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# **Building Social Capital through Distance Education in Asia**

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ABSTRACT :

The effectiveness of distance education can be evaluated at the institutional level in terms of retention, and certification. At the student level, effectiveness can be evaluated in terms of skills mastered, increased salary awarded and new employment secured, as well as achieving other long-term goals. However at the societal level, the effectiveness of distance education should be measured in economic terms such as social capital. In rich developed regions, education can lead to increased social capital, community development and long-term achievements, but in poor undeveloped regions, the same education leads to social capital that can be socially divisive with increased inequalities. This Paper looks at how distance education can be structured so that social capital can be increased in poor undeveloped regions particularly in Asia - leading to reductions in social inequality. Distance education has had roots in correspondence education in rural areas for about one hundred years, and more recently with rural penetration of the internet for about twenty years, although in some areas of Asia there is still no internet communication. With the 60th anniversary of the Universal Declaration of Human Rights in 2008, this is an opportune time to re-evaluate the effectiveness of distance education, and see how it may be structured better to ensure the building of social capital. A transactional distance model is used based on social constructionism theory of knowledge being in relations and interactions, rather than positivist in the world, or cognitivist in the mind. The transactional distance model is well supported by other critical thinking models and by the theory of transactional distance. It is concluded that distance education often short-cuts structure - notably in skills training programmes, but also in general education, in regions throughout Asia - and that structure in the form of disjunctive reasoning and problem solving skills needs more attention. It is also noted that better instruments are needed to measure in context the long-term effects from distance education on social capital and lifelong learning.

#### 1. INTRODUCTION :

Social capital is a macroeconomic term recently embraced by the World Bank and others as an indicator of the effectiveness and measure of the outcomes of various interventional policies. It has been linked with pro-active participation in education and with lifelong learning. In developed regions with deep quality education and affluence, social capital can mean connections that enable upward mobility and both individual as well as community development, while in poor undeveloped regions, social capital might lead to social division and worse inequity.

Asia has some highly developed regions but also some very poor undeveloped regions. Among these and across cultural boundaries, distance education is used to bridge physical and socioeconomic distances. The effect of distance education from advanced affluent regions into the poorer regions has not yet been investigated. This report re-examines the use of distance education in a wide range of rich and poor regions of Asia, to see what differences in uptake of distance education

can de determined. A transactional distance model of distance education based on social constructionism is used that was designed from consideration of Dewey's model of learning critical thinking skills, and other models, and mapped onto the four categories of distance education provision identified in the theory of transactional distance, which characterised transactional distance in terms of dialogue and structure.

The transactional distance model is the only model of education that incorporates the distinction between cooperative learning and collaborative learning. As a result, the survey of distance education across Asia found that courses in rural undeveloped regions preferred to avoid institutionally imposed structure and instead focus on cooperative local context-based dialogue for job-related skills. In contrast the most affluent centres in Asia adopted more structure and collaborative learning of the critical thinking skills.

The thesis presented here is that perhaps Asian rural undeveloped areas might adopt more collaborative structure in distance education courses to promote critical thinking in adults and foster lifelong learning. To understand the relationship between structure in transactional distance and social capital for community development and lifelong learning, it is suggested that instruments be developed to measure social capital and the outcomes from distance education throughout Asia.

#### 2. Methods :

2.1 Meta-Analysis over 15 Regions :

Reports of distance education over the past ten years have been reviewed by Kawachi (2005a) involving a total of fifteen different regions from all across Asia. The regions included were (in alphabetic order) Bangladesh, China, Hong Kong (China), India, Indonesia, Iran, Japan, Korea, Malaysia, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, and Vietnam. Briefly, in Bangladesh, distance education is highly unstructured and similar to correspondence education in its reliance on print, radio and television. Huang (2002, pp.127-128) reports that rural China still has not much experience with e-learning. Therefore there is not much structure in the distance education. Junjie, Long & Liming (2002) reviewed the distance education programmes in China and found generally poor quality, and no learning outcomes were investigated. In Hong Kong, Robertshaw (2002) reported that students used their distance education technology for exchanging views and other dialogue sometimes massively, without any structural focus : in other words for cooperative and not collaborative purposes. In a remarkable and noteworthy study, Tang & Fung (2002) reported that imposed structure of demanding students participate online, compared to a control group without structure, showed better quality learning outcomes - supporting the need for structure in distance education. However they also found that the students preferred using their own practical experiences instead of theoretical content - implying that students did not enjoy the theoretical collaborative learning which is characterised by disjunctive reasoning - suspending one's own views while considering all theoretically possible alternatives. They did find that the more diverse group of students succeeded in better quality collaborative learning (which also supports the proposal that disjunctive reasoning and structure are beneficial for deep quality learning). In India, the number of participants in distance education has increased nationwide, but the infrastructure has been lacking - resulting in lower grades and lower retention (Manohar, 2002). Thilagavathy & Namasivayam (2002) found the majority of students in India thought that their distance education was not adequately linked to future employment and was too theoretical. IGNOU has reported similar findings : Vyas, Sharma & Kumar (2003, p. 125) concluded the way forward should be towards more dialogue rather than structure to better serve the individual wants and needs of each student. There was clear preference in Indonesia for cooperative exchanges : Lawanto (2000) reported that when asynchronous computer conferencing was provided in trials of the new technology

specifically for collaborative group learning for in-service university teacher training, the participants were found to move over into a chat-room for synchronous discussions whenever any difficulty or interesting point developed. Vaziri (2002) reported that Iran used the internet mainly for cooperative content delivery. In Japan, much distance education is in vocational and technical training and can be categorised as on-the-job training or experiential learning (which is the traditional way of learning in Japan) according to Kawachi (2005a). In higher education, Kawachi (2002a ; 2002b) found that students use the internet only for accessing knowledge, cooperatively, and do not engage in collaborative learning for example by using study-group websites or bulletin boards - even in their native language. Kim Hyesoo & Cheol-Hyeon (2002) found in Korea that students wanted cooperative easier access to online learning resources and more help from tutors – both indicating a continued dependence on dialogue and traditional ways of learning. However, the recent development of cyber universities in Korea has meant that collaborative learning does occur and this has inspired lifelong learning among students. In Malaysia, Saleh (undated, c2000) reports that cooperative face-to-face conferencing was preferable, and explains that if she were a student she "would like to see the lecturer, or at least to listen to his or her voice" (p. 6). Accordingly collaborative theoretical disjunctive structure is not yet instituted in Malaysia. No reports from Pakistan indicate collaborative learning. Students in the Philippines "learn more by direct experience and least prefer reading" which has resulted in students "performing unsatisfactorily academically" according to Sabio (2002, p.128). Joung & Kim (2002) reported that in Singapore they needed more structured learning objects, with each structured learning object self-containing the objectives, contents and guides to other e-resources, for collaborative learning activities by the students. Clearly Singapore as a developed advanced region is keen to develop structured collaborative distance education for social capital upon which it

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depends economically. In Sri Lanka, Coomaraswamy has pointed out that future employers find the courses too theoretical and irrelevant to employment needs (Tandon, 1998). No reports of collaborative learning structure in distance education have been found from Thailand, and similarly in Vietnam except for the cooperative sharing of resources reported by Tsuji, Kubo, Taoka & Teshima (2002). A more recent study from Vietnam has reported the development of highly structured online resources for scaffolding the collaborative learning interactions, but this has not yet been tested out in practice (Kawachi & Le Thi Thanh, 2006). These studies from across Asia show that most poor undeveloped regions reported they were trying to reduce and avoid structure as far as possible and that they believed it better to increase educative and responsive dialogue, in contrast to the more affluent developed centres that embraced collaborative disjunctive interactivity.

# 2.2 Transactional Distance Model :

The transactional distance model is a four-stage model described in terms of being cooperative or collaborative, and with or without structure, and with or without dialogue. This model was derived from the five-stage model proposed by Dewey for learning important critical thinking skills.

It is important to distinguish at the outset cooperative learning from collaborative learning (for details see Kawachi, 2003a; 2003b). Cooperative learning essentially involves at least one member of the group who knows the content soon to be learnt by the other(s). Learning takes place through the knower (for example the text or the teacher) delivering the content to be learnt. Collaborative learning on the other hand follows a scientific process of testing out hypotheses. A participant publicly articulates his (or her) own opinion as a hypothesis and being open to the value of conflict allows this to be negated if possible by others, in which case the original participant or another offers up a modified or alternative hypothesis for public scrutiny. In collaborative learning, all participants share in co-constructing the new knowledge

together, and this learning occurs inside the group as a type of consensus achieved through analysis and argument. In collaborative learning, there is no imbalance in the learning process (in contrast to the situation of cooperative learning). The above survey on distance education in many regions of Asia both rural poor and urban affluent has found that rural areas are overly concerned with the cooperative learning mode and with an avoidance of collaborative critical thinking. Collaborative learning forms the essential core stages in the overall cognitive development of critical thinking skills needed for lifelong learning and community development. In collaborative learning, the participants through disjunctive reasoning are open to the value of other ideas and they help each other to develop better connections among the pool of ideas shared by the group.

The transactional distance model was first published by Kawachi (2003b) based on models to acquire critical thinking skills. Initially this was proposed as a model for learning critical thinking skills through multimedia. The original conception was put together in several online postings and assignments by Kawachi as a student in June 1999 with Fred Lockwood as tutor at the Institute of Educational Technology, British Open University. The model for learning using multimedia was reported first there in a tutor-marked assignment (Kawachi, 1999). Then after postulating that the aim of education was the reduction in transactional distance, this model was correlated with the structure and dialogue dimensions of transactional distance.

Studies showed that acquiring critical thinking skills was a key aim of education (though not necessarily an aim for manual skills training). Dewey (1933) had proposed five stages for acquiring critical thinking skills, and Brookfield (1987) also five stages although slightly different. It is clear that their stages were not consistent and not sufficiently distinct for developing a practical model using multimedia learning technologies, although they did indicate some useful ideas of what constituted critical thinking.

The essential four stages for learning the

critical thinking skills are given in the transactional distance model by Kawachi (2003b) where the order of stages is predicated upon whether cooperative learning, or collaborative learning, is needed. A literature search shows that only the Kawachi (2003b) model distinguishes between cooperative and collaborative learning. In this practical model, transactional distance is defined as the psychological difference between a student not knowing something and the student knowing. In this terminology, the role of education is to bridge this gap. This fourstage model is underpinned by social constructionism, by conversation theory, equivalency theory, and transactional distance theory.

Transactional distance theory was proposed by Moore (1993) based on the categorization of the various forms of distance education first published by Peters (1973), and the transactional distance model was then developed by Kawachi (2003b ; 2004 ; 2005b).

Transactional distance was first used to describe the stepwise differences in four categories of distance education provision that reflected to some extent the time-line development of early correspondence education through to broadband computermediated communications. However the categories are now understood to describe the type of education provision in terms of the psychological separation between the student and the teacher, where this separation must be bridged by the medium of the teaching interactions. The transactional distance is characterised in terms of the structure imposed by the institution (S) and the amount of educative dialogue (D) that is allowed by the medium.

In the transactional distance model, the four stages are simplified in terms of imposed structure (S+) and educative dialogue (D+), as stage 1 of S-D-, stage 2 of S+D-, stage 3 of S+D+, and stage 4 of S-D+. The central core stages 2 and 3 have imposed structure S+. And the latter two stages 3 and 4 have added educative dialogue D+. The transactional distance model is a framework to achieve learning. It translates conventional theoretical models

of learning into an efficient practical design for use in a multimedia educational environment. Previous models have variously postulated five phases to critical thinking for learning. In the transactional distance model, only four distinct stages are proposed ; of brainstorming cooperative group learning using synchronous media at the initial maximal distance (at S-D-), then lateral-thinking collaborative learning using asynchronous media (at S+ D-), followed by hypotheses-testing collaborative asynchronous (at S+ D+) with guided didactic conversation, and finally sharing experiential-learning cooperatively using synchronous media (at S- D+). The transactional distance model is operationalised by detailed specific interactions which optimise the learning process : (at S- D-) to elicit and share individual contexts, initiating intrinsic social motivation that starts a learning community ; (at S+ D-) to follow empathy templates to facilitate articulation of personal theories and reveal expressiveness to initiate academic intrinsic motivation and vocational intrinsic motivation ; (at S+D+) to move on to the academic targets with comments to initiate cognitive curiosity, intrinsic fantasy, and challenge (which together constitute personal intrinsic motivation); and then (at S- D+) having covered the target general concepts to be learnt, to elicit feedback from the student on her personal meaning-making experiences in her own context. This model operates through decreasing transactional distance.

#### 2.3 Social Constructionism :

Social constructionism is an important derivation from constructionism, in which the student reflects on the interactions with others, and it is the interactions that convey meanings to the student, rather than the received ideas or own experiences. In practice, a small group of students (preferably holding different views from each other) listen to each other and also explore the interactions between one of the group and the real world to collect interactions useful to building one's own perspective. The teacher may be one of the group provided that all the others clearly

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understand that he is not the fountain of true knowledge but merely an interactor. As such, the teacher could model some interactions and ask the students how they feel about such actions, or could provoke feelings by staying silent or by helping them explore hitherto dark areas. Social constructionism is not dependent on any specific interactivity, provided that there is adequate interaction by the student.

# 2.4 Interactions and Social Capital :

The interactions involved in cooperative learning are essentially distinct from those involved in collaborative learning. In cooperative learning where one participant knows the content to be delivered to the other participant(s), there is an intrinsic imbalance between the participants and interactions are basically one-sided. This is in clear contrast to collaborative learning where participants are fairly equal, and interactions proceed to help the other(s) learn so that one learns oneself. Interaction scaffolds have been identified and designed for these two types of learning.

The transactional distance model in its design based on cooperative or on collaborative interactivity is underpinned by social constructionism. In social constructionism, knowledge lies in and derives from the interactions among participants, things and cultures. Accordingly the transactional distance model is suitable for analysing social capital in which effectiveness and indeed meaning lies in and derives from the connections.

# 3. RESULTS :

#### 3.1 Survey Results :

This research review shows that acquisition of critical learning skills is not an objective in rural Asia where occupational skills are valued. Only in the highly developed centres such as in Hong Kong, Korea, Singapore, and perhaps Shanghai, is there a keen objective to develop students with these critical thinking and analytic skills for personal growth. In Korea for example, computer-mediated communications are used for effective

learning through collaborative tutorial interactions - though they still find their Asian students want and need an initial face-to-face real meeting in order to establish a basis for a later on-line community of learners (Jung, 1999; 2002). Most research reports in Asia see the need for greater dialogue as the key to successful learning. Research finds students in Asia preferring to not become embroiled in the disjunctive analytic argument through collaborative processes and theorising, but to reflect on their own context and then move directly using human interactions among the tutor and other students to experiential learning for personal relevance. This avoidance of hypothesising and questioning the text - seeing learning critical thinking skills as an unnecessary element - characterises education and training in Asia. Socratic Western methods in this respect are seen as not relevant to Asia.

There is actually little research on the educational effectiveness of distance education in Asia. Most reports assert its effectiveness without analyses and usually on the basis only from student post-test satisfaction. Student satisfaction with their distance education experience is important, but does not necessarily correlate directly with improved learning outcomes, and nor to any long-term outcomes. Boling & Robinson (1999) found that students were more satisfied with their distance learning experience than when there was added faceto-face interaction but their students through testing showed they learnt more if they received the face-to-face interaction. This indicated that the level of student satisfaction cannot be equated automatically with better quality learning (that there is some trade-off between these). Reports from across Asia have shown that students preferred their studies to include more dialogue and teacher-student or studentstudent interaction, in contrast to students in the West that Walker & Hackman (1992) reported to be more satisfied more to the amount of information received than to online rapport with tutors and other students. Some courses in Asia are simply imported from the West without adaptation

and without piloting in context. For some students at least multimedia distance education might be very attractive but not educationally beneficial. Cognitive overload might be a cause for poorer learning outcomes : the addition for example of text to a presentation of animation and narration has been found by Doolittle (2001) to show poorer learning outcomes, and Beccue & Vila (2001) have found no learning benefit from adding audio to multimedia of text plus graphics. These findings would indicate that distance education courses should be developed in-house rather than imported. However, in-house courses in Asia appear to focus on local short-term needs - mainly to obtain employment or job promotion. The dilemma here is to produce internationally accredited courses with structure, critical thinking skills and collaborative learning skills that are responsive to the local context and serving the long-term needs of the students. For instance, Dalit (2001, p.103) advocates more-regionally-specific Asian approaches. She concluded that a student-centred open learning approach with high personal relevancy will be best for the Philippines "to serve the unique characteristics and needs of the Filippino learner" - in other words local context would be best in Asia. High local context relevance was seen as crucial by Kawachi (2005a) for e-learning in Asian countries : to counter the very high attrition rates reported from Western distance education.

Further detailed studies have been performed on added dialogue or structure in Vietnam and Japan by Kawachi & Le Thi Thanh (2006), which found that added structure improved the quality of collaborative interactions, in the short-term. The added structure here was text guidelines as annotation to online texts. The purpose there was to bridge the transition from early stage 1 cooperative delivery of content to stage 2 collaborative group learning, by providing scaffolding for developing critical thinking skills.

It is important that connections are experienced as bringing benefit to the participant. If students engage collaborative tasks but are unable to succeed then the social capital may lead to inequity. A poor learning experience could translate into the student not using her connections and not trusting others even when opportunities are available. The student isolates education and keeps it separate from the wider context of life. Motivation is reduced to just academic extrinsic motivation to pass the examination, and there is insufficient trust to depend on others. Such aspiration failure occurs when the other participants become to be perceived as being more successful than oneself, although not to such an extent that the student believed such success was originally unattainable. Such aspiration failure was documented by Kawachi (2007) in other group members who proceeded fairly well through initial cooperative tasks but could not manage the collaborative process and then dropped out from online study. Adults are well known to have much prior experience and enough self-doubt already, and when the educative process involves more self-doubt or doubt raised by others, then they are likely to withdraw

#### 3.2 Measures of Social Capital :

from participation.

Distance education accreditation may be enhanced if some measures of social capital demonstrate the benefits achieved in the long-term from studying at a distance. What measures of social capital are not yet clear. This is mainly due to the imprecise conceptualisation of social capital, and its effects that vary according to context. Generally in poor and developing regions, any increase in social capital (in the connections that in part constitute social capital) can lead to increased inequity and social division. In contrast in highly developed urban contexts, social capital can bring upward mobility and career enhancement. In distance education especially in poor rural regions, students may be making connections to far away participants whom they have never met face to face and so obtain beneficial career enhancement. Whether this is limited to within the narrow connections made within educational circles, or can reach beyond academic contacts to outside business contacts remains to be identified. Some

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reports have indicated that adults in distance education can get job promotion or change employment to that with higher salary, but these reports are based on very small numbers of students, and not on whole cohorts. Complete follow-up of all graduates over the long term is needed. And an instrument should be prepared and tried out to measure such social capital related to distance education. At present, the World Bank has several survey instruments to measure the effectiveness of economic interventions into poor regions or into regions recovering after conflict, reported by Sorensen (2000), and by Dudwick, Kuehnast, Jones & Woolcock (2006). These instruments may serve as a starting point for designing an instrument to measure the long-term effectiveness of distance education.

#### 3.3 Effectiveness of Social Capital :

The effectiveness of social capital to promote lifelong learning is not yet investigated. Further studies are needed. Some individuals and communities can achieve some benefits from connections made during learning, but the exact relationships among learning, social capital, and useful connections are unclear. Any findings will need to be triangulated to establish any causal relationship. Triangulation means collecting three or more types of data to help confirm, revise, or reject an hypothesis. Depending upon just one source of data makes any conclusion suspect. While triangulation is often interpreted as meaning that two different sources of data are used to look at one point of interest under investigation, only two sources simply shows a measure of agreement or disagreement, and three or more sources are needed to know what is reliable. Both Miles (1982, pp. 125-126) and Patton (1987) emphasize the need for multiple sources and multiple methods to describe educational settings.

To date, no survey has been done on educational outcomes and social capital, and no triangulation has yet been done on the interest in lifelong learning found (Field, 2003a) in a general survey on household spending. In a survey on social

attitudes conducted across all households in a large region, Field (2003a) found that there was some correlation suggested between social capital and lifelong learning. There was no triangulation in data collection, so whether these respondents were actually participating in continuing education or not remains unclear. However, adults who appeared to participate more in social activities and their community tended to be those more likely to do part-time or informal continuing education courses.

Students in conventional universities have been found to have very much wider networks of connections than age-matched young adults in full-time employment (and much more than those unemployed). The widest range of connections was for those students living away from family, suggesting possibly some compensatory effect here. Despite these connections among students being weaker than those among young adults at work, students could rely on these connections for future career and employment prospects (Emler & McNamara, 1996). In contrast the social connections among workers were less able to help upward mobility. Bourdieu (1988) found that university teachers were more concerned about social connections for themselves rather than for their students' careers. This is probably due to his asking teachers about the connections among students when the teachers simply did not know about these. Nowadays with students using public social networking websites online, teachers can easily access online student sites and so become much more aware of the connections that students are making among themselves and with outside persons.

Efforts to build social capital in a fairly limited area as a way to foster community development can be detrimental to those same participants by not allowing them to form much wider connections beyond the sandbox that could be more beneficial, or rather beneficial in different ways, according to Field (2003b, p.134). This would suggest that a wide coverage of relatively weaker ties might be preferable to local strong ties. Adults may form strong connections at their workplace, and these strong ties may help them in their daily lives in both learning skills for their work and for socialising. However these localised ties do not provide the necessary connections to move out from this locale to change job, or to find a new job if the employment is unexpectedly terminated. Lifelong learning entails critical thinking skills through which adult learners can appraise new situations and opportunities and act in the world beyond their present circle. The university student can learn these critical thinking skills, and also has access to a very wide-reaching field of connections albeit these are weak connections. Adults in higher education might not develop any special strong local ties, but through global publishing, reading, and participation in conferences the adult student can meet a wide range of persons who might help their career development in the long-term. Students should not give up these weak connections simply because they have found a single job for themselves, but should nurture the weak connections collaboratively - helping others as far as possible so that one day if necessary they might in turn receive help.

#### 4. SUMMARY OF FINDINGS :

Interdependence and the effects of social capital from distance education are closely correlated with the quality of learning interactions in a course, especially the core structural stages of collaborative learning interactions helping others to learn so that one learns oneself. Distance education students have not yet been surveyed about their social capital or interdependence. Chen & Willits (1999) have analysed the interactions by students online to discover that they showed some levels of interdependence towards the end of their course. They performed a factor analysis on the results from a questionnaire to online students in twelve courses, and found that while the dimensions of dialogue, structure and autonomy were present, the students also reported a need for support, and for improved collaborative interaction, in addition to their desire for independence.

They found that the autonomy dimension had factors related to independence as well as factors related to interdependence. They found these two factors in the autonomy dimension were orthogonal to each other in other words independent from each other. This was explained by Kawachi (2007) as arising from being at the end of stage 4 with having acquired interdependence and at the same time about to start other new learning at stage 1 as an independent learner. Autonomy has been related to recognizing one's interdependence on others, by Boud (1988). Interdependence is a maturity characterising an adult or lifelong student, and interdependence has been demonstrated by Kawachi (2007) as being acquired through awareness and prior experience of the critical thinking process involving collaborative learning together in a group. Interdependence as an aim for distance education is gaining more attention in many parts of Asia.

Reports from Japan for example by Kawachi (2008) have shown that learner independence has been an aim for the past ten years, although this is now being reviewed in the light of promoting more interdependence and lifelong education. Adult learning and learner interdependence are likely important aims for distance education throughout the world. More studies on the objectives for distance education should be collected from all regions, particularly in Asia where many different contexts thrive side-by-side region by region without any single solution.

In summarising the need for distance education to build effective social capital for developing countries, Fricker (2002) has argued that distance education courses in developing countries should be structured by the teachers and institutions to ensure long-term quality education for development of the region, rather than have courses dictated by commercial interests which tend to emphasize job-related skills over critical thinking skills.

#### 5. IMPLICATIONS :

In Asia, current distance education may

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have its focus on skills training for employability, to reach those lacking in educational opportunities, and raise up from poverty individuals and their local community. Each region may have different priorities and needs for various skills perhaps mainly job skills, but also community and volunteer skills and not only critical thinking skills. Distance education in Asian contexts may therefore not have the same goals as in the West, or use the same measures of success. However, even considering there are significant cultural differences, distance education providers everywhere could usefully re-examine their courses - identify all the embedded learning objects and their respective purposes and rationale - to auality assurance improve and accreditation. The relative amounts of imposed structure and responsive dialogue will then be more visible. More instructional design will improve institutional accreditation. Accreditation in any context implies the need to consider the usefulness to others and the long-term benefits to the participants and their communities. These local issues within quality assurance and cross-accreditation can then be made public and discussed openly in order to formulate as a measure of social capital.

Social capital in Asian contexts may have quite different effects from those in Western countries. One reason for this may be that social economics is fairly uniform in the West with an emphasis on free market salaries, deregulation of labour markets, financial liberalisation, and tight fiscal management of inflation. In contrast, a characteristic of Asian contexts may be their diversity with each having a local cultural way for social development and community building. That a local culture is using an imported model of social development may actually be working against the success of this model. Some Asian regions may need more controlled salaries and less labour movement in order to promote economic growth and lifelong learning. The concept of social capital will likely become more and more important in order to inform development of education

for lifelong learning in Asia. However, social capital may need to be interpreted and measured differently according to each local context in order to better understand the effectiveness of distance education.

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