

Learning Management Systems

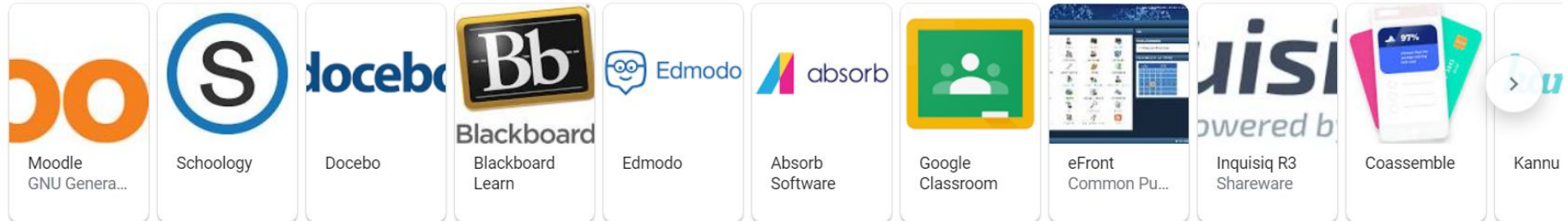
Weekly Ethicacy - 11/19/20

Sangmin Pak and Jonathan Swotinsky

What is an LMS?

- LMS's manage data and content.
- LMS's provide a space for communication and collaboration
- Features vary by LMS, but some common features include:
 - Content Hosting
 - Assignments / Feedback
 - Open Gradebook
 - Communication Features
 - Discussion Boards
 - Positive Behavior Interventions and Supports
- Originally LMS's were more frequently used in higher education settings, but recently they have become more and more popular in the K-12 setting.

LMS options



PROS: Accessibility

- Most LMS have mobile apps; doesn't require desktop/laptop
- Most LMS have built-in accessibility features (e.g. eReader)
- LMS allows teachers to upload/use various formats for lessons and assignments
- Students are able to learn wherever, whenever!
 - LTA students
- Most LMS are linked to each other ➤ easier to transfer data such as grades and attendance.

- **Apps and Vendors**

Online apps like FlipGrid, Kahoot or Minecraft come from third-party vendors. Those vendors are responsible for making their content accessible. In turn, we are only allowed to partner with vendors who provide accessible content. If you are unsure about an app you use, email the vendor/provider and ask if they follow WAG 2.0 AA.

PROS: Data Security

- Aligned with Family Educational Rights and Privacy Act (FERPA)
- Restricted to school faculty/students/parents
- Skedula:
<https://studentprivacypledge.org/privacy-pledge/>

We Commit To:

- ✗ Not collect, maintain, use or share student personal information beyond that needed for authorized educational/school purposes, or as authorized by the parent/student.
- ✗ Not sell student personal information.
- ✗ Not use or disclose student information collected through an educational/school service (whether personal information or otherwise) for behavioral targeting of advertisements to students.
- ✗ Not build a personal profile of a student other than for supporting authorized educational/school purposes or as authorized by the parent/student.
- ✗ Not make material changes to school service provider consumer privacy policies without first providing prominent notice to the account holder(s) (i.e., the educational institution/agency, or the parent/student when the information is collected directly from the student with student/parent consent) and allowing them choices before data is used in any manner inconsistent with terms they were initially provided; and not make material changes to other policies or practices governing the use of student personal information that are inconsistent with contractual requirements.
- ✗ Not knowingly retain student personal information beyond the time period required to support the authorized educational/school purposes, or as authorized by the parent/student.

PROS: Monetization of Schooling

- Obvious thought? – has a completely different business model than, something like Snapchat or Tik Tok. No aggressive advertising, no selling student/parent/faculty data...
- LMS companies usually work at district-level or higher to sell their product.
- Google Classroom ?
 - “Google Classroom is part of the Google for Education package that includes Gmail, Google Drive, Google Calendar and other apps. It targets teachers and students in both K-12 and higher ed markets.”
 - “The Google for Education suite is free for schools, but there’s a paid G Suite Enterprise for Education tier that includes additional features, such as advanced videoconferencing features, advanced security and premium support. Google no longer publishes pricing information so you’ll want to contact them directly for a quote. “ ([source](#))

PROS: Mental Health

- Parents can access students' progress easily.
- Students receive reminders for assignments, notifications of their grade updates... » helps them to stay on top of their stuff!
- Easier to communicate
- Turn off notifications if you want

CONS: Do LMS's really increase accessibility?

- “Bells and whistles” are intended to increase accessibility and engagement, but do they actually increase access and engagement or do they increase complexity?
- Standardized accessibility features cannot replace authentic differentiation.
- Heavy use of LMS's may encourage educators to push back on traditional but more accessible forms of providing students with access to content, schedules, grades, and other
- Users who have not yet received the most recent training on the systems they are using may inadvertently create accessibility issues for students and families.

CONS: Do LMS's really increase accessibility?

- In some cases, accessibility relies on the working hours of individuals providing technical support at the school and district levels...
- ...“What’s my P@55wrD?” syndrome
- Simple tasks, such as handing in assignments, require multiple steps. This can be especially challenging for students and families who are not technology savvy as well as students with learning disabilities.
- What about families that do not have access to technological tools and / or reliable internet?
- What happens when LMS's don't function the way they should?

Greatest Hits!

Invalid username or password.



IMPROVING EDUCATIONAL OUTCOMES

Greatest Hits!

Invalid username or password.



IMPROVING EDUCATIONAL OUTCOMES

Great



Error

The system encountered a significant error when processing your request. We have captured information about the error and will use it to improve the system. Unfortunately, your work has been interrupted. Please try again and if the problem persists contact your Teacher or Administrator.



IMPROVING EDUCATIONAL OUTCOMES

Polynomial Functions

In this unit, we will explore polynomial functions!

Polynomial Functions are functions of the form,

$$f(x) = a_n x^n + a_{n-1} x^{n-1} + \dots + a_2 x^2 + a_1 x + a_0$$

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iLearn won't let me sign in!

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Polynomial Function

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Canvas keeps changing my
password on its own!

$$+ a_0$$

+ a_0

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CONS: What about data security?

Most LMS's have robust safeguards to protect students' data, but is that enough?...

Consider the following:

- How many school-based or district-based staff have access to sensitive student data?
- How are permissions set to ensure that student data is secure and who sets them?
- Who sets / resets students' passwords?
- What level of training do those with access have in keeping confidential information secure?

CONS: Monetization of Schooling

- Companies behind LMS's may design software with the student and families in mind, but school officials with purchasing power are sometimes far removed from the classroom.
- Who is actually involved in the development process, and to what degree? Developers? Researchers? Administrators? Teachers? Students? Families?
- What happens when smaller LMS companies that are more closely connected to school communities get purchased by larger educational corporations?
(Skedula » Datacation » IO Education » Illuminate Education)
- For free LMS's, are students the product???



CONS: The Impact of LMS's on Mental Health

- Do LMS's contribute to the blurring of boundaries between school and personal life?
- Do open gradebooks contribute to grade obsession and anxiety?
- Do LMS's discourage the human factor in having authentic conversations about students' progress?

“Aside from producing anxiety surrounding their actual grades, a phenomenon known as grade anxiety, online gradebooks also have the potential to be deemed addictive technology. Kids have the ability to check their grades 24 hours a day, seven days a week. Technology creates and feeds the need for immediacy. And when kids have to wait for information, they become anxious.” (Johnson, 2019)

Parents Magazine Article: Online Grading Systems Are Giving My Daughter Anxiety

<https://www.parents.com/kids/education/online-grading-systems-are-giving-my-daughter-anxiety/>

Do LMS's Actually Improve Instructional Outcomes?

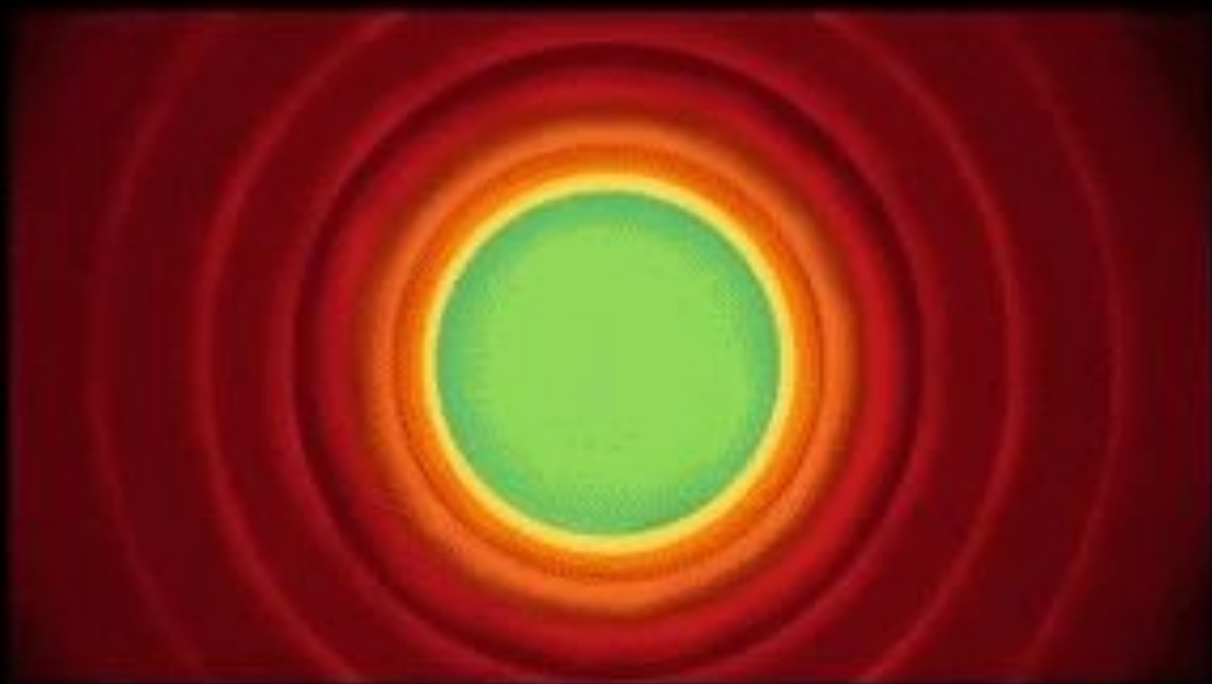
“A new study by Royce Kimmons of the University of Idaho attempts to answer a series of important questions regarding whether online management systems improve learning. First and foremost, is adopting an online system associated with an increase in standardized test scores?...Adopting an online management system had an extremely small, albeit statistically significant, positive effect on test scores. Specifically, adoption of a system explained 1%-2% of the year-to-year variance in test scores. Though there are surely benefits to such systems not reflected in test scores, given their potential cost it seems hard to justify their adoption with a mere 1%-2% increase in performance.” (Horowitz, 2015)

EdSurge Article: Do Learning Management Systems Actually Improve K-12 Outcomes?

<https://www.edsurge.com/news/2015-06-01-do-learning-management-systems-actually-improve-k-12-outcomes>

So...

What can be done?



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