'Youth-on-Youth' Constructivist Approach in Virtual Classroom Across Two Cultures: A Case Study of Malaysian and American University Students

Kaedah Konstruktivis "Youth-on-Youth" di dalam Sebuah Kelas Maya Merentas Dua Budaya: Kajian Kes Pelajar-pelajar Malaysia dan Amerika Syarikat

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ABSTRAK

Makalah ini ditulis berasaskan kelas yang diajar secara bersama oleh dua orang pensyarah untuk selama satu semester melalui pertemuan kelas persidangan video. Pelajar mereka berasal daripada dua negara berbeza; iaitu Amerika Syarikat (University of Delaware) dan Malaysia (Universiti Tunku Abdul Rahman). Kelas persidangan video ini dijalankan kali pertamanya pada tahun 2008 dan dilanjutkan kali kedua pada tahun 2009 dengan menggunakan kaedah konstruktivis "Youth-on-Youth." Kaedah ini membolehkan pelajar-pelajar dari Amerika Syarikat dan Malaysia mengajar sesama mereka mengenai kehidupan golongan kaum muda melalui teknologi persidangan video, Facebookstyle blog, perekaan filem digital dan pesanan teks ringkas. Dalam projek penyelidikan ini, kami mengkaji hubungan antara penggunaan teknologi (terutama antara pengguna akhir) dan golongan belia dalam cara mereka belajar. Bagaimana pengguna (pelajar) dan teknologi (teknologi persidangan video dan teknologi komunikasi baru) dapat diguna bersama untuk membina satu hasil pembelajaran pendidikan yang bermakna dalam konteks bilik darjah maya? Dapatan kajian mencadangkan supaya lebih banyak eksplorasi mendalam dan pendekatan konstruktivis sosiobudaya digunakan untuk menyelidik tentang penggunaan teknologi dalam proses pengajaran dan pendidikan. Ia mencabar pemahaman dangkal mengenai hubungan linear antara teknologi dan proses pengajaran dan pembelajaran dalam konteks bilik darjah maya. Selain itu, pengalaman pembelajaran silang budaya itu membolehkan pelajar-pelajar memperoleh pengalaman berguna apabila mereka mencipta identiti pembelajaran tersendiri, meninjau dan menyoal semula nilai-nilai budaya mereka sendiri melalui mata orang lain. Walaupun pelajar-pelajar daripada kedua-dua universiti berkongsi persamaan dari segi budaya popular, muzik, permainan digital dan alat-alat teknologi komunikasi terbaru; namun, di sebalik globalisasi, perbezaan budaya tempatan dan kebangsaan masih kekal antara pelajarpelajar Amerika Syarikat dan Malaysia.

Kata kunci: Konstruktivis, kelas maya, pengajaran dan pembelajaran silang budaya, pedagogi 'youth-on-youth', teknologi pendidikan

ABSTRACT

This article describes a semester-long, team-taught global videoconference class that took place between students enrolled at the University of Delaware in the United States of America and Universiti Tunku Abdul Rahman in Malaysia. The class, held in 2008 and again in 2009, used a "youth-on-youth" constructivist approach. Each group of students taught the other group about their young lives using videoconference technology, 'Facebook'-style blogging, digital filmmaking, and instant messaging. This research project seeks to understand the relationship between technology use (especially among end users) and youths in the way they learn. How end-users (students) and technology, (videoconferencing and new communication technology) go hand-in-hand to construct a meaningful educational learning outcome in the virtual classroom context. The findings suggest more in-depth exploration and socio-cultural constructivist approach of employing technology in teaching and learning process. It challenges the superficial understanding of the linear relationship between technology, and teaching and learning in the modern classroom context, that there are other equally important social and cultural factors involved. And also from the cross-cultural experience, students gained fruitful learning experiences, as they create their own learning identity, reflect and question their own cultural values by seeing things through the eyes of 'others'. Although students from both universities shared similarities in terms of popular culture, music, digital games and tools of new communication technology, local and national social-cultural differences still persist among students of the United States of America and Malaysia.

Keywords: Constructivist, virtual class, cross-cultural teaching and learning, 'youth-on-youth' pedagogy, educational technology

INTRODUCTION

There are logical reasons for conducting global videoconferences for business purposes. However, when the possibilities for virtual global collaboration are set in a different context, for example, in a teaching and learning environment that bridges two university classrooms in different countries, what advantages does it serve? How does it transform the teaching and learning environment? What does it tell us about the way in which young people, who communicate using technology that is increasingly part of their everyday lives, engage with students in a vastly different culture than their own? Moreover, when youth in two different countries deploy English and New Communication Technology to communicate, do they think and behave in similar ways? How do they discuss and explain differences among themselves?

This article seeks to address these questions by reflecting on a global videoconference led by two teacher-researchers in two different countries that brought together university students from different countries, the United States of America and Malaysia. The global videoconferencing class was also supported by additional means of New Communication Technology (NCT), such as blogging, instant chat, digital filmmaking, and instant messaging in the classroom. In this article, constructivist and sociological viewpoints are applied to explore the social-cultural realities and values of the two groups of students, and seek additional insight into present knowledge about *digital education* and cross-cultural communication and learning.

Despite the fact that Malaysia is still a developing country, Malaysian students, like American youths, engage easily in a fast-changing culture of modernity and technology; nonetheless, the two nations demonstrate significant differences in politics, freedom of speech, and the role of religion, ethnicity, heritage, and morality. By unpacking the social-cultural realities of the students experienced in the videoconferencing sessions and while using new communication technology, we hope to provide insight into how effective use of international digital communication can enhance the global learning experience of university students. We argue for the use of videoconferencing both as a learner-centered classroom tool and for engaging students via the technology that has become crucial to their identities and social and cultural experiences.

OBJECTIVES AND METHOD

Through the empirical observation and the writer's experience of conducting the videoconferencing classes with Dr. Patricia Sloane-White from University of Delaware, the writer suggest the educator looks deeper into the underlying socio-cultural forces, which may both create and resist new teaching and learning experiences simultaneously. As an educator, one should comprehend and embrace the dynamic of underlying socio-cultural changes created by the divergence of *space*.

When *space* has been reduced from a physical platform (classroom) to a *virtual* encounter (meeting students on a flat screen) in a teaching and learning environment, we ask the following queries which also serve as the research objectives:

- 1. What *space* represents and means socially and culturally in the learning context?
- 2. How the *virtual learning* evolved and embodied to become *real* to both professor and students in the context of classroom interaction, sharing, participation and students derive meanings to their learning process on top of fulfilling the guidelines spell-out in the objective and teaching outcome of a syllabus?
- 3. How end-users (students) and technology (videoconferencing and new communication technology) go hand-in-hand to create meaningful educational outcomes in the classroom context?
- 4. How students from two different countries perceive the similarities and differences of a variety of social-cultural background?
- 5. How students from two different countries share, exchange and discuss the similarities and differences of their social-cultural background?

In this project, multiple research methods were used, namely interviews, participant observation, and data from class blog and videoconferencing sessions. Students at the University of Delaware (UD) were in direct communication and on-going dialogue with students at Universiti Tunku Abdul Rahman (UTAR), using videoconferencing, blogs, and digital media. They shared the same syllabus and assignments, and analysed key theoretical, ethnographic, and popular literature on globalisation and modernisation, and on the culture, religion, ethnicity, economy and social life of both societies. They shared American and Malaysian popular films, music videos, culture and social values and read one another's novels and magazines. They were exposed to television programmes and advertisements that demonstrated each other's contemporary virtual tours of each other's campuses, towns, and homes and interviewed fellow students, lecturers, and parents. There were all together thirty students from both universities (fifteen students from each university). At UTAR, there were eight male and seven female students; and eight female and seven male students from UD. In terms of ethnicity, most of the UTAR students were Malaysian Chinese with two Malaysian Indian students (one male and one female student). However, the UD students come from a variety of background. For example, two American Jews, one American Chinese, one American Pakistani, one American Mexican and the rest are Caucasian American. UTAR students were in their final third year, whereas the UD students were in their second, third and fourth year of university life.

We also used a *youth-on-youth* constructivist approach; whereby each group of students taught the other about their lives using videoconference technology, *Facebook*-style blogging, digital filmmaking, and instant messaging. Teaching others about their *own* lives and learning about the ways of life of others allowed students to better understand the nature of global similarities and differences between the two cultures. The experience would allow them to consider how youths in the world today, and in the future, live in a homogenised condition of *Westernisation*.

CONSTRUCTIVISM AND METACOGNITION IN TEACHING AND LEARNING

Constructivism idea rooted in the 18th century can be traced from the work of philosopher, Giambattista Vice. It basically means how humans learn and emphasises on the students' ability (cognitive and skills) to construct, build and create something new, either physical object or new idea, based on changing their existing or prior knowledge and experience (Phillips 2010: 103). There are a number of criteria or principles about constructivism; I will discuss them to give my viewpoints in the following paragraph.

In my opinion, one of the important criteria embedded in constructivist approach is about *change* in the process of learning. Based on my observation and teaching experience in Malaysian classroom context, the issue I notice is whether students accept *change* or recognise it as an unavoidable phenomenon in the learning process? Are students equipped with the mentality, attitude and aptitude to accept *change* brought by technology? At the system and formal structure level, is the ideology of change embedded in our teaching and learning culture? These are some of the questions that an educator may ask because having the general assumption that students, will psychologically accepts changes as a natural process in learning should be addressed before preparing them for constructivist thinking and skills in the classroom.

Constructivism also mentioned about another important concept, i.e. *reality*. "... Reality is not in the objects observed or events experiences but reality is constructed by persons ..." (Phillips 2010: 103). To me, this is the debate between whether reality is out there or reality is within an individual and that could be observed and studied. Thus, the debate is between positivism and hermeneutic approaches of social sciences; to understand human behaviour in the learning process. Hermeneutic scientists questioned the general assumption of positivism approach in social science, that reality is what we see and it is already out there, ready to be studied and observed? However, in hermeneutic approach, reality is not out-there, or something permanent; but it is created by and within individual and it can be changed. Hence, the constructivist approach is more inclined to the hermeneutic perspective. In short, it is a human and social construction of reality with different interpretation of symbol and meanings embedded in different learning cultures.

This brings us to another important principle of constructivism, *interpretation*. A person interprets events, objects and perspective from his or her experiences, mental structures and beliefs. Thus, based on this principle, knowledge is constructed and not merely reproduced. It is personal and individualistic (Phillips 2010: 104). I agree with Phillips, in line with human development objective and that reality is constructed and teaching and learning should gear towards this direction, should not be merely to reproduce group of students with quite similar mould of thinking and behaviour. Taking constructivist approach in the classroom context enables students to be themselves, confident about who they are and simultaneously expressing their own potentials of creativity for a construction of his or her-self reality.

Metacognition refers to thinking about thinking or the ability to look at your thinking (Phillips 2010). In my opinion, constructivist approach goes hand-in-hand with metacognism thinking. In order to create something new from previous idea or existing product, students should be allowed to be different and reflect on their thinking and values, question, analyse and be open-minded about it. In short, they should be a 'reflective thinker' to know their own strength and short-coming in thinking and the meanings and values they uphold. This is like taking a third party role, detached from oneself, making a more realistic analysis. It is not an easy process as students may take the easy way out of looking outwardly than inwardly to question their own ability, perception and thinking.

EDUCATIONAL TECHNOLOGY, EDUCATIONAL PSYCHOLOGY AND CONSTRUCTIVISM

In the 21st century, teachers and students cannot ignore the impinging modern digital education tools in the classroom context of teaching and learning environment. In short, daily technology such as the Internet, blog, facebook, videoconferencing, new communication technology, mobile phone etc play important influences not only to our daily life, but also in teaching and learning environment.

In educational literature, most of the focus of educational technology examines how technology affects constructivism learning, with the assumption that digital education tools create a linear relationship between technology and end users (students), affecting an active and creative learning outcome (Jonassen, Howland, Marra & Crismond 2008). However, in the educational psychological approach, as there is no one simple definition of constructivism that fits all learning behaviour in the classroom context; we can categorise it into two levels, the individual cognitive level (micro level) and the macro level.

At the micro level, Cunningham and Duffy, 1996 (as cited in Phillips 2010: 104) stated that, "... learning is an active process of constructing rather than acquiring knowledge. Instruction should be directed towards supporting that construction of knowledge rather than communicating or transmitting knowledge ...". However, this individual approach is still limited to the one to one approach between technology and human being, such as in science and mathematic subjects, in a more technical sense.

At the macro level, constructivism learning embraces wider context of learning. It looks at how individual relate to their environment, to other students, to teachers, culture and society to make sense of their learning process. I agree with Dewey, 1916 (as cited in Phillips 2010) that knowledge and idea emerge through experience in a social context (classroom), which had meanings and important to students. I also agree with Von Glaserfeld, 1984 (as cited in Phillips 2010: 104), that knowledge is received through senses by ways of communication, where students interpret and construct a reality based on his or her experience and interaction with their environment.

However, whether it is a constructivist technological determinist approach, micro or macro constructivist approach in educational psychology, the three approaches share a common ground in the philosophy of learning in the 21st century: the Learner-Centred pedagogy. The learner-centred pedagogy in constructivist approach rejects traditional education, such as the teacher-dominated classroom in which teachers manage, control, and dispense the information.

APPLYING 'YOUTH-ON-YOUTH' CONSTRUCTIVIST APPROACH IN VIDEOCONFERENCING CLASS

Back in 2008 and 2009, a team-taught global videoconference class took place between students enrolled at the University of Delaware (UD) in the United States of America and Universiti Tunku Abdul Rahman (UTAR) in Malaysia. The classes used a *youth-on*-youth pedagogical in constructivist approach where each group of students taught the other about their young lives using videoconference technology, *Facebook*-style blogging, digital filmmaking, and instant messaging. Teaching others about their *own* lives and learning about another way of life allowed students to better understand the nature of global similarity and difference between the two cultures.

We applied the macro constructivist approach of educational psychological where according to Marlowe & Page (1988: 10-13), learning is about being democratic and meeting societal needs. It supports learning that is about "... understanding and applying, not repeating back; it is about being active, not passive . . . [in which] a student discovers her own answers, solution, concepts, and relationships and creates her own interpretations. Marlowe & Page (1988), further argue that teachers must not neglect the broader context of the learning culture and environment, to view classroom as a "mini-society."

This was precisely the approach we sought in our videoconference semester. We understood that when students enter a classroom, inevitably they carry with them their social-cultural values, perception and thinking nurtured from their private homes and country background (prior-knowledge). Together with these differences, they are also put into layers of different context of learning environment, a physical classroom and a 'virtual flat screen' (technology) of a less structure scenario in the classroom. How do students create the new dynamics of learning? We considered the technology to be the key tool for creating choices for helping the students to learn, following Benson, et al. (2002: 141), who concur that "...Technology does not determine learning outcomes; rather, they are shaped by the choices that faculty, students, and others make about the objectives, content and pedagogy that give meaning to and constrain those choices...".

STUDENTS CONSTRUCT 'MINI-SOCIETY' IN LEARNING FROM ONE ANOTHER

Constructivist approach focuses on students. In this collaborative videoconferencing course between Malaysian and American students, different from the one-to-one computer and student set-up, students were not hands-on to a computer to learn with and from technology. They were gathered together in virtual face-to-face videoconferencing sessions for a cross-cultural interaction and learning process.

According to one of the famous Russian constructivist scholars, Lev Vygotsky, 1934 (as cited in Phillips 2010: 107), social constructivism emphasised the importance of social interaction and culture in the construction of knowledge and learning. I also agree with him that, "... Knowledge is a human product that is socially and culturally constructed and learning is not simply the assimilation and accommodation of new knowledge, but is acquired by actual relationships between learners ...". This was the emphasis set upon the videoconferencing class.

Most of the constructivist approaches emphasise on the creation of new knowledge (end product) at the individual cognitive level. However, in my opinion, the process of how students learn, make mistakes, interact with other students, reflecting and questioning their prior knowledge in a wider context based upon two different socio-cultural backgrounds (Malaysian and American society), gives students a new learning context. In the dynamics of learning, students from both countries find their own way in facing and dealing with cultural similarities and differences. This is reflected directly from how they construct a *mini-society* in facing a variety of cultural differences, values, meanings and interpretation in the learning context of videoconferencing.

Students were, for the first time, encountering globalisation via interaction. They were not only having *virtual-presence of other* students via videoconferencing, they had students from their own peer culture in the physical classroom too. This means there were two overlapping levels of learning process: the 'virtual-other' and the physical-other of face-to-face learning, all happening simultaneously.

The students' culture of learning was both dynamic and complex. For example, on the one hand, both UTAR and UD students tried to respond to the cultural expectations and norms of behaviour of their own peer group, on the other hand; they were faced with different cultural expectations and norms of the 'virtual other' students from the other side of the globe, too. In order to juggle two different cultural expectations (between and within culture), the 'mini-society' they constructed was on ways of how they share, respect, reflect, realise, explain, question and negotiate shared meanings with other cultural experiences. Both the Malaysian and American students indirectly practiced and learnt cultural relativism in their communication, interaction and action of behaviour. However, not all students were able to accept new challenging thoughts and ideas as the students' level of confronting change and metacognition level are different. Some may do better than others.

Another example on how students learn to construct their own mini-society, is the identifying and taking the role of different social identity or how they associate themselves, similar or different with one another, based on the me versus you/other in the learning process. In metacognition, students think about their own thinking; but in this videoconferencing class with two different cultural contexts, it is also thinking about who they are in relations to others, constructing another social learning reality in the process of learning and sharing. All these were reflected on the following issues: Active, average, passive participation in class discussion, learning for knowledge versus paper qualification, inward versus outward discussion, public versus private self, upper versus working social class, majority versus minority. The data below were obtained from observation in videoconferencing class and pursued further by interviews.

ACTIVE, AVERAGE, PASSIVE PARTICIPATION

"... The talkative ones have not given us much chance to voice our opinion, and sometimes I am frustrated because they have mentioned

my point; I am careful about what I say, as I do not want to be judged or labelled after class by others, offend anyone or sound stupid in the eyes of other students; I don't know about the topic, especially 'politic' very well, so I keep quiet. I learn from others and I am shy too..."

LEARNING FOR KNOWLEDGE VERSUS PAPER QUALIFICATION

"... I do not associate myself with those who join the class just for fun and don't believe in academic and university life! To them, coming to class is just to obtain a qualification for good salary and future job. I don't think they appreciate what learning is all about! "

UPPER VERSUS WORKING SOCIAL CLASS

"... Most of the course mates are from the upper-social class. They are rich. I am not! I have to work hard and struggle to earn what I own. They don't! They tend to take things for granted from their parents! Well! Except for one or two!"

PUBLIC VERSUS PRIVATE SELF

"... I do not feel comfortable talking about sensitive issues via videoconferencing because it is a public forum; I am an introvert student, but I am not stupid. I am chattier on face book at a personal level..."

MAJORITY VERSUS MINORITY

"We wish to be 'politically correct' in talking about race and ethnicity, or not to mention about it, as there are affirmative action to protect the minority, the majority is discouraged to say the wrong things; we cannot mention or talk about ethnic, race and religion issues publicly, as ISA will come after you; we are the minority, but we struggle more than the majority to earn our livelihood. We are not protected, but the majority is; though I disagree with majority in the videoconferencing class on race and ethnicity issue, I don't blame them, because they are born into privileged strata of the society, they do not have the social and cultural experience of how poor and minority group struggle; they become oblivious about their surrounding."

INWARD VERSUS OUTWARD DISCUSSION

"... We discuss inwardly among ourselves when we disagree with one another, neglecting other students from the other side of the world, this happened in topic such as binge drinking, academic issues and virginity! Jokingly, one of the students from University of Delaware commented that, "Why don't you ask a group of "virgin" at UTAR!"

I looked at constructivist approach and metacognition from a different angle, how students construct a 'mini-society' in the process of learning, makes more meaningful discovery not only of the new knowledge they gain (thinking about their thinking), but also of who they are and how they learn by positioning themselves in certain social context of learning (thinking about their identity), such as similarity and differences from one another. If the videoconferencing tool is used in a conventional way, via the teacher-oriented style, these dynamics will be hidden from the teaching and learning environment.

STUDENT-CENTERED APPROACH AND NEW COMMUNICATION TECHNOLOGY (NCT)

In the constructivist approach, students are the focus. This means we cannot ignore their learning identity too. We also observed how the use of NCT tools (cell phones, IM, SMS and blogs) both impinged on and transformed student learning behaviour and identity. For example, some University of Delaware students described their relationship to their NCT tools in these terms:

"... I feel awkward if I lose my cell phone. I feel like two of my fingers are missing or part of me is missing. I need to hold something in my hand; we are the visual-generation! Images, pictures, photos stimulate our interest in classroom learning, so it is not so boring! The cell phone is a way to express a sense of "self"! I know who I am already, so it is just to express who I am; I have downloaded some stuff from the Internet to give me guidance in my daily life, for example, on things that I need like a Japanese dictionary for my Japanese class."

This indicates students are far ahead in being socialised on the use of NCT tools via the domestication of technology outside the classroom context. To understand the constructivist student-learner-centred approach in videoconferencing context, I argue, teachers should not ignore, but should leverage on the use of NCT in students' everyday life, as NCT tools have empowered new styles of communication and freedom among their peers.

Some researchers have shown how mobile phone use has become new rites of passage for youths to break away from the structural relationship and power control of parents (home) and teachers (classroom) (Mizuko Ito 2005; Mifsud & Junita 2005; Caron & Caronia 2007: 103). In both Malaysia and the U.S., students have joined 'the thumb generation' in which text messaging becomes their secret language (Caron & Caronia 2007: 178). As such, denying students to use NCT in the classroom is likely to deny part of their existence, identity, 'addiction' to technology and sense of belonging. Hence, NCT has become both the product and a catalyst in the way students create a norm of shared meaning and community, differentiating and liberating them from the adult world.

This shows how videoconferencing and NCT tools used by end-users (teacher and students) with an unconventional approach, constructivist student-learnercentred pedagogy unfolded classroom dynamic in the teaching and learning process. With this ongoing use of technology impinging on the classroom setting, teachers cannot ignore the new technologically informed social and cultural tools that are emerging and changing without notice in the learning culture of their students.

As mentioned, NCT tools do not only provide a channel for students to break-away from the authority control of both parents and teachers, it also acts as a private-channel/ backstage domain for peers to voice their personal opinions on social-cultural and political issues, topics which may be tabooed or too sensitive to mention or talk about in the daily conversation of mainstream society. According to Fortunati (2005), the dramatic effect of the NCT tool is the eruption of the backstage, with all its capacity and strength of information into the unassuming picture of the front stage, challenge the neutrality of the front stage. Among Malaysian youths, NCT has had a significant impact on changing the nature of behaviour and ideas. Because of their use of Information Communication Technology, the younger Malaysian generation has a mind of its own, reflected in their ease in discussion in our video conference such controversial topics concerning academics, family life, ethnicity and minority status, sex, gender and 'hookingup.' Elsewhere in the Malaysian society discussion of such topics are influenced by the mainstream media; in the videoconferencing sessions, students felt freer to talk openly because it utilised the NCT.

CROSS-CULTURAL EXCHANGE AND GLOBALISATION

No doubt the videoconferencing and NCT tools provided a platform for interaction, learning and sharing between students of two different cultures, as the above discussion indicates. However, it is not the digital education tools alone that break the social and cultural barriers of learning between and among students. Human factors, for example how students break away from their stereotyped and prejudiced perception of each other; how they break their own cultural biasness and become more open to learn from others; how they create a comfort zone that allows for free discussion; students' self-images in discussion; and how they build a sense of trust, respect and belonging; are other crucial factors that should be taken into consideration.

The videoconferencing approach and new communication technology tools cannot resolve or manage these human factors. It is still the role of the end-users, teachers and students, to combine face-to-face interaction and digital education tools to unpack the 'truth' of social and cultural realities, and overcome the barriers and challenges in the teaching and learning environment. In this context, whilst the digital education tools set the platform for discussion, teachers and students have to be comfortable with one another to engage in an open discussion, in order to have a meaningful sharing and learning process.

In the videoconferencing sessions, most of the students became comfortable with one another after the first two sessions. The blog, Facebook, MSN chat and text messaging (NCT tools) provided another option for them to continue their discussion from the public forum of videoconferencing, and build further *friendship*. These friendships are still maintained among some students from both countries via Facebook.

PUBLIC VERSUS PRIVATE-SELF/ FRONT STAGE VERSUS BACKSTAGE

The use of digital technology in forming the *social-self* of students in the learner-centred constructivist classroom can be explored sociologically, using the symbolic interaction perspective that concerns a student's *public/front stage* versus *private/ backstage* self in relation to learning behaviour in the classroom. Clearly, videoconferencing and NCT tools have significance in this context.

According to Goffman (1990), front stage is a stage where a person is wearing a *mask* to *act* in front of the *other* or a group of audience/spectators; at the backstage, a person is relaxed, comfortable being who he or she is without the necessity to act. The *mask* for acting is necessary to perform a perceived expected *self* in the eyes of other, not only to *please/satisfy* the other (audience), but to achieve certain intended or unintended goals of interaction and, primarily, to maintain smooth communication in the process of interaction and to play the social roles and responsibility in the society. In our videoconference sessions, the classroom itself began as a *public space/front stage* for students, and extended it across global space.

VIDEOCONFERENCING: THE FRONT STAGE OF FACE-TO-FACE INTERACTION AS PUBLIC FORUM

Students were uncomfortable in the first two sessions of the videoconferencing classes, for they had audiences comprised of both students in their own physical classroom and students appearing on a videoconferencing screen, plus a teacher in both settings. Nobody knew what to expect or how to respond. Students from both countries put on a friendly and respectable front stage to greet one another in the virtual face-to-face communication. To break the ice of interaction, in the beginning of the first session Malaysian students were asked to describe using one word about American and the American students were asked to describe themselves to Malaysian students in the second session. UTAR students generally gave a positive description (independent, strong, fashionable, and friendly, etc.) about Americans. UD students responded by debunking the positive-stereotyped images, describing themselves as arrogant, selfish, ignorant, individualistic, and so on.

The *positive-stereotype* image represents the *front stage*, which can be observed at two levels. Globally, the commercial media, Internet, movie, books, magazine and radio, portray a sense of *superior-culture* in American images, largely influenced the *positive-stereotype* images about American. After they shared their stereotypes, UTAR students described themselves as feeling more *comfortable* and *confident*, because in reality, they discovered, as they said, that the UD students are just

human beings like anyone else. But students in both contexts needed to learn, over time, what social and cultural factors influenced what appears on the 'front stage' of each group.

For UTAR students, the cultural value in interaction requires that they not be rude and offensive, even when they have a different opinion or sharply disagree; whereas for UD students, the cultural values is to respect the individual choice of voicing out opinions. As their understanding of each other grew, their mutual appreciation of the different cultural, social, and political forces that affect the front stage began to become clearer. After the first two sessions, the process of interaction became dynamic, as both UD and UTAR students developed a certain amount of comfort and openness to share their experiences as peers. The process of unveiling personal opinions ('backstage') on the front stage was further enhanced by the usage of the class blog and Facebook. These were less formal, less public tools students used to find different modes for communicating outside of the videoconferences. Over time, by engaging in front stage and backstage communication, they learned to respect a culture different from their own and engage in the practice of 'cultural relativism' in a global crosscultural interaction.

CHALLENGES IN CONSTRUCTIVIST LEARNING ENVIRONMENT

In constructing a new learning environment, it brings along new challenges too. One of the challenges was how virtual class fits into a physical classroom in bridging the gap of *space* and *time* of a cross-cultural environment?

From the participant-observation and experience of conducting the videoconferencing classes, there were two situations identified as the *virtual* class fits into a *physical* classroom in constructing a new reality of learning environment.

Situation One:

Teachers and students equipped with prior 'cultural knowledge' from actual social life in 'face-to-face' interaction

In constructivist approach, prior knowledge, in this case, prior 'cultural knowledge' possess by students of different background and experiences in their face-to face daily interaction determine how and to what degree students are able to accept change, adapt, debunk or build new knowledge from it.

When videoconferencing class is conducted among Malaysian students, between schools or universities, students have already some empirical social experiences and exposures in their daily interaction with other students, though they come from different social backgrounds, social class, gender and ethnic groups, the challenges (socio-cultural changes and adaptation) of starting a videoconferencing class are predictable and controllable to a certain extent.

Students do know to a certain extent what, why and how to perceive, act and respond in their learning process based on their prior cultural knowledge before they step in the 'virtual classes' in a physical classroom. In short, the 'face-to-face' interaction of actual social life plays a role in bridging the gap of 'space and time' in teaching and learning experience of teachers and students. And these prior cultural knowledge enable students adapt to changes or expect what to expect in the new learning reality.

Situation Two:

Teachers and students have NO prior 'cultural knowledge' from actual social life of 'face-to-face' interaction

When videoconferencing class is conducted among students from two different countries, students come from different social class, ethnic, gender and race background, having no prior cultural experience of one another (between Malaysian and American students), this made the new learning environment interesting. A number of observable new learning behaviour emerged (in the following discussion) when a virtual class fits into a physical classroom in the construction of new social reality in teaching and learning experiences.

In this new constructed classroom context, the role of an educator will change. Some of the changes involve, for example, giving up the 'expert' role to become a facilitator, to become a questioner of students to find out what they have learned and how they learned. Students might drive you crazy as more noise come from the student's discussion and question (What are some of the challenges I may face? Retrieve October 21, 2010 from http://www.thirteen.org/edonline/concept2class/ constructivism/explor_sub2.html).

In our experience, definitely the role of the educator had changed. Teachers and lecturers become facilitators, collaborators, give guidance, support and from time to time, intercept when necessary to guide students back to the focus of learning without deviating much from the main topic. This role switching may be difficult for some educators, as it breaks the traditional hierarchical classroom structure and authority of a teacher; it also challenges the flexibility, sensitivity and egocentric of a person. However, on the other hand, two-way communication is initiated and educators can take this new environment as the platform for research too.

Students' role will change too from being a follower to active participants. They come to understand that they will get multiple answers from different students; they learn to justify and defend their ideas and changing one's mind is acceptable in the process of sharing and learning from others; their knowledge will be tested by others questioning them etc. This means, most of the time, students from Malaysia and America are the master of their own to exchange ideas, discussion, question, debate and comment on the given topic. With Internet and easy access to information, students can be 'independent' in this process of learning with proper guidance. Students, on the other hand, have to learn to be confident in acquiring the learning skills, social skills and knowledge among themselves and learning from others, not only from their local course-mates, but also from their counterpart students in America and vice-versa. On top of this, both teachers and students have to adapt to socio-cultural adjustments or tune their mindset to the new teaching and learning experience. This is to avoid under or over-expectation from both parties.

Another adjustment in constructivist learning behaviour, both the Malaysian students and American students, before meeting in each videoconferencing class, with the application of other NCT tools, they are required to read from posted materials on class-blog they shared, write their opinions and comments as their weekly assignment, post on the class-blog too one week before any session starts. After the videoconferencing session, they continue their discussion on the class-blog, or at another level of communication, privately with their web-partner (one to one basic) using e-mail.

Another important element in constructivist approach is *culture* and *perception* on *oneself* and *others*, either as a *driven-force* or *hindrance force* to the crosscultural interactive communication. Most of the students from both sides, Malaysia and America had not have any *face-to-face* real life experience contact of one another. Malaysian students' perceptions on American students were derived mainly from the mass media and stories shared by friends and relatives. Some American students have no idea about Malaysia, while some others derived their perceptions from the mass media too.

It will create more *media-generated* perceptions and expectations if students of both countries enter and exit the videoconferencing session carrying *cultural-baggage* and stereotype images of one another influenced by the mass media. To bridge the gap of *space and time* from *cultural-baggage*, to understand and go beyond stereotypes of each other, in this constructivist crosscultural e-learning course, students were asked to introduce and write about themselves and family, post it on class-blog for the introduction session. They are encouraged to be as creative as possible to exploit the audio-visual interactive features of the class-blog set-up for them. Interactive features include picture, photos, music, email etc.

Furthermore, in the constructivist videoconferencing learning environment, students and teachers have to expect the unexpected and be patient about the technical limitation that crops up from time to time. With the assistance of the technical staff, teachers have to act as the *problem-solver* when situations arise, calm and creative in handling the situations, re-direct students to go beyond the technical difficulties and focus on the topic in discussion. In this sense, students were briefed about this issue, to prepare them psychologically about the un-expected, so that they do not get overwhelmed.

The final challenge is the difference between centralised and decentralised Education System of both countries. Malaysia is like any other education system in Asian countries (Japan and Taiwan), practices a centralised education system. The centralised system is a top-down approach, which standardises all the procedures, regulation and documentation, in a hierarchical way. This contrasts with the United States educational system, which is decentralised, a bottomup approach.

After the videoconferencing sessions, the Malaysian students felt that the bottom-up approach was userfriendlier. If Malaysian education system could employ a more 'constructivist student-centred approach', more flexibility and empowerment given to the dean, faculty, professor and students, this could allow for the creation of new courses, new systems, structures, syllabi and curricula.

CONCLUSION

The use of constructivist approach, metacognition and student-centred approach in teaching and learning is an important way to go beyond the capitalist demand of the type of students needed for market and materialistic requirements. To some extent, it fulfils the essence of human development and allow students to make their own choice or go on their own pace of learning to realise his or her creative potential in the process of learning, and hopefully find their own-self and becoming who they want to become. The creative way of how students manoeuvre the videoconferencing and new communication technology tools allow an open channel for cross-cultural engagement and the complex ways in which local and national culture and values emerge in the course of a global youth-onyouth dialog. It is undeniable that changes brought by the virtual global collaboration that bridges two university classrooms in different countries provide great advantages for all end-users, teachers, students and universities. However, the digital education tools, in this case, the videoconferencing and new communication technology cannot by itself transform the teaching and learning environment, but, it is the creativity, choices and meanings constructed by end-users, teachers and students on how to maximise the usage of digital education that makes the difference. The human users construct a new social learning reality to transform the teaching and learning environment into a meaningful social and cultural sharing and experience.

By applying the constructivist student-learnercentred approach, it also reflects and unpacks the socialcultural realities of how students learn from one another as reflected in the issues discussed under 'mini-society': public versus private social self and identity of students, majority versus minority issues, academic issues etc. In another words, the digital education tools would be less revealing if a conventional teacher-centred approach is applied. Again, without human intervention in a constructive and creative manner, digital education tools could not break the *social-cultural differences* of students from a variety of background. These were the challenges we faced in this virtual videoconferencing classes. The interaction and learning process becomes complex and dynamic with embedded underlying perception, stereotypes and assumptions about one another culture.

I also looked at constructivist approach and metacognition from a different angle, that is on how students relate to other students, different culture, society, new communication technology, values and meanings of a wider societal context. This paved the way for a more meaningful discovery not only of the new knowledge that they gained (thinking about their thinking), but also of who they are and how they learn by positioning themselves in certain social context of learning (thinking about their identity), such as similarity and differences from one another. If the videoconferencing tool is used in a conventional way, via the teacher-oriented style, these dynamics will be hidden from the teaching and learning environment.

Another dynamism reviewed when students are empowered to learn from their own peer-group, is that they uniquely construct their public and private social learning identity and reality. Videoconferencing was treated as their public identity and the new communication technology tools as their private identity, that they use to share and air their opinions about a certain topic, about how they feel and to what extent they share in-depth discussion. Indirectly they engage the front-stage and backstage of their social self to build a certain level of comfort, familiarity, friendship and trust for certain topics of discussion, that in the eyes of the mainstream society, is sensitive or politically incorrect to talk about. At the end of the day, it was a fruitful learning experience as they learn, reflect and question again their own reality and cultural values and understanding from one another through the eyes of others. Finally, despite globalisation, local and national social-cultural differences still persist among students of the United States and Malaysia.

At the end, it is not easy to conduct a constructivist cross-cultural videoconferencing classes with two teacher-researchers and fifteen students each from two different countries of a variety of cultural differences. Some underlying issues and socio-cultural forces need to be explored and comprehended to enjoy a successful and meaningful process of teaching and learning benefited to both teachers and students of the two countries.

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