

Name of Program: General Education- Problem Solving	Date: 2005/2006 Last revised: May 31, 2006
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Competencies/ Student Learning Objectives	Measures Methodology	Expected Results/Standards	Actual Results	Analysis	Action/ recommendation
The student should be able to problem solve by: a. Identifying the problem b. Finding and reviewing appropriate information c. concerning the problem d. Developing a reasonable solution to the problem e. Evaluating the effectiveness of the solution	Direct Measure a-d: Program and liberal arts instructors will be asked to complete an evaluation sheet for a problem solving activity done in one of their classes They will use a 5- point rubric generated by the Problem Solving Team.	It is expected that all of the students at Northeast will be able to: a. Identify the problem b. Review information c. Develop a solution d. Evaluate that solution all at a minimum level of 3	averaged 3.53 averaged 3.43 averaged 3.08 averaged 3.04	Our students averaged a 3 or above in each of the four areas assessed indicating at least average ability to solve problems.	Instructors who assessed students with a problem solving activity will send the Problem Solving committee a report of any changes made as a result of these assessments by October of 2006.
Same as above	Indirect Measure a-d: Graduating student survey questions 9 -11, The instruction I have received at NECC has helped me to: 9. examine alternatives before making a decision. 10- Recognize there may be several solutions to a problem 11. Gather as much information as I can before making an important decision. <u>Skill level & NECC impact</u> #20 Recognize and review information about problems. #21 Develop plausible solutions to problems and evaluate the results. (See 2006 Complete report for description of process and results)	Students will rate the instruction and the skill level they have achieved at NECC as 3 or above.	9. 4.02 in 2005 4.08 in 2006 10. 4.13 in 2005 4.18 in 2006 11. 4.10 in 2005 4.12 in 2006 #20 188/203 responses were 3 or above and attributed impact to NECC #21 187/202 responses were 3 or above and attributed impact to NECC (Over 90 % of the students agree that they have the basic skills for the identified general education objectives. They attribute their skill level to the education that they received at NECC.)	Students met the expectation. Agreement with all three of the statements on the survey was higher than the previous year indicating that students' perception of improved problem solving ability while at NECC has been raised. Comparison of these questions for the past two years and comparable questions for the 3 years prior shows a steady increase which could indicate improvement in teaching and learning over that past 5 years with regard to problem solving. In comparing this indirect assessment to the direct assessment, it appears that students' perception may be higher than their actual ability.	Students are performing at acceptable levels or above. Instructors will continue with current educational practices. The survey will be administered again next year.

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The student will be able to demonstrate critical thinking skills.	CAAP Exam – Administered according to procedure as determined by the office of Institutional Research.	Students will score at or near the national norm.	AA/AS NECC students 61% National Norm 58% AAS NECC students 62% National Norm 58%	Students scored above the national norm. Closer analysis of <i>CAAP Content Analysis report</i> reveals that both AA/AS and AAS students are strong in analysis of arguments. In addition, AAS students demonstrated a positive substantial difference in the extension of arguments. Although students scored at the expected levels, their weakest area was in the evaluation of arguments. See CAAP Analysis and Report 2006 for more specific analysis.	Students are performing at acceptable levels or above. Results will be shared with entire faculty. Instructors will most likely continue with current educational practices; however, they are encouraged to improve teaching of problem solving skills as applicable within their courses.
The student will demonstrate problem solving ability	Employer Satisfaction Survey	Employers will rate NECC graduate employees as having good or excellent problem solving skills	92/124 employers rated employees ability as good or excellent. Responses were as follows: Excellent.....34 Good.....58 Fair.....25 Poor.....03 N/A.....04	Approximately 20 % of the graduates were rated as having fair ability to solve problems. This is an opportunity for improvement here.	Share results at in-service. Encourage instructors to provide opportunities for problem solving in the classrooms. Use this information as baseline data for future survey comparison