

# Kapiolani Community College

## 2010 Annual Report of Instructional Program Data

### Remedial/Developmental Math

#### Program Mission:

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Kahikoluamea leads the institution in the creation of Pathways to Student Success, a model of purposeful and intentional pathways designed for students who place into developmental math and English courses. The immediate goal of the model is to increase retention and persistence of first-year students through a foundational focus on advising, transition assistance, career development, and high-impact curricular strategies. The long term goal includes working with other college units for the improvement of graduation rates. Kahikoluamea provides opportunities for developmental students to pursue college level courses in their major or career field while enrolled in Kahikoluamea. Kahikoluamea is based on Hawaiian values, its faculty strive for a balance between academic rigor and compassion in creating integrated learning experiences and co-curricular support for all students.

## Part I: Program Quantitative Indicators

Demand Indicators		Academic Year	
		08-09	09-10
1	Enrolled in any Remedial/Developmental	1,529	1,648
2	Semester Hours Taught	241	249
3	Student Semester Hours (SSH) Taught	5,733	6,371
4	Full Time Students (Fall) Enrolled	587	672
5	Full Time Students (Spring) Enrolled	430	504
6	Number of Classes Taught	75	77

Efficiency Indicators		Academic Year	
		08-09	09-10
7	Average Class Size	24.0	25.9
8	Fill Rate	100%	100%
9	Number of Low-Enrolled (<10) Classes	0	0
10	BOR Appointed Faculty (FTE)	3.2	4.5
11	Non-BOR Appointed Faculty Teaching Classes	12	11
12	Percentage Classes Taught by Regular Discipline Faculty	36%	52%
13	Percentage Classes Taught by non Regular Discipline Faculty	64%	48%
14	Program Budget Allocation	\$829,112	\$738,189
15	Cost per SSH	\$144	\$116

Effectiveness Indicators		Academic Year	
		08-09	09-10
<b>Retention (Course Completion)</b>			
16	1 Level Below College Level	88%	88%
17	2 Levels Below College Level	85%	88%
18	3 or More Levels Below College Level	0%	0%
<b>Successful completion (Equivalent C or Higher)</b>			
19	1 Level Below College Level	52%	48%
20	Withdrawals (Grade = W)	120	131
21	2 Levels Below College Level	41%	42%
22	Withdrawals (Grade = W)	117	113
23	3 or More Levels Below College Level	0%	0%
24	Withdrawals (Grade = W)	0	0

Achieving the Dream		AtD Fall Cohort		
		2006	2007	2008
25	Cohort Enrolled in Remedial Developmental Course	414	290	191
26	Cohort Successful Completion at Least One Remedial/Developmental Course with in First Academic Year	203	134	108
27	Percent Cohort Successful Completion	49%	46%	57%

Longitudinal Tracking		Academic Year		
			08-09	09-10
<b>Persistence (Fall to Spring)</b>				
28	From 1 Level Below College Level, To College level		N/A	N/A
29	From 2 Levels Below College Level, To 1 Level Below		N/A	N/A
30	From 3 or More Levels Below College Level, To 2 Levels Below		N/A	N/A
<b>Success in Subsequent Semester Course (Equivalent C or Higher)</b>				
31	From 1 Level Below College Level, To College Level		N/A	N/A
32	From 2 Levels Below College Level, To 1 Level Below		N/A	N/A
33	From 3 or More Levels Below College Level, To 2 Levels Below		N/A	N/A

Last Updated: November 15th, 2010

## Part II: Analysis of the Program

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In comparison to the 10.7% (fall 2009) and 9.9% (spring 2010) increases in enrollment growth at the college, Kahikoluamea's math program increased by 119 students for an overall 7.7% annual enrollment increase. Student semester hours increased by 598 hours to 6371 hours, an increase of 10.3 percent. These figures indicate that in addition to having enrolled more students, the students are taking more math credits per year than previously. One possible explanation could be attributed to an increase in math persistence rates

Average class sizes increased by approximately two students per section from 24 to 25.9 students per class. This increase is a result of the growth in student enrollment in 2009-10. However, the fill rate for both years exceeded 100% indicating the need for the department to continuously grow its math offerings. The low percentage of full time math faculty continues to be an issue due to the difficulty in recruiting and retaining qualified faculty.

The retention levels remain high at 88% for students 1 level below college level. For students 2 levels below college level the rate is also 88% and reflects a 3% increase. The completion rate at 1 level below college level decreased from 52% to 48%, while for students 2 levels below college level the success rate increased from 41% to 42%. (The math completion rates remain below the average liberal arts course completion rate of 68%.)

Achieving the Dream Cohort data on college success increased from 49% in 2006 to 57% in 2008.

## Part III: Action Plan

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To achieve higher success rates, Kahikoluamea is piloting a new Math initiative in Math 24 and PCM 23. Instead of the traditional lecture model, Kahikoluamea has initiated the technology enhanced Emporium model. The model is based on a self-paced format including low-stakes testing. Faculty provide less lecture-type instruction, instead assisting students in a one-to-one format addressing their learning needs immediately. Faculty meet weekly to discuss the reactions of the students to the model as well as looking at the data which is summarized on a weekly basis.

In addition to the Emporium model, Kahikoluamea has launched our academy initiative. The academy model is designed to parallel and transition students into academic or career clusters. This year's academy features Career and Technical Education students in Hospitality, Culinary, and Business programs. The Kahikoluamea math and English courses are being taught in an environment or context specific to these disciplines. Early results indicate math success rates of 63%. Next year's academy will focus on Liberal Arts and will incorporate project-based learning in separate academies for science, arts and culture, and public and human services areas.

As stated in the department's tactical plan, the methods to be used include:

1. Researching high impact test support activities, revise policies, dialog with high schools, collaborate with institutional researchers to assess and improve and communicate results to PPAC
2. Creating interdisciplinary Communities of Practices to research and implement high impact educational practices for developmental student success, make site visits, collaborate with institutional researchers to assess and improve and communicate results to PPAC and governance bodies
3. Maintaining professional development for faculty as part of the department's commitment to a student success agenda.
4. Engaging all stakeholders within the department during the process of developing strategies to address strategic outcomes. Use data to identify and prioritize problems. Develop and maintain effective communication systems at all levels that to provide input into the budgeting, program review, and tactical planning processes.

## Part IV: Resource Implications

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High impact initiatives like the Emporium Model and the Academies if successful will generate increased revenues for the College. Nationally, the emporium model has resulted in reduced costs for the institution, based on the self-paced model of instruction.