Purpose of the paper

The purpose of this paper is to examine learning analytics (LA) in the assessment of distance education. The paper explores opportunities to apply learning analytics for change at individual and programmatic levels.

Objectives

1. demonstrate the impact of learning analytics on teaching and learning
2. apply learning analytics within his/her educational program by selecting outcomes for assessment
3. seek additional resources for information about learning analytics
What are learning analytics?

• “the use of intelligent data, learner-produced data, and analysis models to discover information and social connections, and to predict and advise on learning” (Siemens, 2010 np)
• “measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs” (First International Conference on Learning Analytics and Knowledge, 2011)

How can I use LA?

For useful analysis, the instructor and program must define the target of learning analytics to collect behavior-based information. Individual and programmatic levels.

• Cognitive, psychomotor, attitudinal skills?
• Performance competency?
• Programmatic outcomes?
• Instructional design?

How can I use LA?

WHAT TOOLS ARE AVAILABLE?

• Many tools to visualize results of data analysis
• LMS enabled spreadsheets exportable to Excel
• Open-source and commercial tools
• Plug-ins available applied to different LMS
• Learning Analytics Enriched Rubric (LAe-R)
• Social Networks Adapting Pedagogical Practice (SNAPP)
• exploratory Learning Analytics Toolkit (eLAT)
LA Tools: Reports and graphs

Top Resources for Course (# hits per resource)

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<th>Resource</th>
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<tbody>
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LA Tools: Reports and graphs

Activity level by resource (# hits by date)

- Live video
- Recorded video
- Sample assign
- Syllabus
- Discussion

LA Tools: Reports and graphs

Activity level by resource (# hits by date)
minus informal & required discussion forums

- Live video
- Recorded video
- Sample assign
- Syllabus
- Resource docs

LA Tools: Reports and graphs

Activity level by resource (# hits by date)
minus informal & required discussion forums

- Live video
- Recorded video
- Sample assign
- Syllabus
- Resource docs
LA Tools: Text analysis (key words in context)

Discussion?

LA is more than a tracking a series of clicks.
- What do we need to know?
- What data to answer the questions?
- How interpret data to inform best practice?
- Formative and summative assessment?
- Ipsative assessment over time?
- Founded on theories, models, frames of reference?

Implications/Recommendations

- Legal and ethical standards
- Develop pedagogy and best practice (SoTL)
- Involve stakeholders in development
- Develop infrastructure
- Share information
Resources


http://www.educause.edu/library/erm0742


Comments? Questions?

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