

MOOD: From Bucket Based Learning to Socially Mediated, Highly Contextual Learning Experiences

Carlos Olguin, Nandor Tamas, Erich Bratton & John Kruper

Unext

Deerfield, IL 60015

{olguin, tamas, bratton, kruper}@unext.com

ABSTRACT

A flurry of online universities has emerged in the last decade [7,8,9,10,11,12]. Unfortunately, most of the e-learning platforms empowering these universities are best described as “buckets of features” [13,14,15,16]. In these platforms, the interaction model follows from the technological infrastructure needed to build the system rather than a direct response to the student’s needs. At UNext, we have designed MOOD, an interaction model based on socio-constructivist frameworks such as [1,2,3] and inspired in its interface design by [3,4,5]. We present the four key design elements behind MOOD and illustrate their instantiation in Ellis College’s course platform.

Keywords

Bucket based learning, VLE, e-learning, socio-constructivism.

1. INTRODUCTION

Progress in the development of e-learning environments has been rather asymmetrical. Seen from one side, great advancements have occurred in the back-end integration and standardization of what is traditionally considered an online course. However, when examined from a student’s perspective, the experience has become increasingly dysfunctional. As technology advances, new features are typically added to an already disconnected environment; “bolting on” these new features further confuses what is already a non-intuitive experience. We designed MOOD, a new learning environment, to bring the focus back to the student and her interactions with others.

2. UNEXT PEDAGOGY

At UNext, we believe a “course” to be the total sum of learning interactions designed to support and enable mastery learning of a

content domain. Moreover, learning interactions include purposeful and ad-hoc relations and relationships between a learner and 1) content, 2) tasks, 3) other learners (informally and structured, as in team-based collaborative activities), and 4) the instructor. We believe that learning is inherently a social, dialogical process [1], and thus provide an environment that fosters a community of learners.

3. MOOD

Driven by the framework highlighted in Section 2, we present the main design elements found in MOOD (Figure 1). Some are not novel elements on their own (but curiously few, if any, e-learning platforms consider even one of them); however, we combine them all into a coherent experience, which is novel.

3.1 Contextual Discussions

Recognizing the primary role social interaction plays in learning, every course “page” contains a discussion. As a result, every page’s published content (material produced by instructional designers during the course development process) can be seamlessly discussed on that same page. In fact, the published content and discussion together—and as equal citizens—create the “course page” that resides in the course map.

3.2 Page Scope

To further support in the virtual world the social interactions that occur in a physical learning setting, we created the concept of page scope. All social interactions have a scope that defines who can participate in the page’s discussion and other activities. MOOD scopes include class, team, and faculty 1-to-1. In an effort to keep the interface “learner-centered,” a durable interface, multiple visual cues, and motion design were all used to make the page’s scope immediately clear to a student working on that course page.

3.3 Location.

Though we strive for simplicity, the introduction of contextual interactions and scopes inherently increases the complexity of the course learning environment. In the MOOD interface, an intuitive navigation scheme—the location of the student in the course and how she got there—is crucial. In MOOD, the elemental “sense of place” for students in a course is the course map page. The course map is thus the primary conceptual and operational organizer of the course learning experience. Moreover, the course map organizes the course using both sequenced and non-sequenced learning activities. Finally, as described earlier, course map pages contain published content and scoped asynchronous discussions, but can also contain additional functionality, including assessment applications, and scoped synchronous applications.

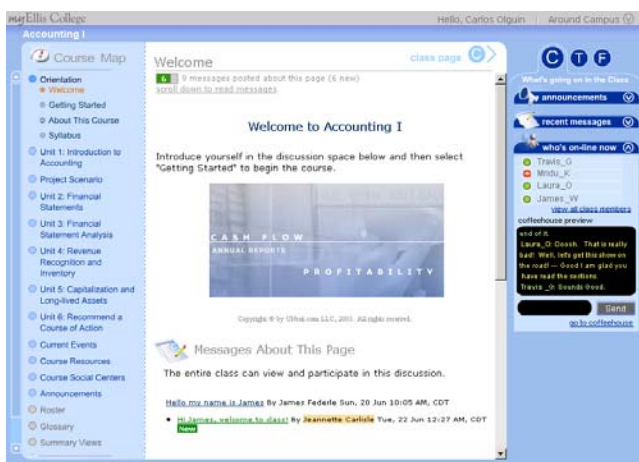


Figure 1: MOOD

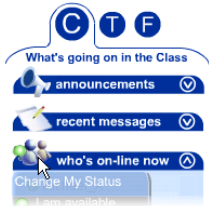


Figure 2: Scope Panel

3.4 Meta and Time-Sensitive Information

During user testing, we found that, with the introduction of scopes and the fact that a given student can simultaneously belong to several scopes, students wanted tools to let them stay

aware of time-sensitive events across all course map pages for all scopes. Examples of meta and time-sensitive information include: discussion activity, roster information including presence detection, synchronous activity, announcements, and grade objects.

Put simply, students logged in to a course should be notified of events happening on any course map page, shortly after they occur. In MOOD, these events are grouped in scope tabs using what is called the scope panel (Figure 2). The scope panel is contextualized around the scope of the page on which a student is currently working. Students should not have to see event notifications that are no longer relevant to them. The scope panel should be clearly understood as meta-content pointing to content in the center – which ultimately lives in the course map. The exception is the report views, which are extensions of the scope panel, wherein due to the insufficient real estate the inability to show a full report causes an overflow to the center of the screen (Figure 3). Color and labeling are used to differentiate a course content page from a report view; however, per the location design constraint, both are always located in the course map. Through a member list, information about other students online is also shown in the scope panel. Below the member list, a preview screen is shown of a persistent chat room, which is associated with each scope. In these chat rooms, students have the ability to converse synchronously with other students. This can happen in a casual way using the class-scoped coffeehouse or in a more coordinated way with fellow teammates in the team chat room discussing a team assignment.

4. CONCLUSIONS AND FUTURE WORK

MOOD was born out of the rising tide against what we call “bucket based learning” platforms that are driven by



Figure 3: Report View

technological fancies rather than the needs of learners. As a Virtual Learning Environment (VLE), MOOD distinguishes itself based on its strong ties to socio-constructivist learning philosophies. Its design elements all flow from a learner-centered view of (online) education. Based on our initial usability studies, we have found that the design elements presented here are indeed appropriate. However, MOOD by itself does not guarantee an optimal learning experience. MOOD is the rich shell in which a course lives and more importantly, in which an instructor facilitates a course. With the official release of MOOD as the learning platform powering UNext’s online learning communities, we seek to further explore the convergence of design, technology, and learner-centered needs.

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- [14] WebCT. <http://www.webct.com>.
- [15] TopClass. <http://www.wbtsystems.com>.
- [16] eCollege. <http://ecollege.com>.