Building the Learning Analytics Curriculum

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Abstract

Learning Analytics courses and degree programs both on- and offline have begun to proliferate over the last three years. As a result of this growth in interest from students, university administrators, researchers and instructors a workshop was convened at the Learning Analytics and Knowledge Conference 2017 in Vancouver, Canada. The broad aim of the workshop was to review how these educational efforts are impacting the field, how synergy between instructors might be developed to greater serve the field and what kinds of best practices could be developed. In the following summary we discuss themes that emerged as a result of this effort.

Background

Learning Analytics courses and degree programs both on- and offline have begun to proliferate over the last three years. Tens of thousands of students registered for online courses such as DALMOOC [1] and BDEMOOC [2], there has been considerable excitement around the growth of new degree programs such as the MSc in Learning Analytics at Teachers College, Columbia [3] and the strong analytics focus of the MSc in Digital Education at the University of Edinburgh [4], as well as an explosion of individual courses including those at the University of Michigan [5], The University of South Australia [6] and others. These efforts are building on the longstanding teaching of influential material at Carnegie Mellon University and the lasting success of the Learning Analytics Summer Institutes [7] as well as professionally-minded projects such as LACE [8]. As such, the growth of the field is clearly happening not just through research, but through the classroom. As such LAK17 seemed a good time to review how these educational efforts are impacting the field of Learning Analytics, create a forum to discuss the unique challenges of teaching Learning Analytics and share best practices to strengthen educational offerings in the future.

Workshop Objectives

The audience for the workshop were those engaged in the work of developing learning analytics curricula and programming, teaching learning analytics courses, administering

learning analytics programs or otherwise interested in the professionalization of the field. The overall objectives of the workshop were to discuss practice and share resources for the formal teaching of Learning Analytics. There were four key sections:

The Many Goals of LA Program Development

The goals of Learning Analytics programs and courses are many and varied. From providing an introduction to the field for the general public to training people for particular roles within the burgeoning employment market for Learning Analysts (or whatever these individuals come to be called). The objective of this section of the workshop was to consider and discuss the underlying purpose of learning analytics programming at both the program and course level. Ryan Baker lead a discussion of the challenges in setting up learning analytics programs within higher education institutions and provided context around how course offerings influence the field overall, and how to balance the desires of different stakeholders such as employers, university administrators and researchers in defining the expertise that graduates should hold. Justin Dellinger gave a similar presentation about setting up micro-masters credentials within the MOOC format.

Course Content & Sequence

The second objective of the workshop was to discuss and develop ideas around content and the sequence in which that content should be taught. Discussions were held around determining the level of consensus that exists within the community about what content should be included within Learning Analytics programming and what the priorities across different cultural, geographic, research paradigms and educational settings might be. Leah MacFadyen lead a discussion on how this dialogue has evolved over the last five years and where it may go in the future.

Sharing Tools & Resources

The third aim of the workshop was to demonstrate useful tools and resources for teaching Learning Analytics. John Stamper gave an overview of advances in data sharing systems for teaching purposes including the development of LearnSphere.

Incorporating LA Practice into Course Program Offerings

Possibly the most challenging part of teaching Learning Analytics is ``walking the talk``, or in other words, thinking through how to incorporate Learning Analytics into the courses we teach and programs we run. In many cases, the courses taught by researchers become the first attempts at observing learning analytics in the wild but whether this ad hoc approach can be systematized remains to be seen. Although participants agreed this was a desirable aim there was little being done to implement it

in the classroom. Both Vitomir Kovanovic and Xu Wang offered preliminary ideas about how this might occur.

Best Practices

We hope to push forward the conversation around strategies to codify teaching practices. To develop an understanding amongst practitioners as to what works and what does not work with respect to teaching Learning Analytics. To that end Paul Prinsloo and Sharon Slade provided a commentary on whether or not a code of ethics should be taught as part of learning analytics programming. We hope that this will develop a lasting conversation that can propel the field forward in the most effective, impactful and rigorous way.

References

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