Educational triage in higher open education: walking a moral tightrope

Conference or Workshop Item

EDUCATIONAL TRIAGE IN HIGHER ONLINE EDUCATION: WALKING A MORAL TIGHTROPE

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> Are students walking around with invisible triage tags attached, that only lecturers can see? Is this fair? Or is it just pragmatic? Like battlefield medical attention, lecturers' attention is finite. And as class sizes and workloads increase, it is becoming scarcer" (Manning, 2012)

Introduction

It is difficult to understate the scope and impact of the changes facing international and national higher education. Terms such as "disruption" and "innovation" (Christensen, 2008), "disaggregation" (Wiley & Hilton III, 2009), the "unbundling and unmooring" (Watters, 2012), "revolution" (Altbach, Reisberg & Rumbley, 2009), and "crisis" (Carr, 2012) have become endemic to discourses on the current and future states of higher education.

Against this backdrop, higher education institutions increasingly need to make strategic decisions regarding opportunities and alleviating risk. Risk within higher education both mirrors the broader societal dimensions of risk, and also presents additional aspects including the danger of obsolescence, changing funding regimes, the impact of technology on content, assessment and the role of faculty, the increasing diversification of forms of higher education and student populations, and concerns about student success and retention (Altbach, Reisberg, & Rumbley, 2009; and Long & Siemens, 2011).

Within this context, higher education and in particular open distance and elearning (ODeL) increasingly relies on the harvesting, analysis and use of available data to inform strategic decisions regarding enrolment, marketing, curriculum development, the appointment of staff, student assessment and increasingly, strategies that inform initiatives to increase student retention and success (Long & Siemens, 2011; Oblinger, 2012).

The harvesting and analysis of student data therefore offers opportunities for higher education institutions to respond, timeously and appropriately, to identifying students who are at risk of failing or dropping out. The opportunities offered by learning analytics have, however, also brought to the fore concerns regarding a number of issues such as governmentality, data privacy, consent and other ethical issues and challenges (Booth, 2012; Clow, 2012, 2013a; Long & Siemens, 2011; Oblinger, 2012; Siemens, 2011; Slade & Prinsloo, 2013 and Wagner & Ice, 2012).

The central question this paper poses is "how do we make moral decisions when resources are (increasingly) limited?"

Due to the fact that the notion of triage originates from medical practice, we also have to consider whether the notion of triage provides a useful heuristic in *educational* settings. Biesta (2007, 2010), for example, raises legitimate concerns regarding the transferability of concepts between the medical and educational domains of practice.

In this paper we will

- Briefly introduce learning analytics as tool in the practice of educational triage
- Provide a short overview of the notion and practice of triage
- Discuss educational triage
- Assess the potential of educational triage to responsibly and ethically respond to legitimate concerns about the "revolving door" in distance and online learning and the sustainability of higher education

Towards a definition of learning analytics

Central to the notion of educational triage is how student and institutional data are used (its purpose and processes), its tools and algorithms, who benefits and the ethical implications of the criteria used. Learning analytics are emerging as a valuable technology (Long & Siemens, 2011; New Media Consortium 2011, 2012, 2013, and 2014) to make sense and understand data resulting from students' learning activities and respond appropriately to increase the effectiveness of students' learning and optimise the allocation of institutional resources.

During the first International Conference on Learning Analytics and Knowledge (2011), learning analytics was defined as "the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimising learning and the environments in which it occurs" (Long & Siemens, 2011, p. 34). Learning analytics is still an "emerging discipline" (Siemens, 2013) and learning analytics' role is "to support sensemaking and not to supplant it" and "Learning analytics does not make decisions, it enables them" (Siemens in Diaz and Brown, 2012, p. 3).

Recent articles regarding the potential of learning analytics in higher education summarise some of the current hype surrounding learning analytics' potential to shape the management of teaching and learning. For example, Wagner and Ice (2012) explore the potential of learning analytics in higher education with the title "Data changes everything" (Wagner & Ice, 2012).

To understand the potential and possible risks of learning analytics to inform educational triage, we need to explore the historical development of triage as well as the moral principles guiding triage.

A short overview of the history of the notion of triage

The concept of triage is more typically associated with medical treatment where it refers to a classification or sorting of injured patients and the subsequent allocation of treatment according to the severity of their wounds (Winslow, 1982). The original purpose of triage was to conserve human resources in times of crises and to carry the interest of the sick and wounded at heart.

Triage is described by the World Medical Association (WMA) as prioritising treatment and management "based on rapid diagnosis and prognosis for each patient" (WMA, 1994, par. 7). The diagnosis and treatment is carried out systematically "taking into account the medical needs, medical intervention capabilities and available resources" (WMA, 1994, par. 7). The basis of triage is therefore the balancing of the scope of treatment in the context of limited resources and health status of patients. The WMA (1994) also acknowledges that triage raises a number of ethical problems. Triage categorisation (WMA 1994) involves the following criteria:

i) Those who can be saved but requiring immediate treatment (priority 1, immediate)

ii) Those not in immediate danger but needing urgent medical care (priority 2, delayed)

iii) Those requiring only minor treatment (priority 3, minimal)

iv) Those who might need reassurance or sedation (no specific triage tag)

v) Those whose condition exceeds the available therapeutic resources, and cannot be saved in the specific circumstances of time and place, or complex cases that require a choice between them and other patients (no priority, expectant)

Beauchamp and Childress (2001) suggest four basic moral principles providing a common framework used in the analysis of medical ethics, namely

i) Respect patient autonomy: the patient has the right to refuse or choose their treatment.

ii) The notion of beneficence requiring a practitioner to always act in the best interest of the patient.

iii) The need for non-maleficence - "first, do no harm".

iv) The scope of justice that includes the distribution of scarce health resources, and deciding who gets what type of treatment and the priority/sequence of treatment. The principle of justice ensures that privilege or others forms of capital should not determine treatment.

Joynt and Gomersall (2005) point to the fact that there "are enormous difficulties when justifying decisions in relation to prioritisation" (p. 38). As a way to overcome these difficulties, they suggest that a focus on "an acceptable process" instead of focusing only on the moral principles will alleviate some of the practical issues around the justification of triage. The proposed process contains four key procedural elements namely

- The need for transparency where all relevant parties, "including the public have complete access to the decisions and the reasons for the decisions"
- The "use of any rationales that all parties can accept are relevant to the fair use of the health resources in question"
- To ensure that "a formal and accessible mechanism should exist for appeals or challenges"
- An "oversight mechanism, preferably external" that exist to "monitor the first three conditions" (p. 38)

Triage in (higher) education

The picture of the (often) dismal student retention and course success rates in higher education in general, and distance education in particular, can paint pictures of students as the "walking wounded" (Graber, 1996), with higher education seen as a "revolving door" (Barefoot, 2004; Yorke, 2004). The concept of the 'wounded' student is embedded in many of current practices in higher education (Manning, 2012).

There is, however, an inherent moral dilemma in allocating the risk and the scope of risk *just* to students – as if higher education institutions are always effective and fair, and secondly, as if macro-societal influences such as an economic downturn or retrenchment do not impact on students' ability to survive higher education (Subotzky & Prinsloo, 2011). Student success and retention (as well as its opposite of failure and dropout) are the result of a complex, multidimensional ecology with many different and often mutually constitutive variables dynamically interacting.

The notion of triage is reasonably well established in the contexts of primary and secondary school education (Booher-Jennings, 2005; and Cobbold, 2010). There is, however, a lack of direct referencing to the notion of triage in higher education research, though issues of optimisation, analytics and addressing the needs of under-prepared students are well-documented.

A number of authors (e.g., Biesta, 2007, 2010) question the appropriateness of practices that seem to work in medical contexts directly to educational contexts. As Biesta (2010) indicate, there are important ontological and epistemological differences between the two contexts and we should therefore be critical in assuming that the epistemological and ontological assumptions underpinning triage in medical contexts can be uncritically applied in educational contexts.

Triage and open distance and e-learning: Mapping the risks and potential

Slade and Prinsloo (2013) propose a number of principles underlying learning analytics as moral practice which include recognising that learning analytics (and implicitly educational triage) can be immoral. Based on the potential of learning analytics as moral practice, it follows that educational triage, in the context of limited resources, will involve making difficult decisions. Even in the context of medical triage the "complexity of disease and heterogeneous nature of general ICU patients, and our lack of quantitative knowledge of ICU outcomes" makes it almost impossible to "define enough specific conditions under which individual triage decisions should be made" (Joynt & Gomersall, 2005).

The moral principles – autonomy, beneficence, non-maleficence, and distributive justice – (Beauchamp & Childress, 2001) provide useful pointers for considering the practice of educational triage. It would, however, seem as if the principles do not transfer directly or easily to an educational context. Education is not a "causal technology" or a "process of 'push and pull'", but an "open and recursive system"

(Biesta, 2007, p. 8) where the factors impacting on student retention and success are complex, and often interdependent and mutually constitutive (Subotzky & Prinsloo, 2011).

We would therefore propose an adaptation of the principles suggested by Beauchamp and Childress (2001) as follows:

i) *Student and institutional autonomy as situated.* Student success and retention are not the sole responsibility of either students or the institution, but a dynamic and often non-linear result of interdependent and mutually constitutive factors (Subotzky & Prinsloo, 2011). Both students' *and* institutional autonomy should be acknowledged. The autonomy of both role-players is, however, bounded or situated in national and institutional policy frameworks and structures. Educational triage therefore finds itself in the nexus between respecting student autonomy but also, at the same time, ensuring the long-term sustainability of the institution.

ii) The notion of *beneficence* requires institutions to always act in the best interest of the student flows from the social contract between higher education and students (Prinsloo & Slade, 2014). Educational triage as moral practice is primarily based on higher education's commitment to be student- centred and not allowing students to register for particular courses, or continue on selected trajectories, if analyses clearly show that the continuation of the trajectory is neither in the interest of the student nor the institution. Providing access to higher education should never be providing access to failure (Meisenhelder, 2014).

iii) The third principle indicates the need for *non-maleficence.* Based on the procedural proposal by Joynt and Gomersall (2005) that transparency should characterise not only the analysis but also the diagnosis, prognosis and outcome, it is clear that the principles of non-maleficence and beneficence are two sides of the same coin.

iv) The fourth principle of distributive justice poses a more difficult and interesting challenge for educational triage. Joynt and Gomersall (2005) state clearly that factors "such as ethnic origin, race, religion, sex, social status and ability to pay, and age should not be considered as acceptable criteria on which to base a triage decision" (p. 38). We can imagine that in a medical *crisis* situation, that these factors should not play a role. One the other hand, we should also acknowledge that resources, whether access to affordable health care, social services, infrastructure, and security is often (and increasingly so) based on a combination of historical privilege, initiatives to address past injustices, and socio-economic and ideological decision making. We simply cannot negate the impact of "causal power of social structures" (Elder-Vass, 2010). (Also see Apple, 2004; Bauman, 2012; Bernstein, 1996; and Chomsky, 2013). We propose that it is immoral not to take into account the historical impact of some of these factors in considering the classification of students in educational triage.

Conclusion

In this article we considered the complexities of "making moral decisions when resources are limited" (e.g. Joynt & Gomersall, 2005). The effective allocation of increasingly limited resources, although not new (e.g. Hartley, 1995), challenges higher education institutions to take concerns regarding student failure and dropout seriously. Institutions increasingly rely on the analysis of data through algorithms to determine students' chances on success, or risk of dropout and allocating resources according to a system of triage. Students are classified in different categories based on an assessment of their educational risk and the cost of increasing or ensuring their chances on success.

Though educational triage is germane to higher education within the discourses and practices of accountability, governmentality and the optimisation of resources; there is a dire need to explore the epistemological and ontological assumptions underlying and informing these discourses and practices.

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