The value and impact of eLearning or Technology enhanced learning from one perspective of a Digital Scholar

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Abstract

The aim of this short article is to reflect on the value and impact of eLearning or Technology enhanced learning (TeL) from one perspective of a Digital Scholar. It will make and elaborate on three observations. Firstly, that the popularity of online digital content can be easily measured, and is a strong indicator that viewers find it interesting, engaging, and useful. This is particularly so when there are many alternatives available, so that the choice of specific content by student cohorts is a useful and strong indicator for its utility. Secondly, that the digital work and artefacts that students, and professionals in training produce, that can be collected and made available online, is a useful, and strong indicator of actual learning. This is an extension of the idea that digital teaching makes what we actually teach with and assess on, as well as our teaching process easily visible. Similarly, collecting representative samples of a student’s work, or a professional’s in training output, allows one to easily see the effect of actual learning and ongoing professional development. Lastly, features of digital scholarship will be described, with a reflection on its relationship to traditional educational scholarship. Online teaching with attention paid to showcasing content, the educational process, and educational outcomes, coupled with online metrics and analytics can be used to demonstrate both the quantity and quality of our educational efforts; as well as form the basis for educational and digital scholarship, through documentation, dissemination and academic discourse.

Keywords: eLearning; Educational scholarship; Digital scholarship

Does popularity or high usage equate with utility and quality?

Does popularity or high usage equate with utility and quality? For specific digital content, a high number of page views (or frequency of readership), significant time spent viewing online content, high frequency of repeated views by the same users, and high frequency of digital downloads is strong evidence that the educational content is not only
interesting and engaging, or useful, or both. Digital content that is not only popular, but also recommended to other students must be similarly interesting and engaging, or useful, or both. A food or restaurant analogy might be helpful here - the popularity of a restaurant, with long queues would be strong evidence and a useful indicator that the food is either of high or good quality, value for money, or both. Particularly when there are competing choices. Similarly good reviews and frequent recommendations would be made for both useful educational content, and good eating establishments. Comparing the relative validity of peer reviews vs actual usage however, a strong case could be made that usage is a better indicator of quality, value and usefulness; as irrespective of the number of likes or dislikes, or strength of a review, educational content that is repeatedly visited, viewed, reviewed and used must be felt to be interesting, engaging, or useful by students; just like long queues outside restaurants and heavy, repeated patronage is often a stronger indicator of good value compared to the number, or nature of food reviews. Participation rates and patronage can be argued to be a more accurate and representative indicator of the quality and value of educational content, similar to food outlets.

Furthermore, the ability for students, teachers, peers and administrators to see what is actually used for teaching and assessment using TeL, and the transparency of the educational process allows the quality of educational material, and the teaching process (the pedagogy), to be easily and directly visible, and evaluated. Going back to the food analogy, by seeing and sampling the actual dishes, and the ingredients that go into each dish, as well as having the recipe and cooking process visible, allows one to assess the quality of the educational product (similar to a culinary product), its educational components, and training process with greater ease. TeL facilitates showcasing the educational value of digital content as well as the teaching and training process, facilitates peer review, illustrates of the depth of scholarly teaching, and can form the foundation of educational scholarship.

What indicators can we use to assess learning?

What indicators can we use to assess learning? Can we measure learning better? How can we evaluate that learning can be translated into real life settings? The same way that we make teaching content, and the educational process visible online, we could choose to use a combination of digital assessment collections, reflection pieces and digital portfolios as continuing and visible evidence of learning, for both teachers, and students to review, and reflect upon. Collection, submission, and episodic review of these digital collections of both classroom type and workplace setting assessments, problem solving and projects can be used to demonstrate learning. This process is very similar to the use of a portfolio of artistic work, to demonstrate mastery of applied theory and increasing skill, during both the training and apprenticeship phase, as well as in the later professional practice phase; similar to the way a professional working portfolio is used by artists (also writers, architects etc.) to demonstrate their output. Digital portfolios and collections are more easily assembled, organised, and rearranged as required, reviewed and disseminated, compared with traditional hardcopy and more infrequent live classroom and workplace assessments. Furthermore, one could argue that the digital artefacts, representative assessments, and digital portfolio items which are produced by students and professionals on an ongoing basis, are more representative of what students and professionals in training are actually doing, and able to do (similar to how TeL allows the actual educational content, and learning process to be made visible). The progressive increase in range, breadth, depth and complexity of these digital portfolio items is a visible record of actual learning, professional development and growth in knowledge, insight and skill. A digital portfolio that is made available for review online not only collects, but also demonstrates what a student, or professional in training is actually able to do, on a regular basis; and is arguably more representative (and better) than more infrequent formal examinations and assessments (classroom or workplace), workplace ratings or 360 review tools.
Digital scholarship

*Digital scholarship* takes established principles of traditional scholarship described by Glassick and elaborates on these for a digital age. Use of teaching websites or blogs to demonstrate not only what is used for teaching, but also to document student engagement with the material and evidence of student learning (by a combination of illustrative examples, digital artefacts, completed assessment and assignment tasks and information from data analytics) makes it easier to both peer review and critique educational content, the pedagogical approach, as well evaluate the outcomes of an educational process. Making teaching visible not only promotes self reflection and metacognition for us as educators; teaching online can also demonstrate both the quantity, and quality of our educational efforts, and form the foundation for educational scholarship.

Online viewership of an educational scholars digital output is a proxy for quantitative impact; and the type and extent of dissemination and discussion a proxy for qualitative impact; with similarities to traditional scholarship. To illustrate this, page views or number of "hits" on a webpage is similar to audience attendance at live conference or meeting sessions, or number of times an article is read; and the time spent viewing a webpage is similar to time spent physically staying at a conference paper session, or reading an article. A large number of page views, or popularity of online digital content can be argued to be similar to popular, and well attended teaching, and academic conference (paper) presentation sessions; or well cited academic papers. Online material that is linked to, and disseminated digitally (for example by sharing hyperlinks via blogs or Twitter posts) is similar to citing useful material during traditional presentations and within written articles - this is evidence that ideas are being discussed, quoted, disseminated and critiqued. Digital platforms have the added advantage of augmenting and accelerating the dissemination and potential critique of educational ideas, by promoting access and leveraging on the strength, connectivity and reach of the internet. From this perspective, the volume of digital viewership and downloads is evidence of the value, and usefulness of online content. The type, nature, extent and depth of online (similar to traditional) dissemination and discussion of digital content is evidence of the value and worth of the digital content.

Where we spend our time, what we spend our time on, and what we discuss are indicators of what we value, and what is valuable (to us). We can measure this online behaviour from number of page views, duration of time spent on webpages, what is shared online, how often it is downloaded and shared, and what is discussed online. These indicators of digital scholarship have analogies with traditional scholarship. These indicators are also starting to be used more often, as evidenced in the "article metrics" section which is now seen online on each article's webpage increasingly in medical journals, where the number of article "views", and "Almetric score" (or quantitative measure of the attention that a scholarly article has received) is highlighted, together with illustration of the range and extent of online (like Twitter, Facebook, Google+, blogs) and traditional media sources indicated in different colours and width of the colour bands in the "doughnut" surrounding the numerical score. To sum up, online teaching with attention paid to showcasing content, the educational process, and educational outcomes, coupled with online metrics and analytics can be used to demonstrate both the quantity and quality of our educational efforts; as well as form the basis for educational and digital scholarship, through documentation, dissemination and academic discourse.

**Take Home Messages**

Where we spend our time, what we spend our time on, and what we discuss are indicators of what we value, and what is valuable (to us).
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Notes On Contributors

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Bibliography/References

Appendices

Declarations

The author has declared that there are no conflicts of interest.

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