged in a smaller percentage of lower-level verbal interactions (56% in Term 2 compared to 62% in Term 1). By contrast, they were involved in a higher percentage of the verbal interactions related to the higher-order knowledge dimensions (44% in Term 2 compared to 38% in Term 1). This shift indicated that toward the end of the semester the students were more focused on investigating and obtaining complex knowledge.

The increase in the students' engagement in both in-class and online discussions and their concern with higher-order knowledge was reflected in their final assignment performance. Specifically, a t-test was carried out to determine if there were differences in the students' achievement scores on the mid-term and final assignments. The results are presented in Table 8 below.

Assignments		t	р
Mid-term assignment	Final assignment		
M (SD)	M (SD)		
6.9(0.90)	7.4(1.01)	1.01	.04

Table 8: T-test results in comparing means of the students' scores achieved on the two assignments

The results in Table 8 showed that there was a significant difference on the two assignments suggesting that the students improved on their final assignment.

When interviewing the students, the researcher found that they highly valued the regulation of their interactions in class and online that the Unit coordinator has suggested for Term 2. They initially perceived these regulations as 'strict' and 'strange' but then appreciated the benefits regarding improvement in their performance on the final assignment. Specifically, the interviewees revealed the regulations regarding participation gave every student the opportunity to share and explore ideas, challenge or convince others. This especially benefitted those students who rarely expressed their ideas in class. Some messages regarding this are:

When the teacher does not set up the regulation [in Term 1], those who are less attentive would chat and fool around. Only those who are attentive, usually four or five persons in the class, would actively discuss. I listen but quickly forget. When we take turn, I am forced to practice how to express my own ideas and compare and contrast with others' opinions. I could subsequently get a better understanding of what we discuss.

Another student revealed that the compulsory regulation helped the class discover talented students.

Wow ... some people always seem very quiet. They almost never talk in the class, so we think they do not understand much but when they are required to talk, we realize that they are so talented and we learn a lot from what they say.

Another student figured out how synthesising various ideas expressed on the forum helped her develop complex knowledge as she compared her own ideas with others' thinking as following.

When we are forced to keep an eye on discussion on the forum, we can see what other students have written and with that we can compare what they think with what we thought, and so we can do some analyses ... I think the forum helps because it provides a record of our thinking. Sometimes in class discussion there are too many ideas and you will forget ... or you will not have time to respond to them. But with the forum, I can go home and read and think over them and respond more carefully.

It was noted that the students also expressed that it was the group leader who played an important role in pushing them to participate in discussions, leading to their improvement in learning. Here are two sample messages regarding this point.

When the group is not well organized [in Term 1], I find it easy to make an excuse not to make any contribution. However, when my group leader rules out that we take turn to speak in class or post our ideas on the forum, I force myself to read and follow what is being discussed. Consequently, I get a better picture of everything. Another added that:

I first find my group leader is rigid and pushing but then understand that I would not be engaged in and get such a good understanding of the course without his leadership.

In sum, it seems that the improvement of the students' performance on the final assignment was related to the lecturers' scaffolding and detailed guidance, as well as their direct regulation of participation. Explicit regulation of interaction ensured that the students engaged in discussion and shared their thoughts. This meant they needed to follow the discussion systematically, before synthesizing various ideas, and comparing different points of view. These types of social interaction provide the foundation for higher-order knowledge development.

Discussion and conclusion

It is commonly said that the typical training for Asian teachers includes an expectation that they identify for students at least three elements of a curriculum topic: the knowledge point (zhishidian) [知識點], the key point (zhongdian) [重點], and the difficult point (nan dian) [難點] (Gu, 2003). Subsequently on graduation, Gu (2003) notes that Asian teachers tend to explicitly name the concepts that students will need to learn, specify the key aspects of the concepts related to the topic, and identify the aspects that students are likely to find most difficult. It is assumed that the teacher needs to, at a minimum, teach and provide enough instructions to help students to master at least the key points. The teacher's reputation would be severely damaged if his/her students failed to demonstrate their understanding of these basic knowledge points in examinations. This explains why the Unit coordinator believed that the intervention was unsuccessful, as it could not create opportunities for her and the researcher to cater for the students to understand key points of each lesson.

These findings were consistent with Pham and Renshaw's (2014) claim "Asian teachers and students will support reform of teaching and learning practices if opportunities for improving examination results are at the forefront. If the reforms are not closely aligned with examinations, both teachers and students are somewhat resistant to change" (p. 4). In the present study, the Unit coordinator was initially interested in the student-centred pedagogical practices because they appeared impressive and were often praised by their supervisors as effective approaches in Western classrooms. They gradually realized, however, that the activities did not align to the kinds of knowledge that could help the students perform well on the traditional assessment. They started negotiating, therefore, with the researcher to implement hybrid pedagogical practices that seemed more relevant to the testing requirements of their college, and their heightened sense of responsibility to their students.

It was interesting to find that although the Unit coordinator was constrained by the system where students' performance on examinations is prioritised and pedagogical practices need to cater for this priority, she showed her strong support for the reform that emphasised high-order knowledge gains rather than results shown on examinations. The Unit coordinator was very wise when using well-crafted and structured approaches, including both collaborative inquiry and drilling of exam questions, to cater to the students' needs. This is similar to the incorporation of diverse contrasting pedagogies that has been documented in Singapore classrooms (Luke et al., 2005) where teachers maintain a strong focus on examination performance through drill and skill lessons but also include open-ended inquiry and problem solving activities. It is important to remember that prior to the design intervention, the course proceeded as a lecture-based pedagogy without the opportunity for students to engage with each other in discussion or post questions and comments online. So even though the hybrid practices in Term 2 may appear designed to simply re-establish teacher authority, the contrast with previous years is still marked.

Using activity theory as a theoretical framework allowed the researcher to explore the potential space where culturally appropriate pedagogies could be developed. Seeking this third space is important to keep the reform sustainable because researchers have reported many failures of 'cloned-pedagogies'. This is due to insufficient consideration being given to the impacts of local cultural and social factors on the reform (Pham, 2015, ...?). In light of the third generation of activity theory, pedagogical reforms become a complicated phenomenon that is supported and constrained by a range of macro and micro factors. To sustain these initiatives, the

disposition of the teachers toward the reform appears to be the most important factor that determines the success or failure of the reform. By supporting the reform, they could negotiate with various actors within the systems to create this third space to sustain and nourish the reform. In the present study, since the Unit coordinator was supportive of student-centred practices, she avoided dichotomizing teacher-centredness and student-centredness, and rather sought to blend and synergize them. Although the procedures did not change from teacher-centredness to student-centredness dramatically, as the researcher expected, the student learning gains in Term 2 were satisfactory for both the Unit coordinator and the researcher. This was because the students demonstrated an improvement in both low-level and high-order knowledge. This indicated that the Unit coordinator advocated a well-structured instruction to help students achieve complex knowledge. This seems to contrast with the common procedure recommended by student-centred reformers who often believe only independent learning could develop complex understanding.

A small but very important change the Unit coordinator made in Term 2 was the suggestion to appoint a group leader to manage the division of labour among group members. Day et al. (2004) proposed that, from the Westerners' point of view, the group only cooperates well when every member is equal in power. Therefore, group leadership is not a common principle applied in student-centred classrooms. However, various studies reported in the literature (e.g., Phuong-Mai, 2008; Pham, 2014) found that for Asian students leadership was a necessary condition to form effective teamwork. This occurred because group leaders could bring about many benefits including maintaining harmony, supervising, involving all group members in making decisions and motivating group members. The Unit coordinator caught this point clearly when she saw that in Term 1 the students did not have anyone pushing them to think, then talk and share ideas. She believed that this problem would certainly be alleviated when the students were managed by their group leaders.

The researcher acknowledges that the study had some limitations. First, due to the scope of the research, the researcher did not have enough time to provide sufficient professional development in student-centred pedagogical practices to the participants. As a consequence, the insufficient training did not provide enough opportunity for the teacher participants to familiarize themselves with basic student-centred learning principles and activities. Second, although Asian countries share some common cultural values, they have distinctive cultural characteristics including daily practices, beliefs, languages and ways of working (Pham, 2014). Therefore, the findings of the present study may not be generalized to other samples in other parts of Vietnam. Also, this study was conducted with students studying the Arts discipline. The findings may, therefore, not be applied to students and teachers in other disciplines. More studies are required to investigate the extent that findings of this study can be usefully applied in a range of contexts.

References

- Albright, J., & Kramer-Dahl, A. (2009). The legacy of instrumentality in policy and pedagogy in the teaching of English: The case of Singapore. *Research papers in education*, 24(2), 201-222. <u>http://dx.doi.org/10.1080/02671520902867200</u>
- Biggs, J., & Watkins, D. (eds.) (1995). *Classroom learning: educational psychology for the Asian teacher*. Singapore: Prentice Hall.
- Blackie M. A. L., Case J. M., & Jawitz J. (2010). Student-centeredness: The link between transforming students and transforming ourselves. *Teaching in Higher Education*. 15(6), 637–646. <u>http://dx.doi.org/10.1080/13562517.2010.491910</u>
- Chan, K. K. C. (2009). Classroom innovation for the Chinese learner: Transcending Dichotomies and Transforming Pedagogy. In C.K.K. Carol & N., Rao (Eds.), *Revisiting the Chinese learner changing contexts, changing education* (pp. 69-210). Hong Kong, China: Comparative Education Research Centre, The University of Hong Kong.
- Cobb, P. (1999). Where is the Mind? In P. Murphy (ed.), *Learners, learning and assessment*. London: Open University Press.
- Cohen, E., & Intili, J. A. (1982). *Interdependence and management in bilingual classrooms*. Final report. Stanford University California, Centre for Educational Research at Stanford.
- Curriculum Development Centre (CDC) (1999). *HuraianSukatanPelajaranSains KBSM Tingkatan 3 EdisiSekolahBestari [Integrated curriculum for secondary school: Form 3 science syllabus, Smart School edition]*. Kuala Lumpur: Curriculum Development Centre, Ministry of Education.
- Day, D., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *The Leadership Quarterly*, 15(6), 857-880. <u>http://dx.doi.org/10.1016/j.leaqua.2004.09.001</u>
- Edgerton, R. (2001). *Education white paper*. Report prepared for the Pew Charitable Trusts, Pew Forum on Undergraduate Learning, Washington, DC.
- Engeström, Y. (2001). Expansive learning at work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, *14*(1), 133–156. http://dx.doi.org/10.1080/13639080020028747
- Gu, L. Y. (2003). Jiaoxuegaige de xingdongyuquanshi《教學改革的行動與詮釋》 [Education reform action and interpretation]. Beijing: People's Education Press.
- Gu, L. Y., Nie, B. H., & Yi, L. F. (2002). Xunzhaozhongjiandidai [Searching for the Middle Ground]. Shanghai: Shanghai Education Press.
- Gutiérrez, K. D., Baquedano-López, P., & Tejeda, C. (1999). Rethinking diversity: Hybridity and hybrid language practices in the third space. *Mind, Culture and Activity*, *6*(4), 286–303. http://dx.doi.org/10.1080/10749039909524733
- Hallinger, P., & Lu, J. (2011). Implementing problem-based learning in higher education in Asia: challenges, strategies and effect. *Journal of Higher Education Policy and Management*, 33(3), 267-286. <u>http://dx.doi.org/10.1080/1360080X.2011.565000</u>
- Halstead, M., & Zhu, C. (2009). Autonomy as an element in Chinese educational reform: A case study of English lessons in a senior high school in Beijing. *Asia Pacific Journal of Education*, 29(4), 443-456. <u>http://dx.doi.org/10.1080/02188790903308944</u>
- Handelsman, J., Ebert-May, D., Beichner, R., Bruns, P., Chang, A., & DeHaan, R. (2004). Scientific teaching. *Science*, *304*(5670), 521-532. http://dx.doi.org/10.1126/science.1096022

- Harshbarger, B., Ross, T., Tafoya, S., & Via, J. (1986). *Dealing with multiple learning styles in the ESL classroom*. Paper presented at the Annual Meeting of Teachers of English to Speakers of Other Languages, San Francisco, Calif.
- Hong Kong Examination and Assessment Authority (2003a). *Biology: Examination Report and Question Papers (with suggested answers)*. Hong Kong: HKSAR.
- Jessen, B. (2012). *Catching up: learning from the best school systems in East Asia*. Grattan Institute Report. Retrieved on October 24th at <u>http://grattan.edu.au/publications/reports/post/catching-up-learning-from-the-best-school-</u> systems-in-east-asia/
- Jin, L., & Cortazzi, M. (1998). The culture the learner brings: A Bridge or a barrier? In M. Byram, & M. Fleming, *Language learning in intercultural perspective: Approaches* through drama and ethnography (pp. 98–118). Cambridge: Cambridge University Press.
- 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/10.1191/1362168804lr1330a
- King, A. (1997). ASK to THINK D TEL WHY: A model of transactive peer tutoring for scaffolding higher-level complex learning. *Educational Psychologist*, 32(4), 221-235. <u>http://dx.doi.org/10.1207/s15326985ep3204_3</u>
- Koch, A., & Shulamith, G., Eckstein (1991). Improvement of reading comprehension of physics texts by students' question formulation. *International Journal of Science Education*, 13(4), 473–485. <u>http://dx.doi.org/10.1080/0950069910130410</u>
- Konkola, R. 2001. "Harjoittelunkehittämisprosessiammattikorkeakoulussajarajavyöhyketoimintauudenlaisenatoimintamallina [Developmental Process of Internship at Polytechinc and Boundary-zone Activity as a New Model for Activity]." In T. Tuomi-Gröhn, & Y. Engeström, Koulunjatyönrajavyöhykkeellä: uusiatyössäoppimisenmahdollisuuksia [At the Boundary-zone between school and work: NewpPossibilities of work-based Learning] (pp. 148–186). Helsinki: University Press.
- Law, K. H. T. (2005). *Relationships between conception and practice: A Study of teacher's conceptions of teaching and classroom teaching practice related to cooperative learning.* Unpublished thesis. The University of Hong Kong.
- Leont've, A. N. 1978. *Activity, consciousness and personality*. Englewood Cliffs, NJ: Prentice Hall.
- Luke, A., Freebody, P., Shun, L., & Gopinathan, S. (2005). Towards research-based innovation and reform: Singapore schooling in transition. *Asia Pacific Journal of Education*, 25(1), 5– 28. <u>http://dx.doi.org/10.1080/02188790500032467</u>
- Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches* (5th ed.). Boston: Allyn & Bacon.
- Pham, T. H. T., & Renshaw, P. (2014). Formative assessment in Confucian heritage culture classrooms: activity theory analysis of tensions, contradictions and hybrid practices. *Assessment and Evaluation in Higher Education*, <u>http://dx.doi.org/10.1080/02602938.2014.886325</u>
- Phuong-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.

- Renshaw, P., & Power, C. (2003). The process of learning. In J. L. Keeves, & R. Watanabe, International Handbook of Educational Research in the Asia-Pacific Region (pp. 351– 363). Dordrecht: Kluwer Academic. <u>http://dx.doi.org/10.1007/978-94-017-3368-7_25</u>
- Smith, K., Sheppard, S., Johnson, D., & Johnson, R. (2005). Pedagogies of engagement: Classroom-based practices. *Journal of Engineering Education*, 94(1), 87– 102. <u>http://dx.doi.org/10.1002/j.2168-9830.2005.tb00831.x</u>
- Tan, J., & Gopinathan, S. (2000). *Education reform in Singapore: Towards greater creativity and innovation*. NIRA Review, Summer issue.
- Tsui, B. A., & Wong, L. J. (2009). In search of a third space: Teacher development in mainland China. In K. K. Chan, & N. Rao (eds.), *Revisiting the Chinese learner: Changing contexts, changing education* (281–313). Dordrecht: Springer.
- Watkins, D. A., & Biggs, B. (2001). The paradox of the Chinese learner and beyond. In D. A. Watkins, & J. B. Biggs (eds.), *Teaching the Chinese Learner: Psychological and pedagogical perspectives* (pp. 3–23). Hong Kong/Melbourne: Comparative Education Research Centre/Australian Council for Educational Research.
- Wells. G., & Claxton, G. (eds.) (2002). Learning for life in the 21st century: Sociocultural perspectives on the future of education. London: Blackwell. <u>http://dx.doi.org/10.1002/9780470753545</u>
- Wong, N. Y. (2003). Kaoshi: Huarandiquhuizhibuqu de mengyan. *Hong Kong Economic Journal*, 27 (March).
- Woodrow, D., Sham. S. (2001). Chinese pupils and their learning preferences. *Race, Ethnicity and Education*, 4(4), 377–394. <u>http://dx.doi.org/10.1080/13613320120096661</u>
- Yang, M., Badger, R., & Yu, Z. (2006). A Comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15, 179–200. <u>http://dx.doi.org/10.1016/j.jslw.2006.09.004</u>