The converging streams of globalisation and eLearning: Stretching the comfort zone

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In this paper we examine the complex web of relationships which exists within trans-national educational programs. In particular, we focus on the role technology can play in supporting interactions between learners when there is significant language and cultural variation. We progressively build up a model of key factors that need to be accommodated if successful trans-national education is to occur. The factors include establishing a common frame of reference, attention to process, minimal critical structure, the need to capture context, and time for adjustment. Multiple technologies are preferable to a single channel with audio, video and data each providing elements of support such that the technology forms no barriers to emerging team processes. Both technical and personal support, and frequent monitoring of team progress are important to stimulate interaction. A supportive rather than directive management style with a balance between proactive and reactive support is needed. We conclude that collective knowledge and ability exists at present to form and manage dynamic virtual teams, working in interactive environments supported by cost-effective technologies that can enhance the probability of virtual team collaboration success.

Key words: globalisation, trans-national programs, eLearning, diversity, cross-cultural, radical innovation

Global partnerships, diversity and technology

The trans-national character of university teaching is increasing. For example, there was a three-fold increase in overseas student enrolments in Australian higher education institutions during the period 1997-2002, and these enrolments are now 10 per cent of the total higher education student population. Further, off-shore enrolments increased from 22 per cent to 37 per cent of total overseas student enrolments during this time period (Department of Education, Science and Training, 2003). A snapshot from the other side is that, in 2001, Hong Kong hosted more than 150 overseas higher education providers. The teaching in these trans-national programs usually has a significant face-to-face component with home institution staff traveling offshore, sometimes partnering with local teachers. However, the majority of such programs also use technology in some way or another. This brief introductory section will outline the diversity that exists in any trans-national project or program. We will use the terms ‘trans-national’ and ‘global’ rather generally and somewhat interchangeably to describe projects or agreements between universities that operate between nations, each of whom has definable cultural and language characteristics.

Global partnerships in higher education mean that various perspectives on knowledge need to be negotiated. There is a substantial literature on cultural boundaries and perspectives on knowledge, including the literature on cross-cultural psychology (e.g. Altarriba, 1993) and the growing amount of multi-disciplinary writing (e.g. Stromquist, 2002; Stromquist & Monkman, 2000). In this brief paper we will present one example so that readers can appreciate the need to question the universality of concepts that have developed solely within one cultural perspective (for many ASCILITE attendees, that may well be an Anglo-Western perspective). Saunders, van Slyke and Vogel (2004) examined how time is viewed by different members of a global virtual team. Global teams rely not only on the coordination of time zones but only on having a shared vision of what time means. They articulated eight dimensions that are commonly used in describing time and mapped these to four common visions of time that are held by

large numbers of people (Table 1). Unless team members recognize and explore the differences that may exist in their perspectives on time, frustrations and inefficiencies can easily result. The creation of an agreed time vision for the team is seen as an important aspect of project management. This need not be a single time vision but can also recognize accommodation and application of different time visions as a function of team activities, personnel assignments and responsibilities within the team.

Table 1: Examples of time visions
(Saunders, van Slyke and Vogel, 2004, p. 21)

Dimension	Time vision			
	Clock	Event	Timeless	Harmonic
Continuity	Discontinuous	Continuous	Continuous	Continuous
Homogeneity	Homogeneous	Epochal	Epochal	Homogeneous
Linear/cyclical	Linear	Cyclical	Cyclical	Cyclical
Direction	Uni-dimensional	Recurrent	Recurrent	Recurrent
Abstraction	Abstract	Concrete	Abstract	Concrete
Objectivity	Relatively objective	Subjective	Subjective	Intersubjective
Time horizon	Short-term	Long-term	Long-term	Long-Term
Chronicity	Monochronic	Formal-Monochronic; Informal-Polychronic	Polychronic	Monochronic
Example	American, Anglo-Saxon, Germanic & Scandinavian countries	Japan	Regions where Hinduism or Buddhism predominate	Regions where Confucianism or Taoism predominate

Of immediate concern to many trans-national programs involving Australian universities is an understanding of Chinese culture in one or other of its national settings. Broadly, this can be viewed as understanding East-West distinctions. This approach involves looking at how value hierarchies and priorities for action differ across cultural boundaries. For example, the primacy of family, and respect for elders and associated groups norms in Chinese culture have implications for students' perceptions of Western curricula and classroom behaviour (McNaught, 2003). Both Bond (1991) and Nisbet (2003) are recommended for good introductions to understanding this area.

Another area of diversity relates to the students who enter post-secondary education. This diversity covers academic motivation and orientation, linguistic and cultural background, prior educational experiences, and approaches to learning. These students interact with teachers who have diverse approaches to and beliefs about teaching and learning. Furthermore, there is increasing diversity in the learning contexts students enrol in; these might be workplace learning, studio-centred learning, programs with intensive block teaching (often across national borders), cross-sectoral programs and tailored industry-related programs. Finally, the technology itself means that there is an increasing range of tools and strategies for us to use in designing programs and courses. All this diversity is summarized in Figure 1. The important thing to note is that unless technology supports this fragile and complicated set of relationships, it is not likely to be a facilitator of the learning process.

The success of these new programs needs to be constantly monitored and the evaluation data scrutinized carefully. Figure 1 shows two important feedback loops. One is between the technology and the perspectives on knowledge. In the example of time visions above, the choice of technology needs to suit whatever the agreed time vision is. For example, automated scheduling tools can assist in monitoring and tracking activities that cross multiple time visions; asynchronous media allow monochronic individuals the ability to reschedule conflicting activities. The other feedback loop shows the need to constantly revisit the original agreements to see if the expected outcomes are being achieved. One should not wait till the newspapers have the next set of headlines about inadequate support for international students before checking pastoral and learning support mechanisms.

Progressive development or trying to get it all right at once?

Having established that there is a complex set of relationships, what is the best way to proceed so that the best outcomes can be achieved? Global educational initiatives are expensive in financial terms but also in

terms of the life opportunities for the students who engage in these offerings. We need to get it right more often than we do.

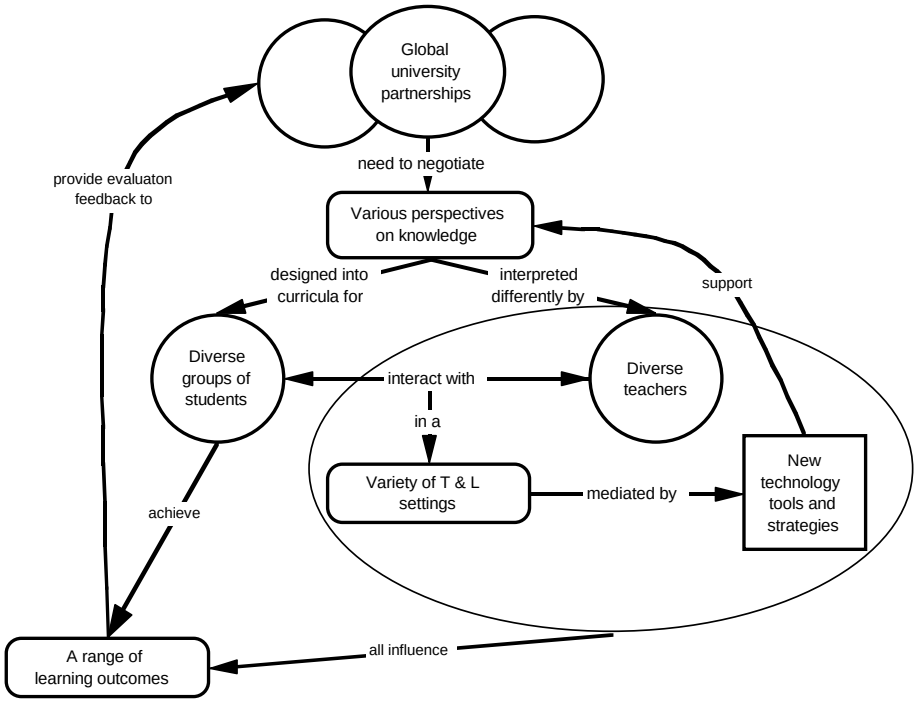

Figure 1: Diversity in trans-national higher education
(after McNaught, 2003, p. 290)

Doom and gloom scenarios abound these days. eLearning is said to be 'not working' or 'not living up its expectations'. In a challenging report entitled 'Thwarted innovation. What happened to eLearning and why', Zemsky and Massy (2004) concluded that "eLearning took off before people really knew how to use it" (p. iii). That is undoubtedly true but, at this point, where do we go? Zemsky and Massy suggest that wide-reaching changes are needed—to the current university process for quality curriculum development, to funding models, and to relationships between corporate and collegial education. They even suggest that all the technical and market issues surrounding learning objects need to be fixed before eLearning can be successful. This is all just too hard. And this is just for eLearning. What about seriously adding in the trans-national, cross-cultural, aspects? How can this ever be achieved?

Rather than trying to fix it all at once, is there another way forward? In the rest of this paper we will use a progressive approach to looking at innovation and change. We will look at some successful global education stories to see how they achieved high quality eLearning experiences in a global context. How did the learning design support the students? What technology was used? What support existed? For learners; for teachers? We will do this in three stages: the first where the global connections are predominantly mono-cultural; the second stage where the technological interaction is limited but there are significant language and cultural boundaries; and the third that we call truly radical innovation, involving both cross-cultural interactions and innovative technology.

Stage 1 Global education mostly within one cultural context

There are some successful projects where students learn about global issues but within their own cultural context, that of the developed English speaking world. We will look at two such projects—one within the US and one with several components operating between the US and Australia. Both projects will be briefly described and then a set of success factors presented which is an outcome of the second project.

The GlobalEd project (University of Connecticut) in US schools

An online description of the project is:

> A U.S. Department of Education, OERI funded project - GlobalEd is titled: Gender, Technology, and Group Decision-Making: An Experimental Study in Secondary School International Studies Programs. This is an interdisciplinary project joining Educational Psychology and Political Science to student decision making, problem solving and negotiation skills of middle and high school students engaged in a simulation based on international affairs. We conduct three simulations per year with a total of approximately 750 students. We administer pre-, post- and follow-up surveys to measure changes in Knowledge, Attitudes and Behaviors (KABs). (Brown, nd).

The technology used is standard communication technology—email, chat and asynchronous discussion forums. What is interesting is the detailed learning design based on problem-based learning principles. Each class of students is assigned to a specific country several months before the actual simulation. Teachers have an extensive set of resources, which can be accessed at the GlobalEd site <http://www.globaled.uconn.edu/>, in order to assist students with their understanding of the country and region they are studying. The actual simulation takes place each day over a five- to six-week period. Names are not used during the simulation. Students are identified by their role (e.g. Brazil, human rights committee). Each group is supported during the simulation by an experienced doctoral student who provides some procedural support and moderates matters such as the use of diplomatic language. The project has been in operation since 1999.

Brown et al. (2004) report on one cohort of this interesting initiative. This study involved 260 participants in middle school grades in four states in eastern United States. Eighty percent of the participants were Caucasian and 98% were American citizens. Using students' self-report measures on knowledge (about the countries in the simulation and about American foreign policy), attitudes (motivation and approaches to study) and skills (communication, group work and problem solving), Brown et al. (2004) report an overall increase in knowledge for both genders and improvements in attitudes and skills for girls.

GlobalEd uses a strategy of progressive refinement of an approach which is well grounded in prior research. They have adopted problem-based learning and then developed scenarios and resources to support that approach. The technology is simple, indeed ubiquitous, in the context of US schools. There is thus one learning design, a highly mono-cultural setting and little technological challenge. These comments are not meant in any way to diminish the achievements of this project. It has supported the growth of cultural awareness of thousands of children and this is to be applauded. But, to us, its success is partly due to the tightly defined context and strategies adopted; diversity is controlled. Let's see what happens when there is more diversity for the project to deal with.

The Global Learning project (Wichita State University)

Instead of refining one model, Global Learning <http://gl.wichita.edu/> uses a project approach and has several initiatives operating. The project is in its third year of operation and its funded sub-projects listed at <http://gl.wichita.edu/project/> are very impressive indeed. They are listed in Table 2. Of these 14 projects, the institutional partnerships of eight of them are within an English speaking 'Western' culture. Of course, the students involved in the activities could be situated in any number of countries, and also there are collaborators in several of these projects from a range of nations. The point we are making is that, in framing initial projects, Global Learning chose to work largely in a known context and then progressively move outwards. There is undoubtedly an element of opportunity advantage here as well as several of the Global Learning staff are Australian. So, our second Stage 1 example is not mono-cultural as the first was, and the project staff are clearly moving towards more realistic exploration of cultural and linguistic diversity which is our second stage. An extensive and impressive literature has already been generated about many of these Global Learning projects (the papers can mostly be accessed from the Global Learning website).

One that deserves especial mention is Rimmington et al. (2004) because it seeks to develop a model for how students learn and change in a globalised context. Using the metaphor of a 'cage' (based on Mackay,

1994), they explored how each person has a personal cage of interpretive frameworks (cage bars). These frameworks are strongly influenced by each person's context which includes all-pervading cultural rules and nuances. Misunderstandings and miscommunications between people arise because their cages are so different. One needs to understand one's own cage before one can hope to understand another person's. The role of the teacher in global education contexts is that of facilitating the intrapersonal and interpersonal reflection (Gardner, 1983) needed for understanding oneself and then reaching out to others. Rimmington et al. (2004) analysed forum messages in three Global Learning courses to show students' movement in this journey of what they call 'cage painting'. The painted cage is visible and hence negotiable.

Table 2: Global Learning projects (2002-2004) <http://gl.wichita.edu/project/>

Year	Project title	Countries of institutions involved in collaboration with Wichita
2002	Instructional strategies in mathematics/science for elementary teachers	Australia
2002	Lean manufacturing	Not clear from website
2002	The global forum on school leadership	Australia
2003	Logistics and supply chain management	Thailand & Turkey
2003	Gifted education specialization	Australia, Canada and UK
2003	Our music, our culture: exploring the U.S. and Ireland through music performance	Ireland
2003	Robotics in the classroom	UK, Taiwan and Japan
2003	Remote access laboratory	Australia
2003	Calling Palestine - enriching learning in women's studies	Palestine
2004	Videoconferencing for global learning	Internal
2004	Connections	Internal – College of Fine Arts
2004	Integrating and sustaining global learning in women's studies	Taiwan, Nigeria & Palestine
2004	Developing global business graduates at Wichita State University	Germany & Australia
2004	Global interactions for future scientists in Communicative Disorders and Sciences (CDS)	Other US, Canada & Australia

The staff in Global Learning have reflected on their projects this far and developed a list of key success factors. This list is framed as '10 traps to avoid in global learning projects' [http://gl.wichita.edu/newsletter/?item=102] [viewed 29 July 2004]; we have reframed them positively.

1. Integration into learning activities
2. Reciprocity of benefits and involvement
3. Assessed outcomes central to design
4. Good communication technology
5. Strong relationship with overseas collaborators
6. Clear institutional support
7. Focused preparation
8. Secure teamwork
9. Having a model global learner to refer to (this is intended in the sense of cognitive apprenticeship)
10. Allowing time for socialization

Both GlobalEd and Global Learning are successful because they adhere to clear principles, maintain careful planning and sustain research and reflection. As more of the Global Learning projects move into direct experience between learners living and learning in different countries, they can continue these principles, no doubt refining their own list of key success factors.

Stage 2 Exploring cultural and linguistic diversity

Situations where there is immersion in a new cultural context offer new challenges because the control described by Stage 1 projects cannot be maintained. Changing the language and cultural context one works in is highly challenging (as both of the authors know from experience!). In this section we will

comment on one large exchange scheme of students and teachers, the Fullbright Scholar Program. The experience of this program has done much to develop understanding about working in cross-cultural contexts.

Some material in this section was based on an interview on 1 June 2004 with Dr Glenn Shive, Director of the Hong Kong-America Centre at The Chinese University of Hong Kong. The Fullbright Scholar program has student exchange schemes in 120 countries. In Hong Kong, the model has a focus on institutional linkages and advisory aspects rather than awarding scholarships for students <http://www.cuhk.edu.hk/hkac/>. The work involves organizing conferences and reflective exchanges about the role of an academic in China in order to optimize the benefits gained from exchanges. Lessons can be learnt from scholars moving in both directions. Besides formal conferences, there are now several online forums that exist for scholars who have had experience in particular regions of China. In most cases, these scholars never meet face-to-face but 'old' scholars share experience with and offer advice to new Fullbrighters. As Glenn comments, they can facilitate reflection, giving "explanatory shape" to "learning moments".

Many returned Chinese scholars (who have spent many years in the US), have been interviewed and they describe a strong experience of the dual world phenomenon. Their advice to Westerners coming to China is: Be yourself. Bring your world with you but read the context and be adaptable. They stress the importance of knowing a little of the language to "put your mind into a cue-reading frame" (or to assist in negotiating cages).

The idea of a 'Model Global Learner' is one of the Global Learning key success factors. A similar idea has prompted a current project of filming Fullbrighters discussing their stories—teaching roles, expectations, institutional bureaucracy they encountered, assessment schemes in schools and universities, political influences on the content that can be taught, etc. US teachers, Chinese students and Chinese teachers are part of this project. The idea originated in part from the online forum that the 10 Fullbright scholars who have been to Fudan have participated in. They have commented that through the forum they become part of a community even though they have never met, and wished that "more could be done in a specific classroom project where this community of experience is captured and available for students in US and China to discuss". The product will be distributed widely in the US and China in a DVD format. Glenn noted how much more powerful technology is now, compared with the tape-slide shows produced with the same intent over 20 years ago.

Recent interviews with 25 post-graduate students in Bejing and Shanghai revealed that only about half these students has had a native English-speaking teacher at any stage of their education. This not only relates to language competence. American teachers in China often comment that they realize they need to explain and emphasize why they are using a dialogic process in the classroom. They see their role in this regard as facilitating a cultural experience as much as a language experience.

The Fullbright scheme (and other exchange programs) have progressively added to our understanding of how individuals can negotiate language and cultural barriers in order that all participants can gain enriched understandings. Technology is used for the dissemination of these understandings; it is an adjunct to the events where teachers and students work face-to-face. In Stage 3 we look at a context where technology is central and integral to cultural negotiation and understanding.

Stage 3 Radical innovation using innovative technology in a multi-cultural setting

What new factors are needed when language barriers exist AND the technology is really new in the context? What additional factors are needed to deal with radical disruptive innovation? To explore these questions and remove uncertainties, the Hong Kong – Netherlands (HKNET) program has been engaged over a six-year period in a field study setting under the general rubric of sociocultural learning theory. The program was initiated in July 1998 and has followed the same structure for six successive years. Students from Hong Kong and the Netherlands (and subsequently expanded to include students from the US and France) are formed into six- to eight-person teams (with two to three participants from each country). These teams work over a six-week period through a series of divergent and convergent activities

resulting in a single joint report. The participants bring with them a variety of national as well as professional cultures that surface through team members' interactions (Vogel et al., 2001).

By communicating with their team members overseas through group support technologies, the students gain experience in using these technologies and the team dynamics within these distributed multi-cultural teams. The educational objectives of this experiential learning context are to support the students to:

- gain insight into the current situation of IT-developments in Europe and Asia and increase the understanding of the global differences and similarities;
- experience the pros and cons of cooperating in a distributed team, with members from different cultures and backgrounds;
- experience the advantages and disadvantages of using a remote Group Support System; and
- become familiar with several applications of information and communication technologies (ICTs), which can be valuable to their study and (future) work.

A commercially available Learning Management System (Blackboard) serves as a shared group memory and a common environment for both synchronous and asynchronous brainstorming, discussion, voting and report writing. All participants additionally have an email account at their disposal as well as periodic access to videoconferencing. If a team prefers to use other tools than those suggested, they are free to do so. Each activity functions as a milestone and is restricted by a deadline. The sequence of activities is illustrated in Table 3.

Table 3: Sequence of activities in the HKNET program

1.	***Gathering and sharing of information:*** An introductory activity is created to encourage the participants to share the information they find with their team members. This activity is available during the entire project.
2.	***Brainstorm on research questions:*** The team members are asked to name possible research questions for their project. All ideas are transferred to the voting activity after a check for duplicates. The activity starts at the same time as the gathering of information activity and is available for seven days.
3.	***Vote on research questions:*** The voting activity is used to establish consensus on the report framework. After the vote, the top three research questions form the report framework. The results from the vote are transferred to the division of responsibilities. The voting activity starts right after the brainstorming.
4.	***Division of responsibilities:*** After the framework is established, each team member selects a part of the report to write. The names of the people responsible for each part are entered in the outline. This activity is started right after the vote and remains open for discussion for the rest of the project.
5.	***Plain text and comment on contributions:*** This activity enables the team to simultaneously write different paragraphs for the report. Students can immediately see the contributions of the other team members on their assigned part. This activity starts after the deadline for the division of work and remains open for 14 days.
6.	***Editor prepares concept report:*** The results from prior phases are exported into a text-file and sent to the team-editor selected by teammates. The editor has to transform the text-file into a draft version of the report by removing date and time stamps, applying some layout, etc. The editor has four days to finish the draft and distribute it to all team members for evaluation.
7.	***Evaluation of the concept report:*** The team has seven more days to suggest changes to the report to the team editor.
8.	***Final editing by editor:*** The editor has one week to process all the remarks from the other team members and to finalize the report which are then integrated with reports from other teams.

Interesting changes occur during the dynamics that occur as the project progresses, including a developmental perspective of cultural learning. Traditional trait-based perspectives of culture (e.g. Hofstede, 1991) insinuate a sense of stability in patterned ways of thinking, feeling and reacting that, in our experience, does not hold as multi-cultural team members interact. In general, we find that culture is malleable as it can start with a shape or identity based on trait-based characteristics but elements of culture evolve as varied circumstances are encountered, each with a specific set of conditions. We suspect, also, that culture has a 'memory'; after modifying conditions have passed, some elements may revert back to more traditional trait-based identities until situations are encountered that, once again, extend aspects of culture towards a more situational-dependent set of circumstances.

Overall, we suggest that team culture is a formative process that begins with broad general characterizations based upon historical perceptions and moves through phases of information exchange, uncertainty removal and personalization, resulting in a patterned way of thinking, feeling and reacting

that fits the unique characteristics of the team. In some sense this is analogous to the developmental perspective of interpersonal communication (Miller & Steinberg, 1975). Thus, culture in this sense continues to be dynamic as relationships and circumstances in the team change. It also suggests that team culture may be carried over in part, to new teams. In our personal experience with this project we have found that to occur. We have seen that stereotypes are initially acceptable to get things started on the way to letting the dynamics converge.

We recognize, however, that the rate of cultural convergence can be influenced by a number of factors. For example, we need to have sufficient degrees of freedom to enable cultural learning to emerge. Time pressure in effect can push cultural identity towards traits, but multiple channel availability encourages development of cultural understanding. Further, as observed in the HKNET project, an individual's attraction to work with different cultures varies considerably (Rutkowski et al., 2002). In one cohort. attraction for different cultures was determined by using a questionnaire to see whether participants who volunteered to engage in the project would be more attracted to different cultures than a cohort of students who did not engage in the project (the control group). As an illustration, the item "How much do you feel attracted to working with foreign people?" showed that the HKNET students appeared more attracted to work with foreigners than the control group.

What we do not yet know, and this is an area for systematic examination, is whether a learning effect takes place to the extent that individuals can more quickly recognize and switch between cultures as circumstances dictate. It is interesting to reflect on how cultural learning occurs; in other words, how we 'read' the multiple layers of culture. The importance of culture, and the need for cultural sensitivity, needs to be unraveled. Cultural background studies will always be relevant, but at the same time it would be valuable to engage in some reflective discussion on the way in which cultures evolve. For example, values within a society may be less stable now than a generation or two ago.

From a technological perspective, we need a rich communication spectrum and not a single technology to accelerate cultural learning. Groupware provides degrees of freedom to let culture evolve and adapt and can be helped considerably with facilitation as well as structure within the technology—scaffolding in sociocultural learning notation. There also needs to be synergistic people and technology roles, e.g. rotating leadership and 'shepherding' of shy or recalcitrant participants. We need to promote the creation of an environment that is trusting and supportive. This will enable culture to evolve and not revert back to a trait-based identity. We feel that education can be enriched and enriching by other similar projects that cross over into a business environment. We suggest the following guidelines for accelerated cultural learning:

- **Before** project initiation it is useful to check for a propensity to effectively engage as well as establishing a common frame of reference and context for participants. Creating the right teams based on cultural learning affinity in addition to skill/ topic areas is a critical success factor. We also need to create the right environment—a combination of minimal critical structure and a tool kit of support (technology and protocol). We need to design the process, effectively prepare the students, and provide multiple technologies to deal with varying team dynamics. Audio, video and data each provide distinct elements of support and side support channels for social interaction are important complements to more work activity support. Towards that end, we need to establish a common content base and give students experience in working with the technology locally before going online, in order to minimize cognitive over-loading and make sure the technology forms no barriers.
- **During** team interactions, we need to monitor progress but give enough degrees of freedom to let consensus, development of trust and cultural learning emerge. There needs to be significant feedback and content from peers (the shepherd role for staying in touch) as well as from instructors/ facilitators. There is an ever-present evolving dynamic that is a combination of individual characteristics, applied structure and facilitation. In general we prefer a supportive rather than directive management style with sufficient time provided to enable team adjustment to occur and seek to carefully balance proactive and reactive support. We need a continuous process of reflection and evaluation during team projects that enables cultural learning to be documented and passed along during the project as well as after its completion. Needless to say, quick technical support from qualified personnel is a key consideration.

The bottom line is we find, with practice, that we can not only effectively manage multi-cultural teams but also can form teams and create an environment for interaction that enhances the probability of interaction and success. Collective knowledge and ability exists to form and manage dynamic virtual teams and create an interactive environment supported by cost-effective technologies that enhances the probability of virtual team collaboration success. These experiences can be summarized by expanding the Stage 1 considerations (largely within one culture context) to multi-cultural contexts as follows:

Table 4: Added complexity in the success factors of Stage 3

	Largely within one cultural context	Within multi-cultural contexts
1.	Integration into learning activities	Multiple layers of learning
2.	Reciprocity of benefits and involvement	Value added benefits and involvement
3.	Assessed outcomes central to design	Negotiated outcomes
4.	Good communication technology	Multiple communication technologies
5.	Strong relationship with overseas collaborators	Strong relationship on multiple stakeholder levels
6.	Clear institutional support	Infrastructure support with bureaucratic clearance
7.	Focused preparation	Intensified collaborative preparation
8.	Secure teamwork	Flexibility and degrees of freedom
9.	Having a model global learner to refer to	Recognizing multiple global learner models
10.	Allowing time for socialization	Creating time for socialization

Overall, this indicates that multi-cultural contexts are considerably more complex but still manageable in comparison to single cultural contexts. By creating extra degrees of freedom through a variety of technological supports, in addition to sustaining structural and support flexibility while monitoring progress and outcomes, we can create an environment conducive to team success and cultural learning. Student response has been positive over the years, for example:

- "During this project, we not only learn about the academic topic but also gain valuable experience in working with people in different culture."
- "These experiences help me to develop myself, to be more considerate and creative."
- "This is a good experience and training on tackling a business case both in real and virtual world."

Conclusion

From each of the stages described in this paper, we learn different things that accumulate to give us a broadened appreciation of globalisation and eLearning. Global education mostly within one cultural context (Stage 1) enables us to develop strategies for success that set the scene for Stage 2 success, i.e., exploring cultural and linguistic diversity. Stage 3 brings it all together. The HKNET project was a rewarding learning experience, both for the researchers and students. Our teams were a 'worst case' test in many ways. There was an initial lack of experience in working in globally distributed contexts and widely differentiated backgrounds, both personally and in terms of disciplines. However, we were able to demonstrate that information technology can make global teams more effective and that teams can help fulfill the promise of new information technology. We suggest that, together, teams and new information technology can catalyze dramatic improvements in organizations. The lessons learned in this study have already been put to use in business environments in Europe, North America and Asia, where virtual meetings are now regularly being hosted. The HKNET program has created a win-win situation as both universities (and their students) were able to test educational technologies, observe user behavior and gain experience in multi-cultural virtual teamwork in education. We have witnessed a much more flexible, dynamic and accommodating nature of culture than we initially expected. On the whole, the ability to recognize and agree on cultural characteristics without meeting face-to-face is noteworthy and supportive of the viability and longevity of virtual teams. Virtual teams have burst on the scene and bring with them a variety of technological and organizational issues. This is an area of special concern to multi-national organizations increasingly launching distributed multi-cultural team projects. We feel that the results of the converging streams of globalisation and eLearning bode especially well for virtual team success in supportive organizational contexts.

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