

## Converting to Faculty-Driven Management of Assessment

By Josie Welsh



In 2009, responding to a perceived need for immediate assessment data, the administration of Arkansas State University implemented a standardized assessment of critical thinking to first-year students. Baseline results presented at an annual faculty conference were met with yawns and viewed as part of the necessary box-checking for compliance with accreditation standards. The Provost responded to faculty disengagement with assessment by creating a university-wide assessment council responsible for the selection of assessment instruments. Four years later, the council denied a request by the assessment office to purchase exams for the follow-up administration of the multiple-choice, standardized test, citing a lack of interest in the baseline findings. As an

alternative, the group recommended a shift to the NSF-inspired critical thinking assessment test (CAT) developed by Stein and colleagues at Tennessee Technological University. Although several group members were wary of the scientific nature of the sample questions, the council voted unanimously to administer the essay exam. A primary goal of the relatively inexpensive CAT exam was to encourage faculty conversation over students' written solutions to the scenarios and motivate faculty to modify instruction based on those discussions. The CAT authors encourage institutions to incentivize faculty participation in the grading of exams through a sustainable train-the-trainer model. Faculty leaders trained by Tennessee Tech conducted grading sessions with their peers; savings from the low cost instrument were reallocated to faculty, all of whom received stipends for their participation.

Within one year, approximately 10% of faculty members representing all colleges attended training workshops, graded exams, and participated in discussions over results. Noting specific strengths and weaknesses of majors, faculty shared changes they were making in classroom instruction. For example, one biology professor increased his use of graphs in every course and directed students to be more cautious when drawing conclusions from the data presented. Another professor wanted to design her own "CAT" questions. In response, the Provost supported three faculty members to take part in the inaugural workshop for CAT analog development sponsored again by Stein and colleagues. These faculty members returned to the university and worked with the teaching and learning center staff to co-sponsor a local analog development workshop.

Not all faculty were enamored with the CAT exam. Several graders found the instrument to be "too science oriented" and not relevant to their students. These concerns led the makers of the CAT to expand their analog development to domains outside of science. Tennessee Tech now invites institutions to participate in an online system through which faculty can submit field-specific essay questions for review. Once analogs are honed and approved by the test developers, the items become part of a test bank that faculty can use to assess critical thinking skills in their students. Faculty at Arkansas State have created critical thinking analogs that present the Globe Theater, a roll of the dice, and recorded social interactions among gamers as novel data that students must analyze to solve a problem. The decision to forego an assessment instrument that was administered "top down" and allow a participatory model of decision making to guide the assessment process continues to foster dynamic, organic, and meaningful assessment of critical thinking.

For many faculty members, the new assessments led to changes in classroom instruction. Some adopted everyday critical thinking techniques such as "think, pair, share," and Socratic questioning. Others revamped entire assignments to mirror problem-based inquiry modeled by the CAT questions. A professor of political science concluded, "In the end, I think we did good work both understanding more clearly, not the value, but the necessity of what we do, how we can link that to what we do in the classroom, and how what we do can shape our thinking, not just the thinking of our students."

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