

E-learning and virtual environments: promoting international social justice or furthering the digital divide?

**Presentation: Helen Yanacopulos
The Open University**

Slide 1- Introduction

- Electronic technologies can dramatically increase opportunities for those studying in tertiary education. However, e-learning does not benefit everyone - it can also expanding an educational digital divide.
- Does this mean we give up on digital platforms as a means of expanding the international reach of tertiary education, or do we continue to increase the e in ODEL?
- This presentation will explore dilemmas and challenges of linking international social justice and e-learning.

Question – how can ODEL contribute to International Development? How do we put social justice ideas into action in thinking about future scenarios?

Slide 2 - Contexts

This paper is bringing together three different contexts and fields:

International Development

Social Justice

Digital and virtual environments

- My primary entry point International Development. I am the programme director for Environment, Development and International Studies (EDIS) and have taught International Development at OU for the last 11 years. I also oversaw the OU's MSc in Development Management for seven years.
- I'm also a political scientist with interest in justice issues. Interested in digital technologies and their political impact in social movements. The theme is interesting to me – in both theory and it practice.
- This talk brings together social justice, ODeL, and the use of technology in education.

Slide 3 - Justice

- What 'justice' are we talking about? We can go back to Aristotle – justice has been a key concept in political science for over 2,000 years.

- But justice is has many diverse meanings. When we speak of justice do we mean fairness? Capabilities? Equality? Equity? Does it take place within communities? Nationally? Globally?
- There is obvious overlap in these conceptualisations of justice, but also quite different and distinct meanings.

Elements of social justice discussed in the conference introduction paper:

- central is a characteristic of equity
- a priori is an assumption that the world is not structured fairly enough
- Rawls – original position– but extending this from being nationally bound to global – justice cuts across state borders
- Sen and Nussbaum – capabilities

I have recently written on the global justice movement and have argued that there has been an unprecedented mobilisation of individuals and organisations globally around specific economic justice issues. This has occurred due to the framing issues around the idea of justice. Paradoxically, the tearing apart of that movement has also been due to the framing of issues around justice when justice actions have been required. I argue that it is when we try to action justice that the different justice conceptions become evident (Yanacopulos, forthcoming). Therefore, justice can be what Laclau and Mouffe have called an empty signifier, a contested political category “whose emptiness results from the unfixity introduced by a plurality of discourses interrupting each other”.

Global justice marks the shift from a Hobbesian perspective on international development to a Kantian one. The latter is more cosmopolitan and less statist than the former. Indeed, recent commentators on global justice such as Amartya Sen (1999), Martha C. Nussbaum (2000) and Thomas Pogge (2002) argue that although we have special connections with those in close relation to us, we also have relations to the humanity as a whole. These relations raise the issue of our obligations to the global citizen. The question is not only what our obligations are in abstract but also what we can practically do to help. (Papaioannou et al 2009)

The debate on global justice is very recent. Until a few years ago, political theory and practice were mainly preoccupied with domestic justice within the state. Not to say this is true --- 1795, Kant (2008), in his *Perpetual Peace*, argued that international justice is possible even in the absence of a global state. However, what most political theorists after Hobbes and Kant had to say about justice and what activists had to do in order to justify their campaigns for development did not extend to considerations of global justice. Even utilitarian approaches to development, based on the maximisation of aggregate utility and welfare, did not explicitly require that the suffering from poverty of all human beings throughout the world should be reduced or indeed eliminated. Only very recently this has changed, giving rise to the growing literature on questions of distributive justice in a global civil society and the

emergence of development action based on principles of global justice. (Papaioannou et al 2009)

The underlying view of social justice here is based on Nancy Fraser's work. Fraser defines justice as 'parity of participation' (Fraser, 2008:16). She explains that: According to this radical-democratic interpretation of the principle of equal moral worth, justice requires social arrangements that permit all to participate as peers in social life. Overcoming injustice means dismantling institutionalized obstacles that prevent some people from participating on a par with others as full partners in social interaction (Fraser, 2008: 16).

Slide 6 – Education and Digital Divide

Do digital technologies help us with social justice ambitions? Do they increase or decrease access? Are these the only elements of the digital divide?

The digital divide refers to the gap between those who have access to the new information technologies, the information 'haves', and those who do not have access, the information 'have-nots' (Clark, 2003). It is generally intended to mean the existing disparities between countries at a different stage of economic development with regard to opportunities to access ICT and their ability to use it for a wide variety of activities. It also refers to the same kind of disparities, within the same country, between individuals, households, businesses and geographic areas at different socio-economic levels (UN, 2006).

What is the social justice element of the digital divide – usually involves quant calculations of digital infiltration rates and access. Access involves both infrastructure and cost – some examples from conference – Lebanon, South Africa. These are important, but also education rates and social factors, gender, literacy rates, etc.

ODEL facilitates development of education internationally – freedom from time, space, access, flexible.

Manuel Castells defines the digital divide as "inequality of access to the Internet" (Castells, 2002, p. 248). Access to the Internet is moreover "a requisite for overcoming inequality in a society which dominant functions and social groups are increasingly organized around the Internet" (Castells, 2002, p. 248).

Van Dijk and Hacker (2003) argue that there are four types of barriers to access:

- The lack of "mental access" refers to a lack of elementary digital experience.
- The lack of "material access" means a lack of possession of computers and network connections.
- The lack of "skill access" is a lack of digital skills.

- The lack of “usage access” signifies the lack of meaningful usage opportunities. (Fuchs and Horak, 2008: 100)

Possible ways of dealing with the DD

1. market and technological development will cheapen access
2. Third world countries will be able to leapfrog into information societies
3. Attracting foreign capital will increase wealth for all and access in developing countries.
4. Technologies for the Third World.
5. The Third World does not need technology. An integrated strategy combining the global redistribution of wealth, educational and health programs, digital literacy programs; public and free access to computers and technologies, open source
6. technologies, and computers for the Third World. (Fuchs and Horak, 2008)

Slide 7 - Internet penetration rates

<http://www.internetworldstats.com/stats.htm>

Slide 8 – OU International Development Experience

OU's social justice mission:

The Open University's mission is to be open to people, places, methods and ideas.

We promote educational opportunity and social justice by providing high-quality university education to all who wish to realise their ambitions and fulfil their potential.

Global Development Management programme?

- The GDM programme is international and we have students taking 1,100 modules per year – and 20-25% of these are overseas students. We have a special scheme which has been funded by the Commonwealth Scholarship Association over the last six year, which has funded over 60 students in Uganda and Kenya and through teaching the MSc in Dev Management, we are helping to develop capacities in country working towards the MDGs.
- The Kulika – Open University partnership began in 1999 as a Kulika UK venture to build the human capacities of Ugandan nationals working in the Non-governmental sector, often known as the voluntary of third-sector. In Uganda, the majority of international and local Non Governmental Organisations (NGOs) are run by expatriates, Kulika sought to change this unsustainable situation by enabling indigenous people to take charge of their own development. Hence, the scheme's

primary aim has always been to build effective and efficient indigenous leadership of the Uganda NGO sector.

- Students interact with other students (from all over the world) on the electronic course conference, with their own tutor group (of 15 students), and directly with their tutor. Additionally, students have the option of meeting with tutor and other students in face to face 'day schools' (these 'day schools' are additionally costed for overseas students). Tuition for these courses takes place on an electronic conference, and we are now using 'Elluminate', which is a synchronous live tutorial accessed on-line, involving both voice chat, text chat and a blackboard for tuition. However, tutorials are an optional element for students, but those who participate benefit from the experience.
- What are the challenges – costs, access, low engagement on digital technologies, synchronicity, high levels of support

Slide 9 - Second Life Teaching

OU islands – tutoring, and meeting space with events.

Some issues that came out of a new way of thinking about resi schools – after the 'failure' of the pilot TUXR873 - *Working with conflict: tools, skills and dialogue*

One primary reason for f2f scenario based role playing is that it allows students to develop particular skills such as negotiation skills, collaborative working and presentation skills whilst constructing context-based knowledge, especially when integrated with other forms of learning material. By enabling students to suspend their own attitudes and beliefs, well managed role plays can encourage exploration of attitude and actions beyond the personal and familiar in a safe environment. F2f simulations have been widely used in training and formal education, through 'model UN's', military simulations, and in a wide variety of distance learning courses. These simulations can have the additional effect (depending on the diversity of the group) of potentially challenging assumptions students/participants may have of other sectoral participants. (Peachey and Yanacopulos, 2009)

This aim of this school is that it is used as a simulated training forum for humanitarian workers. In this paper, we argue that it is essential to use simulations when working in humanitarian work, and simulations are key both practically and pedagogically; we propose an appropriate, blended mix of preparation, theory, virtual world scenario-based role playing, debate and evaluation in this training and teaching, which will combine to elevate courses into a far richer learning experience. (Peachey and Yanacopulos, 2009)

A clear advantage of role play in a virtual world over role play in a f2f context is the ability to present with any physical characteristics, changing body size and shape, age, gender and race at will, significantly enhancing the visual aspects of the immersive experience. As Hine (2000) discusses, people can

“exploit the disjuncture between offline and online identity to explore different roles and personae quite deliberately”.

In a virtual residential school simulation which requires students to assume roles they do not normally hold (for example, an aid worker taking the role of a local government official, or a peacekeeper taking on the role of an international NGO worker), there could potentially be greater empathy with the role and thereby further understanding that position in future real world encounters (Dougherty 2003, Tse Hei Lee 2001). (Peachey and Yanacopulos, 2009)

Students can meet in world at a specified time and place and role play as they would in the real world (keeping in mind that negotiating the time and date can be very time consuming). The environment is interactive and reflexive, enabling all the positive elements of role play as identified above, with the additional benefit of the levels of anonymity afforded by performing through an avatar, potentially allowing students to explore alternative roles and identities with greater freedom. The positive aspects of the environment also bring some drawbacks. Adjustments would be necessary for the practicalities of in-world duration, addressing not only the location-based issues and bandwidth restrictions of participants, but confidence with the environment, allowance for absence, health and safety aspects of prolonged computer use etc. However, there have been considerable steps forward in using virtual worlds for immersive training

However, we exercise a caution drawn from observation of early case studies in 'online learning', where authors have simply converted existing materials into the simplest format for delivery; this new environment is often mistaken for new learning. Just as putting a PowerPoint presentation on a website doesn't make for a rich learning experience, neither does putting it onto a prim (an object one clicks on in Second Life). Integration of Second Life into any training programme requires an underpinning pedagogy to address how the training needs of humanitarian aid workers can be classified by skills, knowledge and experience, and examine what can be extracted from this classification to map against the affordances of the environment.

Accessibility

We acknowledge that the cost of Internet access can be prohibitive, particularly in developing countries, but we suggest that compared to the costs inherent in a student attending the equivalent residential school in Europe or North America, this is still a highly viable economic solution. The primary drawback to the potential for using Second Life to support humanitarian aid worker training is the problem of having access to the right technology: without reliable electricity, a fast, reliable Internet link and a viable graphics card, all other issues are redundant. In most cases this means an environment that is not only wired for broadband but is completely spike protected and with its own backup generator - often available for example in hotels. (Peachey and Yanacopulos, 2009)

Whilst there are perennial issues such as bandwidth problems in many areas where humanitarian workers are based, primarily on the African continent, the new SAT-3 undersea cable will open up African competition and could potentially lower prices and widen access to rapid internet connections. Devices such as the Ndiyo system, enabling the use of one computer by several workstations through ultra-thin client computing and open source software, are also focusing on widening computer access in developing countries. No one project alone will solve the problem, but the combination of efforts could allow a larger number of students from developing countries to participate in online training of the sort proposed in this document.

An alternative to PC-based Internet access is offered by the Second Life client for mobiles (see <http://www.vollee.com/secondlife>). This software is at early stages in its Beta release and needs a high-end phone to provide clear graphics, but otherwise all the adaptation happens on Vollee's servers enabling mobile-friendly transmission to the individual handset. In countries where Internet access may be expensive and/or unreliable, many 'first world' activities are being enabled by the dramatic growth in mobile phone usage. For example in Africa, where cell phones outnumber cash machines by thousands to one, mobile banking means that hundreds of thousands of consumers are able to access banking and financial services for the first time in their lives. According to a report by the Wireless Federation on the 8th of May 2008, Africa now surpasses North America in numbers of mobile subscriptions, with users in Africa exceeding 280 million in the first quarter of 2008 with a 2007 rate of growth at 38%, ahead of the Middle East (33%) and Asia Pacific (29%). The combined number of subscribers in Canada and North America totals 277 million.

(<http://wirelessfederation.com/news/category/wcdma/>). For Second Life however it remains to be seen whether the mobile client is a viable option for long periods of play, where regardless of the technological limitations there will be physical restrictions to the sustainability of operating with a small screen and console. (Peachey and Yanacopulos, 2009)

The advantages of using a virtual world such as Second Life are that it allows students a form of engagement with each other and with the course materials that would not be possible in any other forum other than face to face. The virtual world medium is also advantageous in that it becomes possible to achieve the learning outcomes which are generally achieved through f2f interaction, such as presentation skills, negotiation skills, and working as part of a team. Potentially more students would have access to a course if it was offered or presented in a virtual environment, as it would be significantly cheaper, less disruptive, and more environmentally beneficial; thus, the use of this medium could address the problems encountered in conventional residential schools.

However, we are also aware of limitations which need to be considered and addressed around social and technological issues in teaching a mixed-reality school. The technological issues are numerous and mirror similar limitations we find with other ICT innovations of the past. Access and bandwidth are perhaps the most obvious of these – Second Life requires fast broadband and

even though there is a new fibre optic cable going to Africa, it is not going to be equally available to all; given that Africa is potentially where a large number of students would be based, this is a significant problem. Additionally, Internet connectivity is prohibitively expensive and frequently unreliable. Another issue is that no university can control when Linden Labs (the owners and creators of Second Life) closes the Second Life grid to perform technical maintenance; closures during set teaching times would be extremely disruptive to the teaching schedule. As interactions during the simulations would be synchronous, we suspect that these allocated work times would be more suitable for some students than others. Socially, there are issues around student commitment – students may feel less pressure to miss a session than they would in a face to face residential school. Finally, some students might struggle with the lack of f2f interaction, particularly students who are less familiar interacting in an online environment. (Peachey and Yanacopulos, 2009)

In the Peachey and Yanacopulos (2009) paper, we presented a type of cost benefit analysis converting a course such as TUXR873 to a mixed reality environment.

Slide 10 – Future ways forward

As it is one of the last sessions of the conference, I wanted to use Future Studies - Preferable, possible, probable futures.

What is key is thinking about our 'theory of change' – to start, we need to think about what we mean by justice, and then think about what this means for future change.

Bell (2002: 38) states that no theory of society and social change is complete if it does not incorporate the idea of the image of the future".

The role of the futurist, then, is to encourage people to explore alternative futures and to construct images of the future. And in so doing, people become more competent, effective and responsible actors, both in their personal lives and in their organizational and societal roles . He envisions the systematic and rigorous study of the possible, the probable, and the preferable (Bell, 2002, p.50).

Bell writes that a theory of social change must include people as "active, purposeful, responsible, and creative beings whose future-oriented behavior has consequences for their own lives and for social structures and cultures" (Bell, 2002, p. 37). Futurists help people achieve more desirable futures by encouraging them to look beyond the familiar, to incorporate medium and long-term visions in decision-making, to use their imaginations and to plan deliberate actions.

1. How to search for possible and probable futures (for themselves, groups, societies, the entire human community) and why this is

- important; how to more accurately forecast the future outcomes of their own actions and inactions
2. How to select preferable futures; the importance of moral judgments and how to put them to objective test
 3. The importance of critical discourse, of open and free discussion and exchange of views; the use of reason and a willingness to change one's mind when warranted by the evidence¹ (Bell, 2002, pp.45-46)

Futures studies takes as one of its important attributes ([epistemological](#) starting points) the on-going effort to analyze alternative futures. This effort includes collecting quantitative and qualitative data about the possibility, probability, and desirability of change. The plurality of the term "futures" in futures studies denotes the rich variety of alternative futures, including the subset of preferable futures (normative futures), that can be studied.

No theory of society and social change is complete if it does not incorporate the idea of the "image of the future."

Slide 11 - Questions for working groups

- **What are the competing conceptions of social justice and how do these differ in the actions required to achieve them?**
- **How can we bridge the digital divide in tertiary education?**
- **What are the preferable, possible, probable global futures of ODeL?**