

## TIP Sheet #19

### Defining Learning Outcomes in Academic Foundations: Review of the Academic Foundations Matrix and Student Learning Outcomes

As discussed in Tip Sheets 17 and 18, Academic Foundations is comprised of First Year Experience, General Studies, the university diversity requirement, and student activities. Academic Foundations represents the first in a series of educational experiences in which skills are introduced (General Studies and other Academic Foundations experiences), reinforced and developed (courses in the major), and brought to mastery (capstone projects). Academic Foundations is intended to establish basic skills that will prepare students for the more sophisticated learning experiences they will encounter in courses in their major. The student learning outcomes associated with Academic Foundations are represented in the 16 cells of the matrix provided below (4 student learning outcomes in each of 4 domains). The overarching goal of Academic Foundations is to establish the *initial stages* of student learning that will be reinforced and developed when students begin work on courses associated with their major.

<b>CRITICAL THINKING</b>	<b>COMMUNICATION</b>	<b>VALUES/ INTEGRITY</b>	<b>PROJECT MANAGEMENT</b>
Analysis/Evaluation	Writing	Academic Integrity	Project Skills
Problem Solving	Speaking	Personal/Cultural Values	Self-Regulation (deadline skills)
Creativity	Quantitative Reasoning	Ethical Reasoning	Team Work Skills
Info Literacy	Tech/Visual Literacy	Diversity Skills	Service Learning/ Civic Engagement

***What defines “mastery” for student learning outcomes in these domains for General Studies? These are students who are in their first and second year of college work.***

When considering how to use these definitions and descriptions of student learning outcomes for describing student learning in the Academic Foundations domains, keep in mind that the purpose of General Studies/Academic Foundations is to *introduce* these skills and begin the process of skill development. It is reasonable to expect that full mastery of these skills will occur later in the undergraduate career.

***How were these student learning outcomes developed?***

Academic departments that contribute courses to General Studies met in the Spring 2006 term and developed the following student learning outcomes to help characterize each of the cells within the Academic Foundations Matrix. The intention of these departments was to describe outcomes appropriate to an early point in the development of skill in these four domains. Departments may want to use these student learning outcomes to create working definitions of student learning outcomes that are appropriate for and specific to their discipline.

***Must a department adopt the student learning outcomes described for these domains as presented in this TIP Sheet?***

No. These student learning outcomes are intended as suggestions and clarifications of the spirit of the four student learning outcomes in each Academic Foundations domain. When departments create student learning outcomes for the two cells selected from the Academic Foundations matrix for assessment in their General Studies courses, they should develop outcomes that reflect the discipline-specific interpretation of these outcomes. (See the discussion of this question on TIP Sheet 18.) In addition, departments should describe expectations that are appropriate for a student who is in the early stages of developing competence in this domain. High-level mastery will be demonstrated later, in courses taken in the major and in capstone experiences.

***Academic Foundations Domains  
and Suggested Student Learning Outcomes***

***Critical Thinking***

<b>ANALYSIS/EVALUATION</b>
Applies discipline-based concepts and frameworks
Asks relevant and helpful questions
Develops evidence-based arguments
Applies discipline-based criteria to make informed judgments
Synthesizes appropriate diverse information sources
Accurately assesses quality of higher order skill

<b>PROBLEM SOLVING</b>
Defines problem appropriately
Develops discipline-based strategies to solve problem
Provides rationale for selection of most promising strategy
Successfully applies selected strategy
Evaluates quality of solution and revises appropriately

<b>CREATIVITY</b>
Describes traditional approaches
Produces novel response
Explains unique contribution
Identifies relevant criteria for evaluating success
Assesses quality of creative response accurately

<b>INFORMATION LITERACY</b>
Identifies acceptable types of source material
Conducts appropriate search strategy
Uses criteria to determine fitness of source material
Generates sufficient breadth in selected resources
Evaluates overall quality of support material

## *Communication*

<b>WRITING/VISUAL COMMUNICATION</b>
Follows directions
Uses level of language relevant to audience
Exhibits appropriate grammar and spelling
Organizes ideas into logical, coherent message
Incorporates appropriate disciplinary evidence
Adopts proper citation practices
Elaborates ideas at appropriate length
Produces professional quality presentation
Accurately assesses quality of writing

<b>SPEAKING/ORAL COMMUNICATION</b>
Follows directions
Uses level of language relevant to audience
Exhibits appropriate grammar and spelling
Organizes ideas into logical, coherent messages
Incorporates appropriate disciplinary evidence
Elaborates ideas at appropriate length
Achieves professional delivery
Uses support media appropriately
Accurately assesses quality of performance

<b>QUANTITATIVE REASONING</b>
Selects and defends appropriate strategy for mathematical problems
Derives accurate solutions
Shows concern for precision by avoiding careless errors
Assesses quality of reasoning accurately.

<b>TECHNOLOGICAL LITERACY</b>
Describes technological options relevant to context
Selects appropriate technology
Effectively uses selected technology
Develops technological competence through practice
Evaluates quality of technology use

## *Values/Integrity*

<b>ACADEMIC INTEGRITY</b>
Describes expectations regarding academic integrity
Recognizes situations that challenge integrity
Predicts personal and societal consequences for violating integrity standards
Describes rationale for maintaining high standards of academic integrity
Exercises high standards of academic integrity

<b>PERSONAL/CULTURAL VALUES</b>
Identifies core personal values
Actively factors personal value system in decisions
Compares personal values between self and others
Strategizes about the role of differences in values that contribute to different perspectives

<b>ETHICAL REASONING</b>
Describes the nature of an ethical dilemma
Discusses relevant factors that influence ethical choices
Identifies criteria that determine quality of ethical reasoning
Evaluates quality of ethical decisions based on criteria

<b>DIVERSITY SKILLS</b>
Describes personal characteristics that arise from heritage
Articulates influence of individual/personal/cultural differences in context
Identifies advantages and disadvantages related to personal heritage
Makes effort to bridge differences related to diversity
Extracts personal meaning from diversity experiences

### *Project Management*

<b>PROJECT SKILLS</b>
Selects and defines realistic problem to be solved
Identifies relevant resources and potential obstacles
Strategizes execution in relation to constraints
Integrates discipline concepts appropriately
Identifies criteria for successful completion
Accurately assesses quality of plan
Delivers acceptable product on time

<b>SELF-REGULATION</b>
Sets appropriate goals for completing project
Manages appropriate timeframe
Executes appropriate priorities
Shows flexibility by planning back-up strategies
Accurately identifies quality of individual process

<b>TEAM-WORK SKILLS</b>
Completes responsibilities as team member
Practices appropriate ethical judgment
Contributes positively to task completion
Manages conflict among team members
Assesses quality of contribution accurately

<b>CIVIC ENGAGEMENT</b>
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Appropriately targets civic challenge for contribution
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Justifies selection from personal values
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Identifies realistic set of actions to improve problem, given constraints
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Contributes personal resources to improving conditions
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Evaluates personal and societal impact of contribution
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