

Starting With a Blank Canvas: Introducing LMS Management to Preservice Teachers

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Introduction & Need for Innovation

Looking back at the pandemic, many teachers and institutions across the United States were forced to shift to remote learning through a variety of asynchronous and synchronous methods, using a variety of online learning platforms (Cahapay, 2020, Francom et al. 2021). A survey found that 98% of educational institutions moved their operations online, with learning management systems (LMS) being at the center of those changes (Lang, 2023). During this time, many K-12 teachers and teacher educators discovered that they were unprepared for the challenges of online teaching, lacking the skills and resources needed to effectively use the technology and online learning platforms (Short et al., 2021). Arguably, an unfamiliarity with LMSs was just one of the aspects that made the transition challenging. In many cases, schools adopted or enhanced their use of an LMS such as Canvas, Blackboard, Schoology, or Google Classrooms to facilitate remote online learning (Francom et al., 2021).

In a post-pandemic world, it would be challenging to find a teacher, school, or district that doesn't use an LMS to deliver instruction in some capacity. With the prevalence of LMSs in the K-12 setting, it becomes critical that preservice teachers develop professional knowledge and skills to effectively facilitate teaching and learning using technology such as an LMS. Many post-secondary students, including those in agricultural education teacher preparation programs, use an LMS as part of their schooling. However, students predominantly use their institution's LMS from the student perspective. Although this perspective is beneficial to developing skills and knowledge in relation to LMS management, it doesn't fully prepare preservice teachers to enter the profession with the expectation that an LMS will be used to deliver instruction to students.

How It Works

Six undergraduate students in the Teaching and Training Methods in Agriculture Life Sciences (ALCE 4244) course at Virginia Tech were given instructor access to an empty course landing page on Canvas. These students were challenged to work in teams to navigate Canvas from the teacher's perspective with the purpose of building out a unit of instruction which included learning materials and resources, assignments, and assessments necessary to provide a learning experience using the LMS. The instructors provided basic Canvas management instruction, assistance, and feedback throughout the entire process. Once the components were developed, the student teams presented their module to the class, students navigated through their peers' modules, and provided feedback.

Results to Date & Implications

After the class was completed, students provided feedback on their experience working with Canvas in their daily reflection. Students were encouraged to share both the positive and frustrating aspects of their experience:

Liz said "I was surprised at how easy it was to personalize when it came to the educator's perspective because I found it easy to process what modules you had paired with specific assignments. So, it made it easier to make sure you were not duplicating assignments or could ensure you had published" the right things. Sue recognized that "Canvas is beneficial and working in it as a teacher is something that will become part of a routine if it is what my school system uses". Leslie acknowledged the learning curve and said that it was "interesting to be on the other side of the screen. I have a new appreciation for the teachers that go above and beyond

to make the Canvas site easy to navigate” and Claire realized that it gave her “important insights into how time-consuming making a great canvas site is for instructors, especially if the instructor receives little to no instruction”.

Unlike Leslie, Amy said that she “found it surprising how difficult it is to customize a course in Canvas. I also felt frustrated about where to start; the page is so blank, and none of the buttons you want are where you want them to be”. Alexis said that she felt like it “would be easy to forget to publish things because there are multiple steps in some sections to publish things”. Leslie mentioned that she was “surprised how difficult it was to manage the Canvas website. It was hard to find where to post things at/how to move things around. I found it frustrating to create our home page (as silly and little as that is)”.

Overall, students found the experience to be valuable to their future career paths in education, they discovered that Canvas was more complex than they had previously thought, and they gained an appreciation for the time and effort that instructors put into managing Canvas to create a well-planned course.

Future Plans

We plan to continue to require students in ALCE 4244 to work with a partner or in small groups to develop a module of instruction during a class focused on LMS integration into teaching and learning. In Spring of 2024, students will also be required to build out a 30-minute microteaching lesson into a module of instruction (including learning resources, assignments, and assessments addressing the needs for diverse learners) in Canvas. Additionally, we plan to review the courses in our Agricultural and Extension Education major to assess where learning objectives could be improved to more intentionally address technology integration in teaching and learning which would include future LMS-technology integration activities to better prepare preservice teachers to enter the profession where there is an expectation that they effectively use an LMS to deliver instruction to their students.

Costs & Advice to Others

Although the authors used Canvas, other LMS platforms such as Google Classrooms, Schoology, or Blackboard may be used. We believe that it is beneficial to use the LMS that students are familiar with at the institution they attend. To make the most of this or a similar activity, the instructor should set clear guidelines and expectations for the students, and have a plan for guiding and supporting students through the process. Do not get caught up in teaching all the minute details of the LMS; let the students explore, struggle, and problem solve. Be willing to step in and demonstrate specific skills based on the needs of the students. Encourage students to share their findings with their peers, likewise, have them present their finished build out with the class.

There was no additional cost to integrating this activity into the course and all the instructors who taught the course were proficient in navigating the instructor and student sides of the LMS. Additional assistance may be needed to provide students with access to the instructor side of the LMS; this will vary depending on institution and LMS being used.

References

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