Canvas Basics:  
A UX Investigation of Novice Learners and Their Learnability of a New Authoring Software

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ABSTRACT

This article reports on usability testing of the Canvas learning management system (LMS) by ninety-seven kindergarten through post-secondary, public and private educators across North Carolina. The article will reference research by Rosenzweig and others to understand the impact of user experience (UX) on teachers’ ability to learn features and to create content in the Canvas learning management system (LMS). The author co-facilitated a Canvas Basics course sixteen times for educators new to the software. This article explores the implications of the information gleaned as these educators built content and interacted with the Canvas e-learning software. The training was offered through a statewide initiative by the North Carolina Department of Public Instruction (NCDPI), an entity charged with (among other roles) supporting the professional learning of educators, specifically focusing on digital learning competencies for classroom teachers, a professional growth requirement for renewing teacher licenses in 2019 and beyond.

KEYWORDS

Canvas, K-12, LMS, NCDPI, UX

INTRODUCTION

In 2013, the General Assembly of North Carolina passed House Bill 23, which mandated that the NC State Board of Education develop digital teaching and learning competencies that would “provide a framework for schools of education, school administrators, and classroom teachers on the needed skills to provide high-quality, integrated digital teaching and learning” (“NC Digital,” n.d.). These new digital competencies for educators are informed by the International Society for Technology in Education (ISTE), the International Association for K-12 Online Learning (iNACOL), and the NC Professional Teaching Standards. Beginning in 2019, all educators wishing to renew their professional licenses must demonstrate their use of the following competencies as they improve their practice and drive student learning within their classrooms:

1. **Leadership in Digital Learning:** Teachers will demonstrate leadership in accelerating their integration of digital teaching and learning pedagogies;
2. **Digital Citizenship:** Teachers will model and teach digital citizenship by the ethical, respectful, and safe use of digital tools and resources that support the creation of a positive digital school culture;

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3. **Digital Content and Instruction**: Teachers will know and use appropriate digital tools and resources for instruction;
4. **Data and Assessment**: Teachers will use technology to make data more accessible, adjust instruction to better meet the needs of a diverse learner population, and reflect upon their practice through the consistent, effective use of assessment.

As part of a state-wide initiative to train teachers in these digital competencies across North Carolina, the Home Base Tools for Teachers (Darrough, 2017) training series was created and took place over a two-week period in July, 2017. As a user of Canvas for two years, and being a classroom teacher with substantial experience flipping traditional content to digital formats, the author wrote a proposal for the North Carolina Department of Public Instruction (NCDPI) to facilitate a workshop for teachers as they reimagine pedagogy in digital-rich classrooms. He presented From Flipping to Fully Integrated: Revolutionize your Pedagogy for a Blended Classroom workshop sixteen times, twice in each of the eight training locations. The author also co-facilitated a Canvas Basics training course sixteen times during the same period. The training sessions were offered for any educators new to Canvas, a fully integrated learning management system that utilizes a drag-and-drop user interface to support authoring of course content. As part of a plan to ensure equal access for all students, North Carolina provides access for all districts to Canvas at a set cost per student. The aim is to provide equal access to the best digital tools that support teaching and learning across all state districts—regardless of an individual district’s financial resources (NC Department, 2017, January).

The perceptions the author gained from both the Canvas Basics training and to a lesser degree from the Flipping to Fully Integrated trainings provide an intimate view of the importance of a teacher’s user experience (UX) with a course-authoring tool. From these sixteen Canvas Basics training sessions, the author gathered both informal and formal data that will illuminate touchpoints for actual users of Canvas and provide a better understanding of how the UX influences adoption potential for this authoring tool for school districts across multiple contexts.

Trainee-driven objectives for the Canvas Basics workshop include these:

1. Create four types of content within Canvas — content pages, assignments, discussion boards and assessments;
2. Simulate the student experience of navigating content and submitting assignments;
3. Use gradebook analytics and comment options for student submissions.

Attendees in the Canvas Basics training ranged from first-year teachers to retirees, all varying in their technical expertise and aptitude for building content in Canvas. Additionally, a small number of college professors, administrators and teacher-trainers comprised the audience. NCDPI built the Canvas Basics training product inside Canvas itself, and trainees were provided accessibility in order to create course content within the learning platform. All potential users of Canvas created sample courses and three types of content within them: pages, assignments and quizzes. The author had many opportunities to directly observe educators and question them as novice users of the Canvas product.

**METHODS OF INVESTIGATION**

The author observed users in real time while they interacted with Canvas and used it to create content for the first time. The majority of the reflections are qualitative in nature, though some user survey
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