### Project Details

<table>
<thead>
<tr>
<th>Title</th>
<th>Using CAAP Score Analysis to Assess and Measure General Education Outcomes in Mathematics</th>
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<tbody>
<tr>
<td>Status</td>
<td>ACTIVE</td>
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<tr>
<td>Category</td>
<td>1 - Helping Students Learn</td>
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<tr>
<td>Timeline</td>
<td>Planned Project Kickoff 10-16-2014 Created 10-31-2014 Last Modified 11-20-2014</td>
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<tr>
<td>Target Completion</td>
<td>05-13-2016</td>
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- **1:** Briefly describe the project in less than 100 words. Be sure to identify the key organizational areas (departments, programs, divisions, units, etc.) and key organizational processes that this action project will affect, change, and/or improve:

- **A:** A part of the SEARK Philosophy of General Education is to instill in our students “mathematical understanding and problem-solving skills”. Measuring this educational objective is the goal of this action project. The Collegiate Assessment of Academic Proficiency (CAAP) exam from American College Testing (ACT) is a standardized, nationally-normed assessment vehicle that allows us to evaluate strengths and weaknesses in our general education programs. CAAP testing, and subsequent review of student performance data will provide objective metrics for comparative review, program improvement and development. The general studies division is the area that will be primarily affected. Lessons learned and processes developed through this project will be expanded to assess and evaluate other subject areas in General Studies (e.g. Science and English) to improve student outcomes.

- **2:** Describe your institution’s reasons for initiating this action project now and for how long it should take to complete it. Why are this project and its goals high among your institution’s current priorities? Also, explain how this project relates to any strategic initiatives or challenges described in the institution’s recent or soon-to-be submitted systems portfolio:

- **A:** The CAAP exam has been legislatively mandated for all state supported Two-Year College Associate of Arts (AA) degree seeking students, prior to graduation. Several years of CAAP data are available to the College since the mandate. Self-evaluation and continuous program improvement is fundamental to our efforts to succeed at “providing quality education and workforce development to meet the needs of our service area’ (SEARK Mission Statement). In the CAAP exam and in the subsequent data generated, the College has identified a resource that allows for program assessment and serves as a measure of overall institutional effectiveness. The use of this data will drive efforts as the focus is placed on the assessment of learning in the Mathematics program.
3: List the project goals, milestones, and deliverables along with corresponding metrics, due dates, and other measures for assessing the progress for each goal. Be sure to include formal evaluations when the project progress will be reviewed:

A: Goals for the project:

Show an increase in the number of SEARK College student taking the CAAP as an exit requirement for Associate of Arts (AA) degree seeking students and selected Associate of Applied Science (AAS) degree programs by the completion of this project.

Set specific performance benchmarks for student success at a level that will be equal to or greater than the national norm for mathematics.

Document improvement in student performance annually noting any degree of change from previous testing periods published in the Institutional Summary Reports.

Correlate student performance increases with specific changes and improvements that will be made in response to score analyses in mathematics curricula and support services.

4: Describe how various members of the learning community will participate in this action project. Show the breadth of involvement by individuals and groups over the project’s duration:

A: Since the CAAP Exam tests subject areas taught by the English and science faculty as well as mathematics, a CAAP Committee has been formed to include a representative from each of these disciplines. These faculty members will work in concert with the entire mathematics faculty acting as a committee of the whole. At the beginning of each semester the committee will meet to analyze and review the Institutional Summary Report. This meeting will take place before the semester begins (or as soon as the Institutional Summary Report is available). Though the Institutional Summary Report contains all results of all student tests, the data review is complex and involved. Wherever a specific weakness is revealed, the math faculty will decide upon an action to emphasize, supplement or expand coverage of that specific topic in whatever course is involved. Their report will include recommendations to improve test scores, and by extension the level of student understanding.

When the committee’s summative report is prepared, the entire Division of General Studies will meet to discuss the recommendations. The Dean of General Studies will forward recommendations to the appropriate department as well as the Instructional Affairs Committee (IAC) if curricular revisions are being recommended.

5: Describe how the institution will monitor project progress/success during, and at the completion of this project. Be sure to specifically state the measures that will be evaluated and when:

A: The CAAP Committee will measure success as an increase in CAAP Exam scores from year to year through 2016. Success will also be measured by the substantive course/program revisions that are made based on analyses of students’ performance. Unlike many SEARK College Technical Programs, and programs in Nursing and Allied Health, the Division of General Studies has no formal, or required, certification/ licensing assessments. Course performance and formative assessment is helpful but not sufficient for measuring the stated general studies
outcomes. The CAAP Exam will be used as one of the measures of student achievement and hence institutional effectiveness, as relates to our mathematics courses and programs.

CAAP scores in mathematics will be analyzed to identify specific areas where courses and programs can be improved. This project will also allow for identification of demographic trends that need to be addressed.

- 6: Describe the challenges that may be encountered in successfully completing the project or for institutionalizing the learning from the project’s goals:

- A: According to the literature, successful CAAP Exam Assessment and subsequent change will require three things; 1) strong academic leadership; 2) collaboration across disciplines, and 3) broad faculty involvement.

The CAAP Committee has the administrative support for Action Project. To “institutionalize” the learning from the CAAP Mathematics Project, we must clearly communicate our goals to the faculty so that they believe the CAAP Exam assessment is valuable as a tool for improvement beyond the course level. This faculty buy-in will be critical to the success of this project. Faculty leadership in the process is encouraged and developed through inclusive participation. One unique change here at SEARK is an effort to hire faculty with assessment experience and incorporation of such language into job descriptions for new hires. SEARK College’s continuous improvement planning process must ensure that there is broad interdisciplinary and interdepartmental involvement in this, and every, action project.

- 7: Provide any additional information that the institution wishes for reviewers to understand regarding this action project:

- A: This Action project is fairly narrow in scope but has broad implications for the College’s institutional effectiveness program. The CAAP Committee is expecting this project to serve as the starter for requiring all general education disciplines to look deeper and take on greater accountability for measuring student learning. The College is looks forward to the lessons that will emerge as this project progresses.