

FORT VALLEY STATE UNIVERSITY QUALITY ENHANCEMENT PLAN

QEP Topic: Enhancing Critical Thinking In The General Education Curriculum

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Executive Summary

Fort Valley State University (FVSU), a member unit of the University System of Georgia (USG), was founded in 1895 as a historically black university. The university adheres to a statewide, land-grant mission of teaching, research, service and outreach. FVSU prepares a diverse student body for advanced study, the workforce and lifelong learning. Through its strategic plan, the institution provides a dynamic living and learning environment that prepares graduates for responsible citizenship in a technologically-advanced society. The university's strategic plan advances the institution's mission of "sparking within our students an enduring interest in learning and providing the tools and skills necessary to maintain that interest through life."

FVSU endeavors to produce highly competitive graduates with lifelong learning skills. However, a review of national and statewide assessments, such as the Collegiate Assessment of Academic Proficiency (CAAP) and the University System of Georgia's Regents' Test scores, reveals the challenges that must be met to realize this goal more fully. Life-long learning requires a greater proficiency in critical thinking than FVSU students are showing on these and related external assessments. Sample institutional data, such as the assessment of General Education Outcomes (GEO) in critical thinking and in writing and problem solving, related outcomes in which critical thinking is embedded, show a similar trend. When stitched together, the patchwork pieces of low-performing, incomplete or omitted assessment items on the GEO form a quilted pattern that displays, very clearly, students' inability to perform intellectually complex tasks and their failure to persist in the face of ambiguity. In writing, reading and in problem solving, students' achievement data point consistently to two needs, improvement in critical-thinking cognition and disposition. Contemporary brain theorists call this cognitive competency that our students need *learning with understanding*, the ability to transfer knowledge to novel situations facilitated by deep understanding of content. Rote learning, specifically, the memorization of isolated facts, does not support knowledge transfer (Bransford et al, 2000). Additionally, to persist through ambiguous academic tasks, our students need, among others, to demonstrate the critical thinking disposition of intellectual perseverance.

"Enhancing Critical Thinking in the General Education Curriculum" is a strategic initiative designed to improve students' ability to learn with understanding and persevere through complex intellectual tasks. Building on lessons learned from the fall 2009 through spring 2010 pilot studies in critical thinking, FVSU's QEP will be ready for full implementation by fall 2010. Course revisions will be completed during the 2010 summer session. Starting in the fall 2010, foundational skills in critical thinking will be taught and critical thinking will be infused in the teaching/learning of English 1101 and 1102 and Mathematics 1111 and 1113. All new FVSU students must pass at least three of these critical-thinking enhanced courses to meet graduation requirements.

In support of the QEP, other academic departments will identify and disseminate campus wide, descriptions and examples of how critical thinking is used in their disciplines of study. These disciplinary models will be available for campus-wide use in engaging students in interdisciplinary applications. It is anticipated that this heightened awareness of critical thinking on campus will engender a culture of inquiry. Traits of this new environmental culture will be seen in such annual celebrations as “Critical Thinking Day”. A featured event of the day’s activities will be the presentation of awards to individuals, student organizations or departments that have exemplified noteworthy achievement or accomplishments in enhancing critical thinking.

This Quality Enhancement Plan (QEP) was reached after a two- and a half-year recursive process of soliciting input and feedback from all university stakeholders. We brainstormed, piloted best practices, reviewed data and made revisions that aligned this QEP more appropriately with the identified needs of our learners. The following learning outcomes, situated in the contemporary literature on best practices in learning theory (Bransford et al, 2000), address the identified learning needs of our students.

QEP Student Learning Outcomes

The aim of this QEP is to enhance the critical thinking abilities of all FVSU students by incorporating foundational skills in critical thinking and heightening the teaching/learning of critical thinking within disciplinary content in introductory English and mathematics core courses. In ENGL 1101, ENGL 1102, MATH 1111 and MATH 1113:

- 1. Students will enhance their critical thinking through writing and reflections.**
- 2. Students will enhance their critical thinking through problem solving.**
- 3. Students will demonstrate intellectual perseverance in solving complex or challenging problems or when resolving ambiguous academic tasks.**

In support of the above listed student learning outcomes, faculty who teach the identified courses will successfully complete the QEP faculty development programs and:

Faculty will be prepared to implement and assess students’ growth in critical thinking in their courses.

A phased-in, faculty development plan will ensure that each instructor assigned to teach these critical-thinking enhanced courses in mathematics and English is prepared to meet these stated QEP learning outcomes. Required laboratory exercises, special projects and the use of meta-cognition will cultivate intellectual perseverance in learners.

The operational definition of critical thinking used at FVSU is:

Critical Thinking: “that mode of thinking – about any subject, content or problem, in which the thinker improves the quality of his or her thinking by skillfully analyzing, assessing, and reconstructing it” (Paul & Elder, 2007, p. 2).

The following critical thinking characteristics are used to assess students’ growth as proficient critical thinkers:

- 1) "...thinking which is responsive to and guided by intellectual standards such as relevance, accuracy, precision, clarity, depth, and breadth"
- 2) "...thinking that deliberately supports the development of intellectual traits in the thinker, such as humility, intellectual integrity, intellectual perseverance, intellectual empathy, and intellectual self-discipline..."
- 3) "... thinking that is ROUTINELY SELF-ASSESSING, SELF-EXAMINING, and SELF-IMPROVING...the thinker takes steps to assess the various dimensions of her thinking, using appropriate intellectual standards." (p.2)

The QEP Evaluation Plan identifies appropriate measures for determining faculty preparedness to implement this initiative. Before entering the QEP revised classroom, FVSU faculty will demonstrate the ability to teach in a *knowledge-centered* environment. Such a classroom environment focuses attention on "...what is taught (information, subject matter), why it is taught (understanding), and what competence or mastery looks like" (Bransford et al 2000, p. 24). All members of the FVSU faculty, especially those teaching core curriculum courses, will be invited to participate in these faculty development workshops and seminars deemed essential for expanding and sustaining a culture of inquiry on campus.

Based on years of experience with "Writing-Across the-Curriculum," the "Enhancing Critical-Thinking Initiative" and considering the findings of the 2009 QEP pilot studies in English and mathematics, the QEP Steering Committee concluded that incorporating critical thinking outcomes in English and mathematics core courses would increase our undergraduates' performances on three of seven measures of general education outcomes. The effectiveness of our QEP will be determined by heightened proficiency (80% or better) on the GEO critical thinking outcome. Because writing and problem solving are used as visible conduits of critical thinking in the QEP, we anticipate a concomitant improvement in students' GEO in writing and problem solving. Additionally, at least 40% of the population is expected to perform at or above the 50th percentile on the CAAP assessment of critical thinking.

The QEP is managed by a designated faculty team under the direction of a full-time, QEP Director. Continued guidance, support and review of the QEP implementation process will be provided by the QEP Steering Committee (to transition as of fall 2010 into the QEP Advisory Committee) and the FVSU administration. The QEP will be evaluated annually. The QEP Advisory Committee will review annual evaluation results and recommend revisions in the curriculum, pedagogy, technology, faculty development program, and the physical and human resources, as needed.

To support the successful implementation of this QEP, the FVSU administration will provide, over the next five-year period, \$ 3.8 million dollars. New personnel have been hired. The academic infrastructure will be enhanced to include state-of-the art laboratories equipped with software for enhancing critical thinking in the disciplines. This initiative to produce critical thinkers, who through their clear writing and efficient problem solving abilities demonstrate preparedness for lifelong learning, furthers the mission of FVSU.