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THE PRODUCTION OF ‘PROPER CHEATING’ IN ONLINE EXAMINATIONS WITHIN TECHNOLOGICAL UNIVERSITIES

ABSTRACT

This paper uses poststructuralist theories of governmentality, agency, consumption and Barry’s (2001) concept of Technological Societies, as a heuristic framework to trace the role of online education technologies in the instantiation of subjectification processes within contemporary Australian universities. This case study of the unintended effects of the adoption and usage of an online educational technology (*WebFreedom*) for online examinations in an Australian university setting is analysed using poststructuralist theories of governmentality, agency and consumption. The analysis demonstrates how techniques of governing the learning practices of students via online educational technologies intersect with the agentive capacity of students who are relocated as consumers in the higher education marketplace. In particular the paper focuses on the production of unintended localised online examination behaviours resulting in a form of ‘subterranean ethics’ or cheating in online exams. The results from this case study raise critical questions about the ways in which both students and tertiary educators are constituted within neoliberal governmental thought, as well as the ways in which students produce themselves in practice as autonomous agents and educational consumers within tertiary education. Suggestions on the focus of future research in the area are discussed.

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INTRODUCTION

In recent times, there has been a plethora of research on the role of online education and information technology in general, in the construction of relationships between lecturers and students and the university itself (see Pollock, 2000; Cornford and Pollock, 2002; Cornford, 2002, Pollock, 2002; Cornford and Pollock, 2003; Pollock et. al., 2003; Raven, 2003). In the Australian context, one of the authors of this paper has explored these issues with a particular focus on the effect of information technology-intense teaching and learning networks on the interactions and relationships between lecturers and on-campus students (See Kitto, 2001; Kitto 2003; Kitto and Higgins, 2003) within what are termed ‘hybrid’ offline/online courses (Tait and Mills, 1999; Cornford and Pollock, 2003). Specifically, the focus of these articles centre on how the deployment of online educational technology in universities—developed primarily for distance education purposes which are premised on an advanced liberal political rationality—produces multiple unintended pathways of learning and exam practices by on-campus students. These unintended studying behaviours in turn create difficulties for lecturers in monitoring, detecting and ‘correcting’ deviant online/offline student studying behaviour.

At a broader level, discussions of the impact of educational marketisation on the delivery of tertiary education (see Marginson, 2002; Blackmore, 2003) and neoliberal strategies of workplace governance brought to bear on academic workers (see Davies, 2005; Davies and Bansel, 2005) note that the drive toward global competitiveness and the reconfiguration of education in commodity terms have significantly altered the nature of educational provision and participation in the Australian tertiary sector. In the current marketised context, for instance, Blackmore notes that the university student ‘is no longer the ‘embodiment of generalised social, national or ethnic values’, the passive recipient of knowledge, a ‘reasoning individual of the Enlightenment’, but is a more volatile object/subject as ‘a consuming individual’ (2003, p. 3). This discursive reconstitution of students as individual consumers of educational products, rather than as participants in a learning process, is taken up by Saltmarsh (2004) who argues, following poststructuralist theorist Michel de Certeau, that practices such as plagiarism can

be understood in terms of ‘tactics’ deployed by students-as-consumers in their navigation of the increasingly complex demands of university life. Plagiarism, like other forms of cheating, is seen as a form of production in which students-as-consumers make use of ‘the products imposed by a dominant economic order’ (Certeau, 1988, p. xii-xiii) to reconfigure their location in relation to the tertiary institution in order to achieve a level of success which might otherwise be unattainable.

The practices of students-as-consumers within the marketised tertiary sector, however, need to be read in conjunction with the impact of neoliberal strategies of governance on the work of tertiary educators. In the current economic and political climate, in which drives toward flexibility, profitability and accountability characterise the key aspects of neoliberalist reconfigurations of academic work,

...academics are regulated and controlled through technologies of management such as the assignment of numbers of hours to be allocated to teaching, research and administration... Neoliberal time thus ties individuals and organisations to the chaos of the market, requires never-ending flexibility in response to that market and in the interests of driving those individuals and institutions in directions favourable to the market it regulates, controls, standardises and pressurises. (Davies and Bansel, 2005)

The increasingly regulated work of academics in the current tertiary landscape is accompanied by mounting workloads, the management of which is measured against performance criteria deemed necessary to ensure quality control of the ‘end products’ of tertiary education. In such a climate, students’ successful completion of degrees becomes an important component of the measurable outcomes by which the performance of academic staff is judged, and academics are under considerable pressure to find innovative ways of providing forms of teaching and assessment which minimise input whilst maximising results in the form of student completions. Perhaps not surprisingly, the promise of online modes of delivery to provide an efficient and surveillable means of content delivery and assessment, as well as a more ‘enlightened’ approach to enabling learner autonomy and technical

competence has been met with considerable enthusiasm by many academics and administrators in the tertiary sector. The manner in which students engage with, resist and subvert aspects of these new online learning environments needs to be considered in dialogue with the ways in which tertiary educators deploy these new technologies as a means of negotiating the pressures of neoliberal workplace governance. From such an analytical perspective it may be possible to gauge how these processes acting in concert may redefine notions of quality teaching and learning.

This paper interrogates these issues further, focussing on the local formation of what is referred to here as a ‘subterranean ethics’—or what is traditionally known as cheating in online university exams. Drawing on poststructuralist theories of governmentality, agency, consumption and Barry’s (2001) concept of Technological Societies as a heuristic framework, the argument that follows is that neoliberal higher education policy that encourages the use of particular forms of online educational technology, in part provides the conditions within which students deploy a subterranean ethics in their navigation of university exam requirements. This type of student behaviour increases the complexity of regulating and judging the integrity of students’ online examination practices. Simultaneously, these information technology facilitated micro-practices of the self by students, that appear to act in contradiction to the intended aims of the educational programmes of neoliberal tertiary institutions are also a constitutive component of the acceptably successful local production of the ‘educated person’. The contradictions between students’ subterranean ethics and the rhetorical aims of higher education policy and tertiary institutions of producing academic excellence, independent learning, and so on are complicated further by the impact of neoliberal technologies of workplace governance on the ethos and workplace practices of individual academics.

THE WEST REPORT AS GOVERNMENTALITY

During the period of 1997-1998 a serious speech act concerning the role of information technologies in higher education emerged on a global scale. In order of sequence, the following appeared; the publication of the report of the Dearing

Committee on higher education in the United Kingdom- *The Learning Society* (July 1997); the release of the New Zealand Government Green Paper on the review of tertiary education (October 1997) and subsequent white paper (November 1998); and the publication of the Australian West reports – *Learning for Life*, the review (1997) and subsequent final report (1998). These governmental programmes appeared with remarkably similar content and form. All of these governmental reviews and policy documents into the state of higher education placed communication information technologies at the centre of a ‘matrix of practical reason’ (Foucault, 1988) for the neoliberal restructuring of higher education. Contained within this matrix are the so-called drivers of change: the rhetoric of lifelong learning; threats of globalisation; the increasing internationalisation of higher education due to the increased usage of information technologies; the need for greater quality assurance; perceived problems with funding arrangements; market discourses concerning de-regulation of universities (the re-naming of universities as industries); and changes in the demographics, situations and needs of students (redefined as consumers).

At the time, the West Report (1998) had far reaching implications in relation to Australian higher education management, teaching and learning and still remains pertinent today as many Australian universities have adopted the principles of online course delivery as outlined in the West Reports. The governmentality literature is used as a heuristic framework in this paper to demonstrate the constitutive role of the political statements contained within the West Report (1998) in the shaping of online educational enterprises within Australian university settings. The poststructuralist notion of governmentality provides a useful analytical tool for exploring the effects of information technologies in university settings (Kitto and Higgins, 2003). Three analytical guides central to a governmentality approach are employed in this paper: problematisation, political rationalities and technologies of governing. Political rationalities refer to:

...discursive fields characterized by a shared vocabulary within which disputes can be organised, by ethical principles that can communicate with one another, by mutually intelligible explanatory logics, by commonly

accepted facts, by significant agreement on political problems. (Rose, 1999, p. 28)

These are made manifest during the problematizing activities of government where the disjuncture between the ‘real and ideal’ is uncovered (Rose and Miller, 1992). When the particular problematic aspect of governing is revealed, then the political rationalities are translated into programmes of government that seek to shape various social domains. The implementation of these rationalities is made possible through heterogeneous forms of technologies of government such as techniques of notation, computation, calculation and procedures of examination and assessment (Rose and Miller, 1992).

If political rationalities render reality into the domain of thought, these ‘*technologies of government*’ seek to translate thought into the domain of reality, and to establish ‘in the world of persons and things’ spaces and devices for acting upon those entities of which they dream and scheme [original emphases]. (Miller and Rose, 1990, p. 8)

The political rationalities—including techniques of governing—that constitute the West Report are materialised most significantly through the emphasis, in the West Report policy and discussion documents (1997, 1998), on information technologies. The discourse around information technologies and their globalising capacity in the West Reports serves to act as a problematisation of the structure of Australian higher education and simultaneously as a solution to that problematisation:

We are convinced that technologies offer significant opportunities to higher education institutions to enhance the quality, accessibility and cost effectiveness of higher education teaching and research. (West Report, 1998, p. 60)

The benefits are also purported to support quality higher education experiences for academics and students through value-adding to their inter-relationships. The pedagogical power of these information technologies lies within their ‘inherently’ enhanced communicative powers:

We believe that the new technologies, whose power resides largely in their ability to enhance communication, offer great opportunities for enhancing teacher–Student student–student interaction, *as well* as providing superior resources for independent study. (West Report, 1998, p. 61)

When read through the analytic lens of governmentality, the West publications can be understood as advanced liberal rationalities and technologies that seek to create ‘governable spaces’ by constituting the target entities as ‘intelligible subjects’ who can be ‘governed’ from a distance (see Latour, 1990; Miller and Rose, 1990; Dean, 1999; Rose, 1999). A key focus of advanced liberal ways of rule concern the freedom of the individual, whereby individuals are invested with the responsibility for appropriate forms of self governance in order to maximise their capacities as ‘active citizens’ (Rose, 1993; Dean, 1999; Rose, 1999; Gordon, 1991). The move toward increased usage of online educational technologies is predicated upon a free individual who has the appropriate pre-constituted moral disposition. Within the West Report (1998) the university and student enter into a provider – consumer relationship through a student-centred funding arrangement, where the student is interpellated as an active rational consumer who will seek out the best possible learning experiences:

We are confident that students are capable of assuming the responsibility of greater control over their higher education experience, provided they have access to appropriate information to support their choices.... There is no reason to think that students will choose less rigorous courses, thus undermining scholarship in universities. Because scholarship is what makes university

teaching special, universities and students alike will continue to regard it as intrinsic to their core business, and therefore a more student centred funding framework will not threaten it. (West Report, 1998, p. 114)

However, we suggest that the very information technologies that are supposed to augment this ‘responsibilised’ active citizen provide seductive opportunities to engage in the practice of consumerist forms of subterranean ethics along the lines outlined by Blackmore (2003). This involves online educational technology facilitating the representation of a successful student-citizen (i.e. a student who successfully passes their exams), while the individual studying behaviour of the student may actually proceed in a known, but ‘unseen’ and contradictory manner to the stated intention of the broader governmental programme. In this case, the intention of the governmental programme is outlined in the following quote:

Higher education has a distinctive and important role to play in the learning society. In particular, higher education should, whatever form it takes, whether it be professional, technical or liberal, open, nurture and refine minds, and create *independent learners*. It should enable individuals to grow intellectually, to achieve personal fulfilment and to contribute fully and at the highest levels to society, the workplace and the nation [emphasis added]. (West Report, 1998, p.43)

Technological Universities in a techno-intense global market

We suggest that the global predilection toward using online educational technologies in higher education does not simply demarcate a benign attempt to create networks of teaching and learning to cover the tyranny of distance in university teaching. Rather, technology and by extension information technology—as it is deployed by both tertiary institutions *and* by the student consumers of tertiary education—is a productive force that impacts on the concept and practice of the university as an institution. These ‘missing masses’ (Latour, 1992) do not simply transfer forms of rule in an inert manner, they also constitute,

form and disrupt intended programs of rule. In other words society and its constituent institutions like universities, are re-configured and made durable by productive technologies (Latour, 1991; Latour, 2002; Latour, 1996) that, “construct literally, and not metaphorically, social order” (Latour, 2000, p. 113). In Certeau’s terms, this reconfiguration of the social order is not only associated with the products made available by institutions, but also by the use made of those products by consumers, who “reappropriate the space organized by techniques of sociocultural production” (Certeau, 1988: xiv), and in so doing become the inventors of new structures and social relations mapped onto those that preceded (see Certeau, 1988, 1997).

In the higher education context, we argue that this dual production by both tertiary institutions and student consumers results in the creation of Technological Universities characterised by both the expectation of governing interactive Technological student-citizens, as well as the expectation that students’ practices of educational consumption will be guided by their recognition of technological governance on the part of the institution. Importantly though, the creation of Technological Universities can also be understood as part of the production of educational consumers, whose tactics to resist and subvert technological governance ultimately function to alter the shape of educational provision in the tertiary sector. The West Reports’ emphasis on delivering higher education through online educational technologies may represent a shift from the constitution of active student-citizens to increasingly interactive Technological Student-Citizens within Technological Universities. The concept of the Technological University is used here in two senses as a sensitising concept to guide the analysis of the data presented in this paper. Firstly, these types of universities can be understood to be ‘technological’ in the governmentality sense (Rose, 1996; Dean, 1999) as they seek the calculated orchestration of human activities under a neoliberal practical rationality directed toward certain goals. Technological Universities attempt to simultaneously maximize certain capacities of individuals and constrain others in accordance with particular pedagogic knowledge(s) and toward particular ends. Secondly, following Barry (2001) contemporary universities can also be understood to be Technological as they currently embody a wider contemporary political fetishism in regards to the self-

governance of institutions and individuals through the intensive deployment of information technologies. These are processes engaged in by universities who seek to competitively engage in the global higher education market by using information technologies that grant the institution the capacity to enrol students and govern disparate and heterogenous educational sites and student cohorts.

In this global higher education context, universities are constituted as markets, in which private clients must purchase goods for private benefit' (Marginson, 2000:19) and contribute to national economic objectives. Students as Technological Citizens should exhibit high levels of work and study flexibility and productivity in a globalised higher education market. As a form of neoliberal citizen, Technological Citizens are expected to be entrepreneurs who are encouraged to continually develop their economic and social capacities especially, in this case, in relation to the supposed need, "for life-long learning in the face of rapid technical change' (Barry, 2001, p. 3). They should never be 'rooted in a place, but in a web of extended connections' (Barry, 2001:13) that must be accessible and maintainable. Under neoliberalism, public institutions such as Technological Universities are deployed not to explicitly direct, but rather to provide the conditions for the *interactive* consuming and responsible citizen, in control of their own government (Rose, 1999; Barry, 2001). Interactive and networked ICTs can be inscribed with a political function and deployed to provide solutions to the proper formation of the citizen; to produce an interactive participatory subject who is able to 'exist, manage, compete, experiment, discover, invent and make choices in a technological society' (Barry, 2001: 31). Barry argues that interactivity¹ is much more than an instrumental function of a material technology; like discipline it is a diagram of contemporary social organisation. To paraphrase Barry (2001, p. 135), in the university context student

¹ We are using a modified version of Barry's concept of interactivity. As Barry (2001: 149) contends, 'interactivity turns the user (visitor, school child, citizen or consumer), into a more creative, participative subject without the imposition of a direct form of control or the judgement of an expert authority [it] is associated with the expectation of activity'. However, in university settings we would argue that interactivity involves the use of ICTs as technologies of agency and performance *and* as disciplinary techniques to normalise intra-institutional populations (see Kitto, 2001; Kitto and Higgins, 2003; Kitto, 2003). Thus, the term interactivity is used in this paper to describe discourses and practices around ICTs that seek to express increased and networked participation, choice, experimentation, feedback while retaining disciplinary and normalising components.

interaction with online educational technologies ‘might foster agency, experimentation and enterprise, thus enhancing the self-governing capacities of citizens’.

The remainder of this paper focuses on a case study of the inter-relationships between the assumed responsibilised interactive student consumer and the productive power of information technology; in concert with neoliberal higher education policy within an Australian university. The effects of this imbrication of politics, technology and education are demonstrated by the entrepreneurial behaviour of students performed within online examinations and the concomitant incorporation of this behaviour by academic representatives of the university.

THE CASE STUDY

The following data excerpts are taken from a case study conducted over a four month period at an Australian regional university as part of a larger research project carried out from May 2000– January 2002. The larger study concerned the implementation of online educational technologies in Australian universities¹. The setting is an Australian regional university that in recent years has become one of the leading online education providers. In this paper, four in-depth semi-structured interviews are drawn upon: two full-time on-campus internal physical education students; one lecturer within the school of physical education; and a faculty level online teaching and learning quality assurance manager. These interviews concerned the subjects’ experiences and views of the types of teaching, learning and assessment practices undertaken within hybrid online/offline units, specifically in relation to the conduct of online examinations. These particular interviews were selected for their usefulness in signalling the ways in which the neoliberal reforms in national higher education policy are played out in local university contexts in surprising and unintended ways. Specifically, the interviews provide powerful insights into the production, practice and incorporation of subterranean ethics which significantly reconfigure both learning and teaching practice within the university. As a qualitative study the importance of this case is not the empirical generalisability of the data generated, but rather the conceptual generalisability (Green and Thorogood, 2004) of the phenomena of cheating in

online examinations (subterranean ethics). The aim then of this qualitative research is to consider the:

...processes involved in a phenomenon, rather than its distribution.... not to generalise about the *distribution* of experiences or processes, but to generalise about the *nature* and interpretative processes involved in the experiences (Rice and Ezzy, 1999, p. 42).

WebFreedom: The Online Educational Technology

WebFreedom is one of the typical standardised online educational technologies that have been operating throughout universities on a global scale since mid-1990. The online educational technology has been described elsewhere (Kitto, 2001; Kitto, 2003; Kitto and Higgins, 2003) so only a brief description of the technology is included in this paper. *WebFreedom* contains a variety of technical functionalities that allow educators to create web-based online courses and enable the movement of print-based courses to an online mode or the construction of entirely new online courses. *WebFreedom* also has a Manage Students function that enables the enrolment or dis-enrolment of students-at-a-distance and the storing and maintenance of student information and grades in a database. This function enables the adding or deleting of students, updating of student records and calculation of grades. *WebFreedom* has the capacity to track the pages students visit and their movements throughout an online course. Other data recorded includes the initial time a student logged on to the course, their last access time, course content pages visited, the number of times the pages were visited and the length of time spent on average by students online. In principle, lecturers can track whether students are 'active' or 'passive' participants in the course in terms of whether they have interacted in discussion lists or chat-rooms and how many and what type(s) of responses they have posted. The lecturer can to a large extent monitor and control a student's access to the course, the types of participation undertaken and the conditions of access in terms of time and functions.

In ideal terms, the capacities of *WebFreedom* can facilitate the governing at-a-distance via technical means which is an essential component in the construction of durable networks of governing (Latour, 1987; Miller and Rose, 1990). The technical capabilities of *WebFreedom* allow the folding of space and time and the representations of the relations of the actors within it (Kitto and Higgins, 2003) making 'visible' the entities within a 'governable' space (Dean, 1999; Latour, 2002; Rose, 1999). This is made possible by the folding of database representations of the students and their learning practices with their *in situ* practices (Kitto and Higgins, 2003). With this kind of online software technology students placed within a situated time and space away from the university campus can also potentially be simultaneously enrolled and distributed through an online education zone and thus be accessible to the universities' governing activities. The heterogenous cohort of students and their disparate time and geographical spaces (both global and local) could conceivably be effectively managed through such a system. Governing via information technology necessarily involves attempts to standardize for if an institution like a university 'is to be governed technically, then the technology of government must itself possess a certain degree of uniformity and comparability...[information technologies] are expected to have similar effect on the object and persons to which they are applied' (Barry, 2001, p. 13). The technical intermediary must be able to instantiate a standardised, durable online education zone that is also accessible from anywhere that produces the same subjectification effects. This is an essential component of making any technical network in the instrumental sense, but also of making durable neoliberalist technological zones of governing (Barry, 2001; Rose, 1999). However, attempts at creating standardised zones via information technologies may uncover and/or create new experiences and objects that do not fit the norm. Information technology can create systems which, 'both close off other options and generates novel, unpredictable and indeed unthinkable, options (Callon, 1991, p. 132). It is this formation of new experiences and objects that are produced out of an online education zone that utilises online examinations that is the interest of this paper.

***WebFreedom* and online examinations**

The Online Examination function contained within the software program can enable assessment to occur at-a-distance in either a multiple choice or open-ended question format. Straight multiple-choice examinations can be automated, whereby upon completion the student can automatically receive their marks. Students can access these examinations from any location where the appropriate computer technology is available within a timeframe prescribed by the lecturer. Together, the Manage Students function and the Online Examination function allows for individual comparison in relation to the class where statistical information about the students is stored within numeric columns. Selective displays of individual student records can be generated for the lecturer to view, and/or all student records can be displayed in a spreadsheet format to allow comparison.

In this way, *WebFreedom* can be conceptualised as both a technique of agency and performance (Dean, 1999, Rose, 1999) for cultivating neoliberal subjectivities as it provides a learning context supposedly characterised by student agency, participation and self-regulation, while also seeking to ensure that students capacities are, by means of the management and surveillance functions of the software, 'made calculable and comparable so that they maybe optimised' (Dean, 1999, p. 173). However, the online educational software as a technique of facilitating student agency and measuring student performance is imperfect; prone to failure and requires constant monitoring, interpretation and maintenance by lecturers. For instance, the data representations of students' online behaviour does not necessarily faithfully represent the students' behaviour and/or achievement, as there is no clear means by which to ascertain whether the designated student is in fact the person carrying out the exam. Also, the tracking of student visitation of pages within an online course does not necessarily represent learning activity. As in the case of face-to-face lectures and tutorials, where physical attendance does not guarantee student learning, neither does logging on to an online course necessarily imply that studying and/or learning is taking place. Consequently, lecturers face difficulties in calculating and judging the performance of students' learning activities, while students can be presented with complex dilemmas concerning how to calculate and enact self-regulation when provided with a capacity to engage in anti-programmatic activity such as cheating within on-line

exams by collaborating with others or seeking other means to enhance their success within examination procedures (see Kitto, 2003; Kitto and Higgins, 2003).

An additional layer of complexity is introduced when the apparent ease with which students can be monitored via the *WebFreedom* software is mapped onto the concerns of lecturers to operate within designated time constraints and to meet performance criteria and teaching outcomes. In this way, the promise of streamlining and efficiency which pervades discourses of online teaching and learning becomes a desirable commodity in the temporal economies of neoliberal universities. A further layer of complexity emerges, however, when the concerns of student consumers are mapped onto neoliberal discourses of student agency, participation and self-regulation, so that progress through courses relates not only to participation in a learning process, but also through entrepreneurial dispositions and behaviours which minimise risk (of additional expense caused by poor academic performance, of protracted periods out of the workforce, and so on) and which maximise potential benefits (in the form of qualifications and employment outcomes) to the individual. The following analysis outlines in detail the experiences of two students involved in such activities.

Online examinations and the performance of Subterranean Ethics

The analysis of the following excerpts outline two 19-20yr old male students' difficulties in negotiating the many possible ways, some of which are morally ambiguous, to practice 'techniques of the self' during online examinations. Techniques of the self are understood as a form of ethical comportment (Foucault, 1988); a practical way of evaluating and acting upon oneself under neoliberalism:

...a means by which individuals come to construe, decipher, act upon themselves in relation to the true and the false, the permitted and the forbidden, the desirable and the undesirable (Rose, 1998, p. 153).

It is important to note that the production of ways of thinking, acting and judging oneself are not reducible to 'private matters', they are intimately related to the

political discourse of neoliberal democracies (in this case the West Report (1998)) which provide the conditions of possibility for individual ethical comportment. They are understood as the calculations and actions of ostensibly free individuals, which partly constitute and make possible advanced liberal ways of rule (Rose, 1998).

Student A: Constituting the Technological Student-Consumer

During the study one of the authors of this paper asked the students (designated as student A and B) how their online multiple-choice exams actually operate and how they engage with them. Student A described his experiences in the following way:

Student A you can actually go back and see which questions you got right and wrong so once you've done that, and I've done it 4 or 5 times this year already for internet exams, we get a group of four of us, pull short straws. Whoever goes first, we get their exam results back, see where they went right, where they went wrong and it gives you the correct answers and then you log in, 100% bang.

Interviewer So if you are the last one in the group...?

Student A ...there's like a base of like of 80 questions for each exam, but you will only get asked 50 so you get a few you haven't seen before, but the person in front of you could have had 30 questions that you had, so there's 30 marks out of 50.

The capacity of the online education technology to improve interactivity (Barry, 2001) through the provision of instant feedback on students' exam results facilitated student A's achievement of high scores with little study preparation. Ironically, this very capacity of *WebFreedom* to provide increased interactivity

through instant feedback (a key diagram of organisation in a Technological Society and by implication within a Technological University) was a central aspect of discourse around using ICTs as a technique to improve the efficiency and quality of teaching and learning in universities within the West Report (1998). The benefits of engaging in this type of examination behaviour for students is obvious, however student A felt uncomfortable with the process and was ambivalent about this way of doing exams:

Student A I'm not sure, it certainly makes it easier to cheat, its' just incredible. I catch myself, there was one exam when I was sick as a dog and I didn't do any study or anything and I still took the exam and the guys let me go last and I ended up getting 85% or something like that....We all live in the same area and if someone is like sick or has to go to away or something, we just all, it doesn't really worry us, we take it in turns to go first. But that's one of the bad things about *WebFreedom* but it's one of really, really good things about *WebFreedom* cause if you get caught out with other subjects, you've got assignments due, it means you can allocate a little bit more time to it.

The student was clearly struggling with the common day-to-day difficulties of finishing his degree and the imperative to complete it. While the online examination process allowed ways of expediting the successful completion of his courses, he felt ambivalent trying to 'catch himself' before engaging in cheating as he felt he didn't actually learn anything through this process. He was asked about the learning aspects of cheating within online exams:

Interviewer How does that [way of doing exams] equate with your idea of learning at university?

Student A See, it makes it difficult, for some people to just get the answers and stuff...they'll

have no idea [about the course] and I honestly; from last semester, I did a course that I hated and I probably couldn't tell you jack shit about it cause both the exams were on *WebFreedom*....One was worth 50% and so was the other one. So, like our whole mark was from *WebFreedom* and if you've got there, and there was no time limit on it, I don't think, or it may have been an hour and a half and it only took you an hour, but the good thing about *WebFreedom* you can have your book there. Like if you don't know you can just open a textbook and read straight from that. It's good for your marks and stuff but if you actually wanted to learn it, you're just reading out of the textbook. I don't think I get much from it, just reading straight from the textbook.... I'm not here just to get like a degree, I actually want to learn a little bit about it but, the easier the better but I'm not going to take the easy option most of the time.

The ability to draw upon his peers in group exams practices and being able to use textbooks while sitting in the exam was clearly appreciated by this student. The flexibility it gave enabled the successful participation at university while working part-time to support him. However, he was sceptical of the quality of learning online and was cautious about the negative implications of cheating in online exams all the time:

Student A ... Yeah it gives you a little bit of freedom, if you are willing to work most of the time. Sometimes if something has happened, like if you've got work or something you can do it once or twice, but like people who choose to do it every time, I don't think will get much benefit from it at all.

Paradoxically, it was this very freedom that the student grappled with as he was clearly confused by the seductive possibilities of online exams via *WebFreedom*.

online exams and conducting internal on-campus final exams). During the interview he repeatedly stated that he hoped that the university would not stop using online exams as it provided a much easier way to cheat, especially if you have your ‘team’ already set up.

Student B Its fine, it’s just, there’s always ways to, there always seems to be people you can sort of ask to get the answers off or something like that. People have sat the test before and they sort of got their results back, what not. There’s always ways of figuring it out, you sort, whether you sit in a room with 4 or 5 people and just go through textbooks and class notes and stuff like that, pretty much but pretty much the way it goes every time... Yeah, well it makes it easier [online exams]... There’s generally the same group every exam so you just take turns of going first just sort of on a roster basis, it’s all set up.

From these excerpts it would seem that from a government policy perspective, it could be inferred that there is some disjuncture between the political rationalities delineated within the West Report (1998) and the emergence of the students’ practices of micro-technologies of the self (Foucault, 1988). The students’ actions do not exhibit an, ‘exercise of inhibition of the self, by the self’ (Rose, 1999, p. 43) by free and responsabilised interactive students. Instead, the students’ have taken advantage of the capacities of *WebFreedom* to expedite the successful completion of their studies. Their actions seem to represent those of, ‘a consuming individual’ (Blackmore, 2003). However, as O’Malley (1996, p. 311) states:

To think in terms of failure puts the emphasis on the status of the collision from the programmers’ viewpoint, and consequently reduces resistance to a negative externality. No space is created for a productive and incorporative relationship with resistance-such as would exist where rule and resistance form each other reflexively.

This is especially salient when studying the local translations of broader higher education programmes and their resulting articulations through information technology with local micro-practices of rule. In this case, using *WebFreedom* for multiple-choice examinations presented the students with an ethically ambiguous and complex decision-making situation that they would not have so readily encountered in more traditional exam situations. The outcome of these circumstances was that these student consumers deployed an *entrepreneurial form of subterranean ethical practices*. Such practices can be defined as actions by an opaque subject (as it is impossible to actually confirm that it is the right student undertaking the exams and/or that they are undertaking it themselves without aid) that are facilitated by online educational technologies, which proceed in an ‘unseen’ and contradictory but relationally constitutive manner with advanced liberal ways of rule that actually contribute to the local ‘success’ of broader programmes of governing in higher education. The final section of this paper demonstrates empirically the incorporation of instances of subterranean ethics into local university practices of governing student cohorts via information technology as part of the ‘success’ of the neoliberal governance of higher education.

The institutional incorporation of Subterranean Ethics

The probability of cheating within online examinations was not lost upon the academic staff in the school, nor on those individuals who were given the task of monitoring the implementation of *WebFreedom* at a faculty level. An interview with the Associate Dean of Learning and Teaching (ADLT) of the faculty was conducted to ascertain their knowledge of and views on cheating within online exams. The role of the ADLT was to conduct quality monitoring of online teaching activities and assist staff in its implementation. To begin with the ADLT was openly critical of some of the multiple-choice examinations of the kind that the students were engaging in as he believed that it:

ADLT ...encourages surface learning. It does not encourage deeper understanding; the rote learner will do well....Unfortunately you will hear a great number of

academics now saying, this is the way to go because we do not have the time or the resources now to mark assignments, this is quicker and easier and the other argument is it is the only way that we know that this is truly students work, to reduce plagiarism.

However, while this educational practice may increase efficiencies in assessment for the academics and reduce the possibilities of students copying previous essays or textbooks for assignments, the ADLT was all too aware of the possibility of group cheating in online exams via *WebFreedom*. What is interesting here is the re-translation and incorporation of this traditionally understood deviant behaviour within examinations into an instance of the effective extension of the learning process. The ADLT had this to say about examinations and quizzes online:

ADLT ...Now I know very well that there are groups of students sit around the computer terminal and 5 students will do a different test 5 times. Now that in itself gives you some interesting learning, it means that all of those 5 students, even when they're helping a mate out with their assessment, are exposed to 5 times the items that they put on their own assessment

A lecturer within the ADLTs faculty had previously complained to the author about high average examination scores being produced in his online courses. He and many of his colleagues also surmised that some sort of group based cheating was occurring:

Lecturer It is not that the students we've suddenly enrolled this year are brilliant, it's just the fact that you've got that, I guess it is cheating, you've got that group work thing happening for an individual exam.

However, like the ADLT, the lecturer suggested that this may be an effective type of 'learning':

Lecturer [In my unit]...I am guessing that one student did the exam twelve times...he has got twelve mates he has done it with, then he will probably learn a lot more doing that than he has in the entire course.

The ADLT expanded further upon the online examination cheating phenomenon by problematising the very notion of assessment rather than the behaviour of the students or the integrity of conducting online examinations:

ADLT Where you lose by cheating, will we say you learn more by group learning so what's to be gained and what's to be lost? So the argument that exams are the only way of ensuring that it is the students own work, it's full of holes, especially with online...I think the other issue is to consider what assessment is and assessment should actually drive learning. If the assessments that the students are doing online informs greater learning then who cares? Go back to the same scenario with the 5 students and the 5 different tests, 5 people benefit and they get greater benefit

This raises the question of which students are actually being assessed. Part of any higher education governmental programme is to make the target object (the student) visible, to make them 'governable' in a socially and economically utilisable way (Rose, 1999). This process of making governable subjects visible is necessary in order to judge their ethical comportment to see whether they are deploying their freedom properly. With this in mind, the following question was posed to the ADLT:

Interviewer So it's [online exams] a way of assessing the multiplicity or the group, the collective rather than the individual?

ADLT Well I think it does...every time you get into a group and you discuss an item or a question or a problem within your study you get 5 brains instead of 1 and that's a great way to problem solve and we should be encouraging students to problem solve in groups, not just individuals because you can learn the same wrong thing 5 times over but get in a group and you can toss around ideas and you get to learn and think more broadly, that to me is an *educated person*[emphasis added]...but if you are truly looking at measuring performance of one individual student then online assessments are not going to do it and should we?

In this instance it would seem that the *territory* of governing (Rose, 1999) is unclear as it is difficult to separate the opaque subject from the collective in order to assess their individual knowledge. Therefore, *Webfreedom* as a technology of performance (Rose, 1999) seems to fail in light of subterranean ethical practices enacted by the students. Nonetheless, the rationale of the improved learning experience of individual students and the student cohort through better communication and collaboration is still cited as a successful outcome by the ADLT. This local re-translation of the production of an 'educated person' is articulated in a partial way with the predicted outcomes contained within the West Report (1998), concerning the increase in quality learning through the use of information technologies in higher education. The Report states:

...the effectiveness of *study groups*, collaborative learning arrangements, group problem solving and discussion of *assignments* can be improved through the use of modern communication tools [emphases added](West Report, 1998, p. 60).

It is only a partial alignment as the West Report highlights the value of group learning in relation to studying and discussion of *assignments*, not collaborative *online-exam completion* processes. Also, the subterranean ethics enacted by the

students raises question about online education as an effective technology of agency to create interactive *independent* learners; a key aim of the West Report (1998). Nonetheless, the subterranean ethical practices were provisionally accepted locally and translated as an example of ‘good’ learning through online educational technologies.

DISCUSSION

Cheating in university examinations is neither a new phenomenon nor a phenomenon emerging from the advent of recent technologies such as those deployed in online modes of study. However, we argue here that the emergence of neoliberal Technological Universities—and the entrepreneurial, interactive and consumerist forms of student engagement they invoke—produce unintended configurations of teaching and learning within tertiary sector institutions. These reconfigurations of higher education take place in terms of the learning and assessment practices of student consumers and the teaching and assessment strategies of educators, as well as at the broader level of institutional governance. In each instance, information technologies that facilitate the emergence of new *interactive* forms of teaching, learning and governance are in turn implicated in the processes of subjectification as experienced by students, academics and administrators within tertiary institutions. These processes may be understood as a ‘complexification’ (Rose, 1999) of techniques of governing educational practice, which significantly alter localised conceptualisation and practice of higher education provision.

For instance, the educators’ explanations of notions such as learning and collaboration, together with their apparent willingness to accept online examination cheating practices as a form of learning, are an interesting example of the extent to which the consumptive practices of student consumers function to alter the nature of higher education institutions and practices. It is possible that neoliberal strategies of workplace governance (see Davies, 2005; Davies and Bansel, 2005) which place increasing pressures on academics to streamline activities to increase efficiency, accountability and marketability through ‘flexible’ online learning modes may be contributing to the emergence of what

Certeau (1988, 1997) would refer to as ‘new’ institutions, or what we term as Technological Universities.

It could also be inferred from this study that the actions of the two students (student B especially) and the acceptance of those actions by the two representatives of the university are the direct effects of the pervasive neoliberal policies in combination with the use of information technologies that make them operable in western universities today. An effect of higher education policies in an age of globalisation that have changed universities into performative oriented institutions that now:

...are called upon to create skills, and no longer ideals... no longer designed to train an elite capable of guiding the nation towards its emancipation, but to supply the system with players capable of acceptably fulfilling their roles at the pragmatic posts required by its institutions (Lyotard, 1984, p. 48).

Student B certainly seems to represent the kind of pre-constituted pragmatic and credential focused student - consumer that such a Technological University is ideally placed to receive, or in the case of Student A, contribute to creating. Both students certainly exhibited a form of agency in terms of their experimental and entrepreneurial behaviour in online examinations. They seem to represent an effect of Readings’ (1996) laments about how globalisation linked to the university via the techno-sciences has broken the relationship between the nation-state, national culture and universities. He contends that the university, ‘no longer participates in the historical project for humanity that was the legacy of the Enlightenment: the historical project of culture’ (Readings, 1996, p. 5). This case study provides a powerful example of the discursive production of tertiary students not as educational participants who embody values of a nation as espoused in the West Report, but rather as student - consumers whose subterranean ethics deployed in the navigation of the reconfigured relationship between the nation-state and universities, functions in turn to reconfigure the very concept and practice of the university itself. However, Readings’ (1996) argument

of the loss of the project of culture within university education system due to globalisation facilitated by the techno-sciences has been criticised as nostalgic, as too heavily reliant' on an abstract intellectual history to elaborate his big picture based on a contrast between past and present' (LaCapra, 1998, p. 38, see also Cornford and Pollock, 2003; Robins and Webster, 2002). The concept of the university as an institution used by Readings (1996) to make his claims is overly conceptual and simplistic which does not allow for the historically situated and variable modes of practices that relate groups of people (Robins and Webster, 2002).

Rather than fall into a speculative and comparative discussion about old and new ideal-types of universities, we suggest an ongoing research agenda that focuses on what O'Malley (1996, p. 312) terms, 'government from below' and the constitutive role it has in the localised conceptualisation and contemporary governing of universities and the involvement of information technology and higher education policy in these processes. We should remain attentive to the nuanced relations between neoliberal techniques of educational and workplace governance, the use of online educational technology and their inter-relations at the level of institutional practice, in addition to broader critiques of higher education policy. There is a pressing need for more meso level (at the level of university institution) and micro level (at the level of individual educational practice) empirical analyses that study the mixing of the technological and the political in the everyday practice of higher education. Researchers and practitioners alike must be 'attentive to the ways in which both technical practice and political action can be inventive and anti-inventive in their implications' (Barry 2001, p. 33). This kind of analytic and descriptive exercise allows the uncovering of governing practices and how these are involved in the constitution and performance of Technological Universities. By making governing practices visible it increases the opportunity for universities and their teaching and research practitioners to be self-reflexive about how they practice their freedom by opening up spaces to think about other possible ways of governing (Rose, 1999; Dean, 1999).

CONCLUSION

In conclusion, this chapter has demonstrated the creation of opaque governable spaces and subjects and moments of ambivalence and resistance in hybrid online/offline educational practices. This set of circumstances was formed by *WebFreedom* as an interactive technique of governing in association with the convergence of neoliberal rationalities of the West Report (1998). The presence of interactive forms of governmentality facilitated by and flowing through *WebFreedom* provided the conditions for the emergence of subterranean translation practices by university students. In an ironic turn, the interactive component of *WebFreedom*, in terms of instant feedback on examinations, facilitated the performance of subterranean ethical practices of the self by the students in this study, making the local manifestation of the neoliberal political rationalities contained in the West Report (1998) practicable and viable. What does need further exploration is the process of performing subterranean ethics in Technological Universities by students and the role of online education technology as techniques of interactive forms of governmentality in these practices and their relationship to modes of incorporation by in situ putative higher education governing agents. This approach would move beyond macro-structural or speculative accounts of the effects of online educational technology in re-shaping higher education towards facilitating, to paraphrase the ADLT quoted in this paper, a measure of, ‘what’s to be gained and what’s to be lost?’ in the local production and practice of subterranean ethics within Technological Universities and their online educative enterprises.

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