

# ICTs as a Cause of & Response to Globalisation in Education & Training: A Critical Examination

Robin Taylor

## Abstract

Modern information & communications technologies have been and remain, a qualified 'cause' and 'response' to the globalisation process. Whilst the initial issues may have been grounded in the notion of 'access' and 'openness', current writers suggest that economic considerations now drive tertiary institutions to adopt ICTs in order to remain 'competitive'. Globalisation brings about particular 'challenges' and 'opportunities' for education that uses ICTs. The 'challenge' is to not lose the integrity of what society previously trusted held in high regard – namely a certificate behind which was some perceived societal worth (Brown, & Duguid, 2002). The opportunities are to allow distance, open and flexible learning to gradually talk and in some cases 'beat' the educational value of traditional bricks and mortar tertiary institutes. The underlying possibilities for these challenges and opportunities is presented in this essay.

## Introduction

It is difficult to consider discussions about 'globalisation' without tripping over an overabundance of conceptualisations. Perhaps the most succinct is that offered by Edwards & Usher (2000), who suggest that globalisation is the process in which space and time are compressed such that the world 'feels' subjectively smaller. They suggest however, that this is not something dramatically 'new' but rather a reformulation of the increase in speed and efficiency of both travel and communications and therefore a greater awareness of the 'globe'. This has been possible through the implementation of a global network of *information & communication technologies* (ICTs) with the current state of the art implementation being the 'internet' or 'word wide web' with the ability to use computers as clients which can display media rich content (text, sound, animation, pictures and film). It is the ICTs which have dramatically increased the speed of communications to the point where the distinction between 'space' and 'time' become indistinguishable. It takes no more or less time to send an email with an attached document to students or colleagues in Jamaica versus those in Glasgow. Previous correspondence courses, or courses which required physical transfer of educational material (audio cassettes, video tapes) were affected by the space between the distribution centre and the student's place of learning.

In particular though the implementation of the internet as an ICT tool has meant that many state and national boundaries are either not relevant or very much reduced in importance. The transparency of national, state or regional borders means that education is increasingly taking on a global view, even if the advent of a truly 'virtual university' appears to remain a future wish rather than a present reality (Crook, 2002).

There are a set of critical questions to be asked in this arena, three of which are: whether the modern

concept of globalisation can be meaningfully applied in the context of *open, distance & flexible learning* (ODFL); and if so to what extent are the use of ICTs in education a cause of 'globalisation'; and conversely to what extent are they a response to globalisation. These questions are the focus of this essay.

This essay looks more at post-secondary education and in particular that offered by tertiary educational institutions.

## **Does globalisation exist in tertiary education?**

If globalisation has occurred in tertiary education, then one would expect that the landscape of tertiary education should subjectively (at the very least) feel 'smaller'. It is not enough to suggest that simply because we have modern ICTs that this should automatically be so. After all learning at a distance has already been practised with success of varying degrees (Peters, 1973; Perraton, 2000). The arguments made by Castells is that modern ICTs allow significant interaction in close to real time or effectively in real time (Hoogvelt, 2001; Kirkup, & Lea, 2006). The opportunities for timely feedback (certainly in the same time scale as conventional face to face tertiary institutions) and the possibility of genuine 'communities of practice' to become established (Lave, & Wenger, 2002; Russell, 2002) are reflected in some of the anecdotes of students (Wegerif, 1998).

Castells is incorrect to suggest that 'the' defining feature of globalisation (and from this perspective, globalisation in education) are the ICTs with the implication that a '(dis)located' learning institution (to use (Edwards, & Usher, 2000) phraseology) could not have occurred. is contested by the historical fact that places such as the University of London were already operating such a 'dis-located' university structure well before the advent of modern ICTs (Brown, & Duguid, 2002) (see also (Brown & Duguid, 1996)). But Castells is surely correct to suggest that without the implementation of ICTs the landscape of tertiary educational practices would not have the strong focus on 'flexible' learning that it currently does (Garrick, & Jakupec, 2000). And it is true that the tertiary educational (dis) location can be said to be globalised in several distinct ways, such as:

- i. Educational courses can be delivered, managed and 'taught' in 'real' time or very close to it if there is relatively close proximity to the network (space-time compression (Edwards, Nicoll, & Lee, 2002)).
- ii. Tertiary institutions currently offer courses and programmes that puncture regional, state and national boundaries.

## **Are ICTs a Cause of Globalisation in Education?**

The definitive answer has to be a qualified 'yes'. Yes in the sense that ICTs allow for instance Open University UK courses to be offered in Fiji via the internet, so that such a student does not need to attend classes in the UK, can remain in Fiji and even pick and choose which courses or programmes she or he might want to take from different institutions.

Jakupec (Jakupec, 2000) and Perraton (2000) both highlight how another potential defining feature of globalisation occurs in tertiary education, namely the 'homogenisation' of values, commodities or issues (Kellner, b). The reasons for this appear to be for a number of reasons mostly involving the consideration for financial accountability.

It is the change of the role of universities which brings on education as more of a market commodity to be exploited.

“Universities and colleges were seen as guardians of the culture and knowledge that they transmitted. Today universities are seen as ‘industries’ (Jakupec, 2000) p. 80

This suggests that information is a ‘commodity’ to be exploited like any other market commodity (Hoogvelt, 2001). Institutions without the relatively expensive resources to develop and distribute learning programmes utilizing ICTs (Perraton, 2000) may decide to ‘buy’ something that has already been developed by another institution and incorporate it into their own programme. The second place where this could occur is the drive by institutions to ‘penetrate’ market opportunities. By using the prestige of a university, students from a region such as the Pacific, may opt to do a degree offered by Harvard, compared to that of the University of the South Pacific because a degree from the former (rightly or wrongly) carries more weight than the latter. Homogenisation occurs due to the intentional adoption or purchasing of a course developed originally in a different context than the one it is being offered in. The ‘best’ interpretation of this homogenisation phenomena, is when a course or programme is simply not available and not supported by the local tertiary institution. The effect though is the same, information and knowledge about a topic comes from a context which can be markedly different from the one the student is in.

The qualification to ICTs being a ‘cause’ is the fact that these effects could (and did to some extent) occur previously (Brown, & Duguid, 2002). ICTs has merely made the globalisation process occur far faster.

## **Are ICTs a Response to Globalisation in Education?**

As above, the answer seems to be a qualified ‘yes’. There are two main reasons for this. The first is to make the business of running a tertiary institutions more efficient to increase stated goals of increased access and the provision of flexible learning environments. The second is to make the tertiary institution a more financial viable institution.

### **‘Better Education’**

There is no doubt that ICTs are able to *potentially* deliver a better educational experience. Email, facsimiles and the internet allow courses to be designed, managed, delivered and taught more efficiently (Bottomley, 2000; Thorpe, 2002). From the point of view of simply wanting to offer a better educational experience, ICTs are considered a god send by many although the precise way in which they are utilised may vary from institution to institution (Nunan, 2000).

If we take Castells argument (Hoogvelt, 2001), that ICTs are an expression of the globalised society, then indeed there is a thrust to educate tertiary students in the use of ICTs.

Haughey (2000), suggests that our globalised world requires flexible learning. Usher (2000) also illustrates the way that ‘lifelong learning’ is becoming the norm in order to remain ‘competitive’ in the modern workplace. This has brought on the huge aspect of ‘flexible’ learning, with the tool to achieve flexible learning being ICTs. One of the emerging fields that appears to be having an increasing impact on the provision of education, is in the field of training given by employers (Usher, 2000; Kirkup, & Lea, 2006).

In principle, ICTs can allow greater access to higher quality educational resources than traditional print media - if the tertiary educational provider can pay! The University of the South Pacific has had considerable funding to establish network access across it’s four major campuses and 12+ distance education centres. Although the amounts spent (strictly donated) are in the 100s of millions of US

dollars over the 31 year period of its existence, the argument is that this is still cheaper than trying to establish a university in each of the 12 contributing nations to this regional university.

### **“Financial Viability”**

Change in many government policies has meant that previous tertiary institutions are increasingly looking to supplement their traditional or reduced income (from state, government or foundation grants) with other sources of income. These include offering their courses to 'international students' who typically pay substantially higher fees (Jakupec, 2000), offering perceived high value courses such as 'MBA' programmes, and finally offering business solution departments - where research expertise is contracted out by the institution to high fee paying commercial, or governmental and non-governmental sources.

Commercial organisations are also looking towards constructing and devising in-house training, or doing a combination of in-house training with a local tertiary education provider to keep their workforce upskilled and competitive (Haughey, 2000). Workforces, from lathe operators using computer controlled equipment on the shop floor, through to the senior manager who have to understand how to input, manipulate and interpret data from spreadsheets, databases and project management workflows from electronic sources that may come from international colleagues continents away in order to make decisions; are very much part of the 'globalised' world today.

This becomes then a market to be exploited. It has been argued that the response by traditional tertiary institutions to engage and compete in the ICT world of globalised education is more about a fear of becoming irrelevant, rather than a desire to utilise the best tools in order to produce a superior learning experience (Brown, & Duguid, 2002).

To qualify the 'yes' ICTs are a response to globalisation, is to harp back to the previous section where there are historical reasons to suggest that in fact education, particularly that of tertiary education in the US, is responsible for the modern ICTs that drive the processes of globalisation today (Leiner, et al.).

### **Challenges & Opportunities**

Kellner, graphically shows how 'globalisation' at any level of discourse (social, economic, political and educational) is full of inherent contradictions (Kellner, b); and is inexorably linked to ICTs. The processes that spawned the internet, spawn the sweat shops of transnational corporations (Bardhan, 2006), but at the same time they allow 'resistance' to be implemented by forming non-governmental pressure groups. Many of the effects of these groups are also not bound within a single nation or state; examples include Amnesty International or Greenpeace. By the same token ICTs may have the curious effect of both denying access to developing countries to quality educational resources as more tertiary institutions devote more resources to developing or acquiring 'online' resources ( – instead of improving existing technologies); but as the relative costs of acquiring technology and establishing a network come down dramatically, the same technology may allow developing countries to leap into the very latest in pedagogical thinking, production and delivery in education where currently they are too remote to have any chance of acquiring 'bricks and mortar' equivalents.

## Challenges

Jakupec notes:

"The main stakeholders in education currently seem to be working towards a long-term strategy, with little regard for the cultural, social and intellectual values of education" (2000) p.75

Perraton in a comprehensive analysis of the effectiveness of ODFL suggests that:

"... as long as distance education has lower prestige, and is less efficient in terms of its graduation rates, it may have no deeper political function than that of providing a safety valve, or a narrow route for educational advantage to a small number of students whose rare success cannot threaten the status quo." (2000)p 190.

The challenge being that a globalised education assisted by ICTs may bring about the contested overall or at least partial disastrous effects of economic and political globalisation (Martin, & Schumann, 1997; Chomsky, 2003; Bardhan, 2006). The optimistic argument would state that this 'race to the bottom' would probably not occur because of the perceived greater value in face to face instruction, which includes exposure to communities of learning (Brown, & Duguid, 2002), the social dimensions of tertiary institutions (Cornford, & Pollock, 2002) and the element of validity and trust placed in an organisation (Crook, 2002; Brown, & Duguid, 2002). However, just as in the economic and political globalisation process, there are varying degrees of success of the benefits of a globalised ICT driven education system as globalisation is not experienced universally, or at the same pace, or in the same character (Edwards, & Usher, 2000).

Some theorist, not necessarily in the realm of ICTs and education per se (such as Foucault, McLuhan & Baudrillard), have suggested theories that has significant practical applications in using ICTs in education (Kellner, a; Aycocok,). However, there is little in the way of empirical evidence that these theories have significantly enhanced the application of implementing good ODFL courses/ programmes. For the moment this remains 'rich pickings' for the educational scientist that has the resources to experimentally test this. Certainly during the course construction of distance education courses at the University of the South Pacific between 1994-2003 there was no overt discussion with course writers that suggested any application of these theories to help design and deliver the course.

USP, the African Virtual University (AVU) and the Commonwealth of Learning (CoL)<sup>1</sup>, on the whole use ICTs to replicate face to face traditional instruction where possible, or when it is not possible to use ICTs to support the traditional modes of instruction/learning.

There is of course a significant danger however, in going down this path, namely that for much of the world, access to a computer, electricity let alone high speed broadband access is a fantasy world.

## Opportunities

If Castells' *magnum opus* is correct and indications are that he is (Kirkup, & Lea, 2006) then ICTs and their impact on society cannot be disentangled because they are integral to society. ICTs are not simply a product of society, they are a significant cog as to what our society will become. The internet started out as a defensive network to guard against a centralised nuclear strike hypothesised in the Cold War did not anticipate the '.edu' and subsequent '.com' global phenomena

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<sup>1</sup> <http://www.usp.ac.fj>, <http://www.avu.org>, <http://www.col.org>

that it is today. ICTs as a tool for ODFL have huge theoretical importance as to how we shape our society of tomorrow.

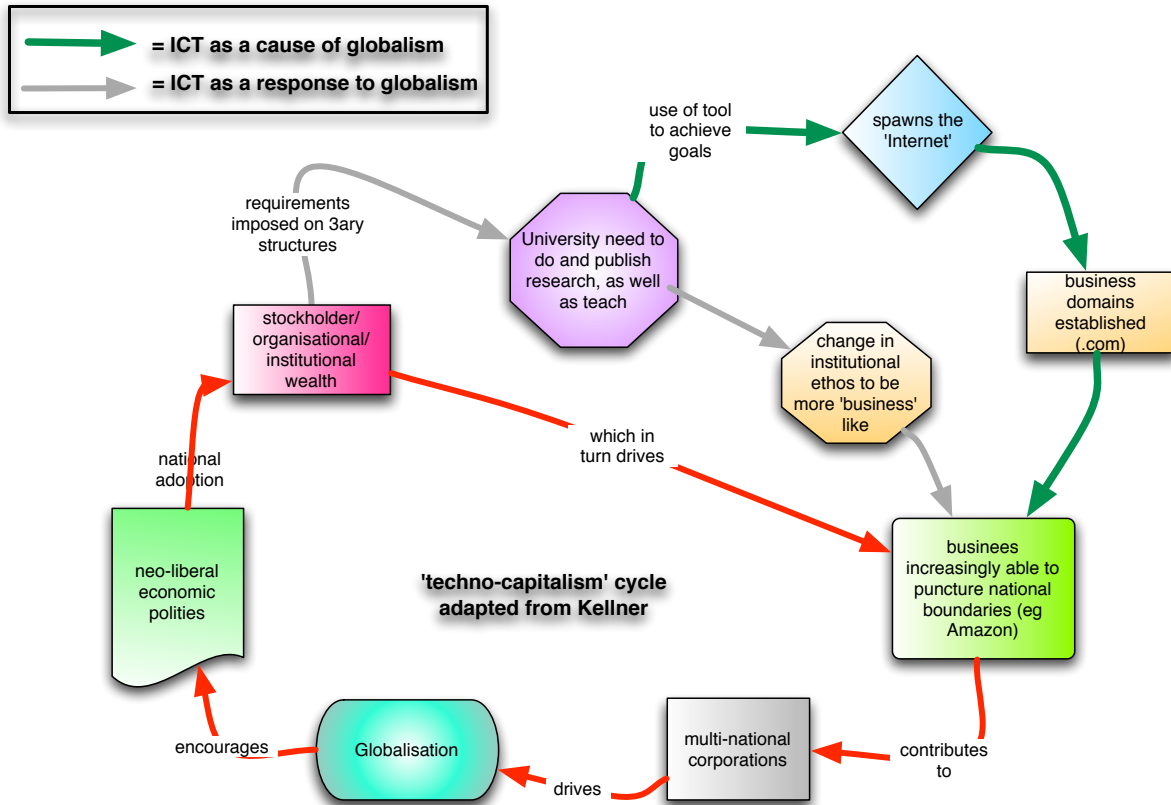
Perraton cites Emile McAnany to highlight the issue of assessing the effectiveness of ODFL through a number of different criteria, one of which is 'processes' (2000) (p. 192). *Processes* in this regard is the closest to the conception of the pedagogy in the use of ODFL techniques. Of the many definitions of *flexible learning* that has not been capitalised upon in using ICTs, is the notion of providing multiple avenues to understand, explore and learn (Nunan, 2000).

One of the theorists that has received little attention in the ODFL literature is Harvard developmental psychologist Howard Gardner (1993), although theorists like Thorpe make allusions to similar issues (Thorpe, 2002). His theoretical stances is that there is no such thing as a 'universal intelligence' but rather a range of 'intelligences'. In today's modern world he suggests that there are at least seven and possibly eight 'intelligences' which help us to survive and thrive in our modernised and globalised world. For instance, the intelligence to understand people (political, union and military leaders), the intelligence to move one's body or understand one's body movement (professional athletes, dancers, fighter pilots), and the ability to understand spatial relationships (architects, graphic artists), which have not been considered until recently as the more traditional intelligences of written and spoken languages, and mathematical intelligence. The importance of this approach is that Gardner states that most of us are more adept at a few of these distinct areas, and weaker in others. From an educational point of view, the issue then becomes how to present to the 'strengths' of a learner and not their weaknesses (Gardner, 1999). In traditional face to face (lecture/seminar/tutorial) mode this is not easily attainable. A course lecturer will not have the time (to say nothing of the energy, skill or inclination) to present the same information five to seven times, each time being with a perspective aimed at a different 'intelligence'. However, ICTs could in principle go some way towards that. Hypertext allows different routes to arrive at the same final destination. Multi-media means that people with stronger language skills could choose a different set of instructional material than other students who would prefer to 'manipulate' virtual (or real) material.

## Summary

This is the challenge that institutions like USP, AVU and CoL need to embrace enthusiastically if they are to prove Perraton's pessimism wrong, who seems to suggest that the role of ODFL not genuinely being about access to quality education and instead being merely a 'safety valve'.

Below is a diagram that represents the role that ICTs have had as both a 'cause' and a 'response' to globalisation.



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