

Week 1 Project Assignment: Needs Analysis Report

The client for my instructional solution is a fully online, for-profit university. The analysis performed was based on reading the results of formative evaluations, compiling student and instructor feedback, listening to observations made by management, and gaining an understanding of the course development process. The lack of in-depth interviews might qualify my analysis as rapid-design, but my personal experience with the project both as a content author and course mentor give me more information than might otherwise be had using the common rapid-design shortcut (Piskurich, 2015).

The formative evaluations reveal a decline in student engagement over the time of the course involving multiple classes using a sole source for digital courseware. In particular, the gap between reading and doing is problematic because “doing” has a greater effect on student outcomes (Clark, 2015). Additionally, student engagement with summative assessments is often higher than page visits intimating that learners are merely using the courseware to take the quizzes. The trend suggests that students are using the graded assessments to test out and generate a personal learning path. The underutilization of the adaptive assessments for this purpose further supports this theory (Fleming, 2014). Overall, students are typically engaging between 40% to 60% of total formative questions against a learning objective. Additionally, the total number of formative question parts per learning objective reveal significant differences with some questions having four times more question parts. The discrepancy hints at a lack of standard or algorithm for the number of times a skill is assessed, which may also affect the level of student participation. However, further research is needed into what comprises question parts.

Next, the course development process points to potential problems in business processes relative to workflow, procedures, and job design (Piskurich, 2015). For example, the workflow does not include systematic instructional design principles or processes that ensure congruency between the learning objectives, assessments, and content. Likewise, the construction of terminal and enabling objectives are not aligned with the level of learning outcomes which confuses the degree of knowledge acquisition and depth of the content. Equally, the job design places SMEs in the role of designers but lacking requisite knowledge of design principles, skill in the authoring tool, use of visual and interactive media, and an understanding of the appropriate uses for activity and question types in the development of criterion based assessments.

Following, although there is a detailed skill map the development process lacks a methodology for accelerated design and the platform does not have built-in instructional design processes and principles to help guide the design process (Piskurich, 2015). There are also no beta tests or regularly scheduled formative and summative evaluations, and despite the availability of course level analytics, no measurement of the effectiveness of the learning or the assessments is taking place on a regular basis. The manifestation indirectly and negatively affects student participation and performance and suggests student participation is declining because there is too much material, no means to test-out, a lack of relevancy, and the inclusion of extraneous information and activities.

Additional evaluation reveals there is little to no formal training and the documentation if made available, is sparse and incomplete in many areas including the types of assessment questions. Similarly, there is no online help. Additionally, there is a lack of documentation

about standards, procedures, or a delineation of tasks such as the fact that faculty subject matter experts are familiar with instructional design principles and developing effective formative assessments. However, despite the complexity of the authoring platform the users are familiar with distance education, curriculum development, and developing courses in Blackboard.

My analysis concludes with the recommendation of training and non-training performance interventions. Web-based training can address the knowledge and skill deficits surrounding the authoring platform, design principles, use of visual and interactive media, and an understanding of the appropriate uses for activity and question types in the development of criterion based assessments. Additionally, performance improvements are needed to better identify and document the standards, procedures, workflow, and tasks to develop digital courseware and to better align the roles and related responsibilities within the team. Likewise, beta tests and formative and summative evaluations need to be included in the workflow and will provide the immediate and long-term feedback necessary to not only make program improvements but also make learning more effective. These types of performance improvements can be addressed through non-training performance interventions such as management practices, documentation and standards, reference manuals, and on-the-job training in the form of microlearning and community or informal learning that ties into the web-based training.

References

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