

## Briefing Report: March 2009 WMU STEP Advisory Board Meeting

Date: March 18, 2009

Attendance: Paul Engelmann, Tim Greene, Eileen Evans, Diane Anderson, Bill Cobern, Len Ginsberg, Cynthia Halderson, Dan Lytinski, Laura Darrah, Sandy Blanchard, Dana Butt

### 1. Retention Results

Retention to STEM	2 <sup>nd</sup> Year (%) <sup>1</sup>		3 <sup>rd</sup> Year (%) <sup>1</sup>		4 <sup>th</sup> Year (%) <sup>2</sup>	
	STEP	WMU-Historic	STEP	WMU-Historic	STEP	WMU-Historic
2005 Cohort	<b>68.0</b>	58.7	<b>54.3</b>	40.5	<b>45.7</b>	32.6
2006 Cohort	<b>70.1</b>	58.7	<b>54.5</b>	40.5		
2007 Cohort	<b>66.3</b>	58.7				
Retention to WMU	2 <sup>nd</sup> Year (%) <sup>1</sup>		3 <sup>rd</sup> Year (%) <sup>1</sup>		4 <sup>th</sup> Year (%) <sup>2</sup>	
	STEP	WMU-Historic	STEP	WMU-Historic	STEP	WMU-Historic
2005 Cohort	76.2	74.2	69.5	61.2	<b>63.1</b>	55.1
2006 Cohort	77.9	74.2	66.2	61.2		
2007 Cohort	75.2	74.2				

<sup>1</sup>2000-2004 average, 2007-08 CSRDE WMU-STEM Retention Survey, WMU Office of Student Academic and Institutional Research

<sup>2</sup>2000-2003 average of combined 4-year graduation and continuation to 5<sup>th</sup> year, 2007-08 CSRDE WMU-STEM Retention Survey, WMU Office of Student Academic and Institutional Research

**Bold** represents statistically significant at  $\alpha = 0.05$

## 2. Survey of Student Satisfaction

Percent of students who responded “Agree” or “Strongly Agree” to the statements:

	2005	2006	2007	2008
I know at least 6 other LC students	87	78	79	71
I have studied with other LC students	74	63	73	59
I know where to get tutoring for core classes	54	54	70	62
I have used a tutor for one or more core classes	32	44	31	25

## 3. CEAS-Residence Life Collaboration

a) CEAS and Residence Life jointly planned and implemented the following programs in Fall Semester 2008. The results are summarized in the following table:

Program	Contribution of Program Toward Objectives				# Students Involved	Program Effectiveness (4=Excellent; 3=Good; 2=Average; 1=Poor)
	Life Skills	Academic Habit/Skill	Connect to CEAS/WMU	Career Exploration		
Academic Etiquette		XX			>200	3
Kick-Off Event			XX		>200	4 [27 students turned in essays in IME 1020 and ENGR 1001; Level 2-3.]
Alumni Event (What Engineers Do)		XX	XX	XX	53	xx [9 student turned in essays in IME 1020 and ENGR 1001; Level 2.]
Study Abroad (Grab Your Passport)					19	xx [6 students turned in essays in IME 1020 and ENGR 1001; Level 2-3.]
Community Design Project	XX		XX		51	xx [14 students turned in

						essays in IME 1020 and ENGR 1001; Level 2-3.]
Study Break	XX	XX				xx
Tutoring: STEP -- SI --		XX				xx
Spring 09 Registration		XX		XX	303 (out of 353) or 85.8%	3

Level 1: Students not interested nor value activity; rote response about activity.

Level 2: Students show interest or value the activity; able to describe the activity in their own words or critique activity.

Level 3: Students see the connection of activity to their own development, or acknowledge lack of prior experience, or show willingness to apply knowledge.

Level 4: Students become a champion; demonstrate interest to seek more knowledge or opportunity.

- b) Faculty Protocol – A protocol by which CEAS instructors engage a Residence Life staff to check on a student when s/he misses consecutive classes was implemented in IME 1020 in Fall Semester 2008. A total of 20 referrals involving 17 students were made by 7 IME 1020 instructors. Based on the first implementation, a revised tracking form was created to improve the process – see Appendix I. The protocol will be implemented again in Fall Semester 2009 in IME 1020 and IME 1420, which typically enrolls 140 students per section. A team of Computer Science students have taken on as their capstone design project to create software and interface that will allow swipe card readers to check a student’s WIN against the IME 1420 class roll and which will send an email to Residence Life when a student misses two consecutive classes.
- c) An abstract for a Work-In-Progress paper about the CEAS-Residence Life collaboration to improve student success has been accepted for presentation in the 2009 Frontiers In Education Conference. A manuscript is currently being prepared for peer review and inclusion in the conference proceedings.
- d) The proposal to National Science Foundation STEP IC program to support further CEAS-Residence Life collaboration was not funded. It is the intention of the Principal Investigator and Co-PI’s to reapply at the next call for proposal.
4. A curriculum proposal on engineering mathematics, ENGR 1990, was approved by the CEAS Curriculum Committee in Fall Semester 2008. A pilot section of engineering mathematics will be implemented in Fall Semester 2009. This will serve as the anchor class for a learning community targeting Mechanical and Electrical Engineering students who are placed into Pre-Calculus. This project is supported by a National Science Foundation CCLI – Phase 3 grant on engineering mathematics education.

## Collaboration between CEAS and Resident Life/Student Affairs

### Faculty Protocol Tracking Version 2.0

Referral	Response	Follow-Up	Student Action	Comment	Result
<p>Give the date and the name of the instructor who initiate the referral; and the name and WIN of student.</p>	<p>Residence Life will create categories appropriate for internal operations to track responsiveness of the referral</p>	<p>The types of follow-up including:</p> <ul style="list-style-type: none"> <li>• Counseling Center</li> <li>• Advising Office</li> <li>• Meet with instructor</li> </ul> <p>Depending on the Student Action, follow up to determine if student carry out recommended action</p>	<p>What the student will be asked to do</p>	<p>Residence Life will create a code to track the types of student behavior or issues that led to the referral</p>	<p>By the end of the semester or the start of the next semester, CEAS Advising will look up registration records and GPA of students.</p>