Integrating Transfer Science Courses with Basic Skills Services

A Fall 2008 Basic Skills Funding Request--$2020.40

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Background: Traditional, transfer-level science courses are often considered "hard" or "difficult", and many students have pre-conceived notions that they are "just not good at science". Science courses typically have high drop-out rates, often hovering in the 20-35% range, with some students disappearing after receiving their grades after the first mid-term exam.

Main Goal (Where we want to go): Research ways to improve the retention and success rates of students taking these traditional, transfer-level science courses.

Main Outcomes (What we want to happen):

- Better, more coordinated collaboration between the science disciplines and the academic support centers.
- Improved consistency of expectations and attainment of General Education SLOs across science disciplines.
- Earlier detection of and assistance for students needing remedial education.

Main Objectives (How we plan to get there):

- Define general Math, English, and possibly other basic skills that students need to be successful in science courses
- Communicate this set of "science course basic skills" to the academic support centers in a coordinated manner so that they can meet the needs of these students in a more effective and systematic manner, rather than on an ad-hoc basis.
- Investigate science-course prerequisite models at other California colleges to see how students are appropriately placed in traditional, transfer-level science courses.
- Analyze the data we are currently collecting about the preparation of our Earth Science students, and possibly expand this data collection to other disciplines.

Financial Support (How much money we need):

- Forty hours for adjunct Leslie Turrini-Smith to coordinate this effort and complete most of the tasks.
  - Coordinate dialog between various science disciplines
  - Investigate science prerequisites at other California colleges
  - Analyze the data we are already collecting in Earth Sciences (see attachment) and may begin to collect in other disciplines.
  - Develop list of basic skills required for successful completion of traditional, transfer-level science courses.
- Turrini-Smith's hourly non-teaching rate is $50.51/hour. Forty hours at this rate is $2020.40.

Support of BSI Mission, Long-Term Goals, Expenditure Plan, and Best Practices:

- A main point is improving coordination, collaboration, and student success (Mission)
- Addresses Long-Term Goals A, B, and D

Attachment: Earth Science Questionnaire **name_____**

This questionnaire is part of the Earth Science Department's efforts to assess factors that influence student success in Earth Science courses. Your answers are **not** a part of your grade for this class.

Part I. Please answer the following questions about the most recent Math course *you have completed*.

1. The most recent Math course you completed was
a. at MPC b. at another college c. in high school

2. When did you take your most recent Math Course?
a. Within the last two years
b. 2-5 years ago
c. 5-10 years ago
d. over 10 years ago

2. At MPC, the most recent math class you have completed is
a. no Math classes at MPC
b. MATH 360 Arithmetic
c. MATH 351 Prealgebra
d. MATH 261 Beginning Algebra
e. MATH 263 Int. Algebra and Coordinate Geometry
f. MATH 10 Math for General Education
g. MATH 13 Precalculus
h. MATH 16 Statistics
i. MATH 17 Finite Math
j. MATH 18 Calculus for Biology, Soc. Sci., and Business
k. Any higher level Math course involving calculus, linear algebra, differential equations, or discrete math

3. At another college, the name of your most recently completed Math class is most similar to:
a. No Math classes at other colleges
b. Arithmetic
c. Prealgebra
d. Beginning Algebra
e. Intermediate Algebra
f. Math for general Education
g. Precalculus
h. Calculus
i. Statistics
j. other. Name_____

4. In High School, the name of the highest level math class completed was
a. Arithmetic b. Prealgebra
c. Algebra d. Geometry
e. Trigonometry f. Precalculus
g. Calculus

Part II. Please tell us about the results of any Math placement tests you have taken at the college level.

1. When was the Math placement test taken?
a. *Before* your most recently completed Math class.
b. *After* your most recently completed Math class.
c. Never taken a Math placement test.

2. As a result of the Math placement test, which Math class were you placed into? (If at another college, which of these courses is the most similar to the one you placed into?)
a. Never taken a Math placement test.
b. MATH 360 Arithmetic
c. MATH 351 Prealgebra
d. MATH 261 Beginning Algebra
e. MATH 263 Int. Algebra and Coordinate Geometry
f. MATH 10 Math for General Education
g. MATH 13 Precalculus
h. MATH 16 Statistics
i. MATH 17 Finite Math
j. MATH 18 Calculus for Biology, Soc. Sci., and Business
k. Any higher level Math course involving calculus, linear algebra, differential equations, or discrete math

Part III. Please answer the following questions about the most recent English course you have completed.

1. The most recent English course you completed was
a. at MPC b. at another college c. in high school

2. When did you take your most recent English Course?
a. Within the last two years
b. 2-5 years ago
c. 5-10 years ago
d. over 10 years ago

3. At MPC, the most recent English class you have completed is
a. No English classes at MPC
b. An English As A Second Language class
c. ENGL 321 Effective Writing Skills
d. ENGL 322 Effective Reading Skills
e. ENGL 301 Academic Writing
f. ENGL 302 Academic Reading
g. ENGL 111 Introduction to College Writing
h. ENGL 112 Critical Reading
i. ENGL 1A Composition and Analytical Reading
j. ENGL 1B Literature/Composition
k. ENGL 2 Composition and Critical Thinking

4. At another college, the name of your most recently completed English class is most similar to:
a. No English classes at other colleges
b. An English As A Second Language class
c. Effective Writing Skills
d. Effective Reading Skills
e. Academic Writing
f. Academic Reading
g. Introduction to College Writing
h. Critical Reading
i. Composition and Analytical Reading
j. Literature/Composition
k. Composition and Critical Thinking

Part IV. Please tell us about the results of any English placement tests you have taken at the college level.

1. When was the English placement test taken?
a. *Before* your most recently completed English class.
b. *After* your most recently completed English class.
c. Never taken an English placement test.

2. As a result of the English placement test, which English class were you placed into? (If at another college, which of these courses is the most similar to the one you placed into?)
a. Never taken an English placement test.
b. An English As A Second Language class
c. ENGL 321 Effective Writing Skills
d. ENGL 322 Effective Reading Skills
e. ENGL 301 Academic Writing
f. ENGL 302 Academic Reading
g. ENGL 111 Introduction to College Writing
h. ENGL 112 Critical Reading
i. ENGL 1A Composition and Analytical Reading
j. ENGL 1B Literature/Composition
k. ENGL 2 Composition and Critical Thinking

Part V. Commitments outside of class.

1. How many hours per week do you work?
a. 0-10 b. 10-20 c. 20-30 d. 30-40