Design-Based Implementation Research of Spreadable Educational Practices within the Participatory Learning and Assessment Network (PLAnet)

Rebecca C. Itow, Daniel T. Hickey, Learning Sciences Program, Indiana University
rcitow@indiana.edu, dthickey@indiana.edu

Abstract: This poster presents a secondary language arts module where open-source activities were (a) oriented to the theme of Romeo and Juliet, (b) aligned to a Common Core English standard, and (c) were organized around four principles of participatory assessment. The design of the module and the “spread” of the principles to the module and beyond show how ideas from the spread of media “memes” and new participatory approaches to assessment can extend design-based implementation research.

Current efforts to catalogue and test “21st Century Skills” are woefully misguided because they emphasize static decontextualized knowledge and under-represent the importance of multi-modal writing (Hickey, Honeyford, Clinton, & McWilliams, 2010). The quickening evolution of digital knowledge networks means that we know very little about the actual contexts where our students will operate. But the most consequential contexts will surely be digital networks consisting of user-generated content that is persistent, searchable, and replicable (boyd, 2008), and will feature transactive interactions where media is customized for users’ personal preferences and shared control where content and expertise are co-created (Xenos & Foot, 2008). These networks will be characterized by “participatory culture” including low barriers to entry, support for creating and sharing, informal mentoring of newcomers, and a strong sense of social connection; as such they will be spaces where “not every member must contribute, but all must believe they are free to contribute when ready and that what they contribute will be appropriately valued” (Jenkins et al., 2006, p. 7). This reality is prompting growing interest in “participatory” education and curriculum for use in school and elsewhere.

Unfortunately, test-based accountability and demands for achievement impact in strict experimental designs present significant obstacles for participatory learning in formal school contexts. Teachers need curricular resources (a) that support conventional literacies and academic knowledge teachers are accountable for, (b) which they can implement with reasonable levels of professional development and typical student access to networked computers, and (c) that are no more laborious for teachers than existing resources. This presentation features a case study of the development of just such a resource within a digital professional development network designed to support participatory learning while addressing accountability concerns.

Participatory Assessment and the Participatory Learning and Assessment Network

This module and the nascent PLAnet professional development network are organized around four core participatory assessment principles: (1) let contexts give meaning to concepts and skills: foster increasingly sophisticated discourse around valued concepts and skills by considering how they get their meaning from the contexts where they are used; (2) assess reflections rather than artifacts: rather than assessing student-created artifacts directly (i.e., with a rubric), assess student reflection on how creating the artifact gave meaning to valued concepts and skills; (3) downplay assessments: protect participation by using formal assessments to formatively assess curriculum rather than students; (4) Isolate tests: use tests only to evaluate the curriculum-assessment ecosystem. These principles are rooted in the implications of situative theories of learning for assessment (e.g., Hickey & Anderson, 2007).

This network was initiated in 2008 as collaboration between a University-based team of assessment specialists, Project New Media Literacies and a secondary English Language Arts (ELA) teacher. In 2009, the network expanded using Moodle to accommodate five new ELA teachers. In 2011, the network migrated to National Writing Project’s Digital Is network to foster further growth.

The Consequences of Ignorance English Language Arts (ELA) Module

In Spring, 2011, the first author, with a M.ED from a progressive program, was implementing elements of participatory curriculum in her California ELA classroom. In advance of entering a doctoral program to join the aforementioned assessment research team headed by the second author, she elected to implement participatory assessment in her own classroom. She built a module using custom and open educational resources that were aligned to Common Core English standards (concerning character analysis and writing) and to a single classic text (Romeo and Juliet). The module included four activities: Discussion (in class and online) and role play; the mock trial, the digital poster, and the formal essay. For each activity in the module, the author created informal reflections during the activity, semi-formal reflections after the activity, and formal reflections on artifacts created in the activity. For the entire module she created a curriculum-oriented assessment to formatively assess...
the module, and a standards-oriented test consisting of released items aligned to the targeted standards but independent of the curriculum to discreetly estimate impact on external achievement. The module was successful in that (a) it was manageable for the teacher and students, (b) the reflections revealed increasingly successful participation in increasingly formal discourse about the text and the practices, (c) the final formal essay showed enduring understanding of the concepts and skills in the standards, (d) students excelled on the formal assessment, and (e) test scores increased significantly.

Design-Based Implementation Research (DBIR)
This presentation shows how this effort embraced the four elements of what Penuel et al. (2011) labeled Design-Based Implementation Research (DBIR), and how participatory assessment can support DBIR. The first element of DBIR is that teams form around a focus on persistent problems of practice from multiple stakeholders’ perspectives. In our work, the team was formed around the “persistent problem” of the obstacles to participatory curriculum described above while the “multiple perspectives” were embodied in the three very different kinds of learning outcomes that participatory assessment aims to align and foster (shared participation, individual understanding, and aggregated achievement). The second element is to improve practice, teams commit to iterative, collaborative design. In close collaboration with the assessment team, the teacher made continual small refinements with the feedback she received from the informal reflections in each activity; additionally, she discussed the progression of the implementation with the researchers to make larger adjustments with the feedback from the more formal reflections as the module progressed.

The third element of DBIR is teams develop theory related to both classroom learning and implementation through systematic inquiry. The design of the module was based on the participatory assessment framework and guiding principles, which evolved out of situative theories of cognition. The fourth element of DBIR is that it is concerned with developing capacity for sustaining change in systems. Because participatory assessment invites practitioners and researchers to work collaboratively to develop and iteratively refine modules with each implementation, the modules themselves stay relevant and useful for each classroom in which they are used. Teachers are encouraged to adapt, adjust, and remix these modules (and activities within the modules) as necessary to keep the content relevant for their curricular needs and student population.

“Spreadable Educational Practices” (vs. “Disseminated Instructional Routines”)”
This presentation also illustrates the lessons that educational innovators and the PLAnet can learn from the “reuse, remixing and adaptation” of messages of viral “memes” by media scholars (e.g., Green and Jenkins, 2011). In contrast to centrally-tested “evidence-based” resources, participatory curricular resources need to “spread” in educational professional development networks the way that the familiar “lolcats” (cat pictures with humorous misspelled captions) spread in digital social networks.

The module exemplifies what we call a Spreadable Educational Practice. While the Romeo and Juliet module was entirely different from other modules in the network, it was guided by the specific principles that emerged when the general participatory assessment principles were applied in other ELA contexts. Perhaps the best example of spread is the way that another teacher in the network in the Fall of 2011 successfully adapted the Romeo and Juliet activities to Of Mice and Men. This and other initial successes are now being used to gradually invite new teachers to join the network. Consistent with the intentions of the PLAnet and spread, the persistent digital traces of prior collaboration between the developing and implementation teachers are expected to be crucial resources, along with shared accounts, artifacts, and evidence from the specific implementations.

References