Page

Interpretation (KCC)

Elevating Developmental Education at Kapi'olani Community College: Thoughts on Our Past, Present and Future

Leon RICHARDS[A] and Salvatore LANZILOTTI[B]

Keywords: developmental education, KCC, curriculum, program, outcomes.

1. Providing for Access and Success

The University of Hawai'i (UH) – Kapi'olani Community College (Kapi'olani), the second largest of ten public colleges and universities in the University of Hawai'i (UH) system, is a two-year urban institution providing high-quality, transfer liberal arts and 21st century career programs in Health, Hospitality and Business Education. Kapi'olani serves diverse Native Hawaiian and multi-ethnic student body and communities. The College bears the name of Queen Julia Kapi'olani, whose motto was *"Kūlia i ka nu'u"* – "Strive for the Highest." This motto inspires and clarifies the College's vision and mission as a learning-centered institution, striving to move students progressively to more challenging levels no matter the discipline or content. Students learn to integrate developmental and general education, their major course of study, and electives into a coherent degree pathway.

That Kapi'olani's students, faculty, staff and administration honor the Queen's guidance is evidenced by the fact that its graduates provide leadership in Hawai'i and beyond in the fields of:

- nursing (i.e., long-term care nurse aide, licensed practical nurse and registered nurse);

- emergency medical services [i.e., Emergency Medical Technician (EMT) and Mobile Intensive Care Technician (MICT)];
- health sciences (i.e., dental assisting, massage therapy, medical assisting, medical laboratory technician, occupational therapy assistant, pharmacy technician, phlebotomy, physical therapy assistant, radiological technology, and respiratory care);
- hotel and restaurant operations (i.e., culinary arts, and travel and tourism);
- business education (i.e., accounting, entrepreneurship, information technology, marketing, legal secretary and paralegal); and
- Arts and Sciences (i.e., exercise and sport science, international studies, Hawaiian/Pacific studies, Asian studies, new media arts educational paraprofessional, educational interpreter, ESL teacher training, and various fields of science, e.g, biotechnology).

To increase access, Kapi'olani physically provides some of its programs statewide, e.g, EMT and MICT, and radiologic technology; and others in off-site campuses on O'ahu, e.g., nursing programs. Finally, many of its courses are available through distance learning.

In its continued efforts to "embrace a culture of continuous innovation and quality improvement,"[1] in Fall 2007, Kapi'olani, as well as the other six UH

A: Chancellor of Kapi'olani Community College(KCC), located in Honolulu, Hawai'i.

B: Special Assistant to the Chancellor and Interim Dean for Health Academic Programs also at KCC.

Community Colleges (UHCC) as a system, began participation in the national Achieving the Dream (AtD) initiative. Achieving the Dream provides participating colleges with support to implement strategies designed to help more students, particularly minority students and low-income students, earn degrees, complete certificates or transfer to other institutions to continue their studies. AtD emphasizes building a culture of evidence, i.e., the use of data to drive institutional change, identify effective practices, improve student success rates and close the achievement gaps[2]. Accordingly, the goal for Kapi'olani and its sister campuses is to close achievement gaps and enhance the success rate of disadvantaged students, particularly Native Hawaiian students. Historically, Kapi'olani has used data gathering and analysis of its remedial/developmental education efforts to elevate its programs and to improve student engagement and success. The College integrated the AtD initiative with other data sources to develop further its efforts to improve opportunities for student access and success.

2. Elevating Developmental Education

In the Fall semester of 2008, 8327 students enrolled in classes at Kapi'olani Community College; 1539 were first time students, of which 907 or 58.93% were enrolled in at least one remedial/developmental course (includes below college-level, i.e., Pre-College Communication, Pre-College Math, Learning Skills, Math and English). This number is slightly lower than the Community College Survey of Student Engagement (CCSSE) estimate that 61% of all first-time community college students are assessed as underprepared for the academic demands of college-level courses[3]. A total of 1778, or 21.32 % of the 8327 students were enrolled in at least one remedial/developmental course at Kapi'olani in Fall 2008. The institution as champion of developmental/college ready programs is an

essential role. The CCSSE 2007 Report suggests one strategy to maximize success for these students is to elevate developmental education, i.e., provide effective developmental education and appropriate levels of student support. Initial Achieving the Dream data from 27 colleges showed that students who successfully completed any developmental course in the first term of enrollment were from that point more likely to persist and succeed than other student groups, including those who did not need any developmental education[4].

The CCSSE 2007 Report also suggests that to better serve academically underprepared students, and thereby increase success rates, colleges should focus attention and resources on supporting students in their first semester work; begin this support utilizing accurate and effective placement information; provide an adequate amount of developmental course selections taught by qualified faculty who want to teach them; and collect data on the outcomes of academically underprepared students, e.g., percentage of students who successfully complete developmental courses and begin college-level work. Kapi'olani's tradition is not only to implement such strategies but to use the data on outcomes to evaluate and adjust them if necessary. The report further cautioned institutions to pay attention to academically underprepared students who are working hard but not getting solid results and to place particular priority on identifying interventions that may help students successfully complete remediation and progress to college-level work[5].

3. Elevating Developmental Education: Holomua at Kapi'olani

Research studies identify a multitude of variables that impact a student's decision to remain in college or drop out:

- student characteristics (e.g., age, gender, ethnicity, socioeconomic status)

- other student-related variables (e.g., parental education level, employment status, marital status)
- academic ability (e.g., high school grade point average, class rank, admission test scores, first-semester college grades;
- non-cognitive factors (e.g., motivation, social integration, intent to return, and career aspirations) and
- availability and use of student services.

Also, institution-related factors, curriculum, faculty-student interactions, and campus climate have been studied to better understand their effects on student persistence[6]. Kapiʻolani has a history of developing programs, such as its Holomua Program, based on such research to determine how best it can support its students in their quest for training and education.

Kapiʻolani established the Holomua Program in 1998, following a reorganization that changed the College's administrative structure, to address some of the variables impacting students' ability to remain in college, i.e., persist. Holomua combined the existing pre-college program for basic education with courses in developmental mathematics and English, and added a counseling component, learning support, and non-credit courses. The program integrated learning support activities with counseling and instruction. The Hawaiian word Holomua expresses the philosophy underlying the developmental education program proposed by the Kapiʻolani faculty, as it means "to progress, advance, surpass, go ahead."

Kapiʻolani students new to the college who do not have previous college course work in English and mathematics are required to take the COMPASS Placement Test for English and mathematics. Results of this test determine the starting course level in these subject areas. Holomua was designed to support the students who place into an English or mathematics course that is below the 100-level. Through classroom instruction, tutoring, counseling

support, computer assisted instruction, and group learning activities, the program meets the needs of the underprepared college student. While students acquire basic competencies in reading, writing, and mathematics, they also learn the importance of being active and responsible learners. Study skills and shared learning activities are also integrated into the curriculum.

In 2002, in further response to the remedial/developmental needs of its students, and to further elevate developmental education, Kapiʻolani established the Holomua Department. The purpose of this restructuring was to provide an organizational unit for Counseling, Math, and English faculty, support staff and tutors, that would facilitate faculty and student teamwork so as to provide students the tools they need to succeed in pre-college Math and English classes and to prepare them for success in their 100-level courses. Each component of the team plays a vital role in this effort to help students understand the value of learning as well as to succeed. Instituting the Holomua Department allowed the College to intensify its focus on student success and support by creating a safe place for students to learn foundational skills and adjust to college life; help students explore educational and career goals; assist faculty in becoming expert resources in developmental education; and attract and hire faculty with a commitment to basic and developmental education.

Specifically, the Holomua Student Success Program provides basic skills and developmental instruction for college students who place into Pre-College Communication (PCC 20, ENG 21, Pre-College English (ENG 22), Pre-College Math (PCM 23, MATH 24, MATH 25, MATH 81), and/or College Success Learning Skills (LSK 30G). The department also offers first-year college experience courses, e.g., Interdisciplinary Studies 103 College.

Research at Kapiʻolani shows that Holomua students tend to persist despite experiencing

Table 1 Demand

Enrollment in Holomua	F-03	F-04	F-05	F-06	F-07
Total number of student in remedial or developmental MATH	1347	1168	1152	1117	1182
Total number of student in remedial or developmental ENG	742	689	624	583	600
Total number of students in both MATH & ENG	471	397	360	340	386

Table 2 Success Rates of Holomua(%)

Grades in Holomua classes	F-03	F-04	F-05	F-06	F-07
Average MATH success rate (A-D grade)	56.3	56.5	57.7	58.3	60.6
Average ENG success rate (A-D grade)	65.4	64.9	70.2	68.4	70.7
Average MATH success rate (A-C grade)	48.2	48.4	45.1	47.4	51.8
Average ENG success rate (A-C grade)	58.8	58.9	63.6	58.0	58.8

academic and personal challenges. For example, in 2004, Holomua students' persistence rate as measured by the percentage of students remaining at the college for four semesters was 36.9% as compared to 34.1% for the rest of the college for the same cohort. In addition, Holomua students that remain at Kapi'olani are able to complete their post-Holomua English classes within one semester and their post-Holomua math courses within one year. **Table 1** illustrates the steady demand for Holomua courses and **Table 2**, the effectiveness of these courses by comparing data from the Fall semester of 2003 to 2007. The data gathered from Holomua (**Table 2**) indicate modest increases in success rates in remedial and developmental courses. However, as the 2008 CCSSE Report suggests, community colleges that are determined to help students succeed continuously assess strengths and weaknesses in their educational practices, then make improvements that actively engage students in learning[7]. Thus, Holomua faculty upon reviewing data in 2005 found that MATH 24 success rates were the lowest overall in the department, ranging from 43.94% in Fall 2003 to 41.34% in Fall 2004 and 41.0% in Fall 2005. The department in writing its Tactical Plan saw this as a serious concern and created several means of

dealing with the low success rates. One was to create a Supplemental Instruction (SI) Program with Perkins Grant funds. Supplemental Instruction (SI) is a peer facilitated academic support program that targets historically difficult courses so as to improve student performance and retention by offering regularly scheduled, out-of-class review sessions.

The Holomua Department sent its SI Coordinator to an SI Conference in August 2005. Upon return the Coordinator set up SI student leader training and hired and placed four SI student leaders in five MATH 24 classes. As a whole, SI participants had a mean final course grade point average of 2.34 versus non-SI participants whose mean final course grade point average was 1.46, a + 0.88 difference, which is higher than the national average. The difference in mean final course grade point average between SI participants and non-SI participants in three of the five classes was +1.12. Also, while no SI students withdrew, in comparison, non-SI participants average withdrawal rate was 23.6%. The data in the early morning and evening classes was not as positive, primarily because students had difficulty attending SI sessions due to work or other obligations before or after class[8].

Additional comparison of SI and non-SI participants was conducted in Spring 2007. At this time SI had been incorporated into a total of

18 sections of MATH 24, four of MATH 25, and eight Cost Control (FSHE 241) classes, with 694 students participating in SI and 39% of those attending at least one SI session during the semester. The data showed that SI students received higher course grades, had better retention rates, and had a lower withdrawal rate compared with non-SI students. The Kapiʻolani experiences reported here are consistent with research conducted by the National Center for Developmental Education, in which it was found that students enrolled in courses supported by SI consistently outperformed students in more traditional courses and were retained at higher levels than students who had not participated in SI[9].

To further increase success rate in its Math classes, the Holomua Department decreased the percentage of lecturers from 40% to 28.05% from academic year 2003 to 2005. Holomua hired two full-time, temporary faculty members in Fall 2005, one a former lecturer, in order to create more stability in the department and to better share departmental and college-wide duties and responsibilities. Research suggests for community college developmental education to be successful, institutions need to assign faculty to teach these courses after they have been oriented to the institutional philosophy of teaching developmental education and understand the institutional expectations for student outcomes such as successful completion of courses, progression through the developmental curriculum, and the achievement of individual student academic goals[10]. By hiring its own faculty rather than borrowing from the Math Department, Holomua faculty believed they could better control faculty attitude and competence, in accordance with research that associates negative attitudes of faculty toward developmental education and students with poor developmental program outcomes[11]. In addition, the Department also reduced the maximum enrollment from 30 to 28 in MATH 24 and 25, following best practices in developmental education. This change resulted in adding two more sections of math classes[12].

4. Elevating Developmental Education: From Holomua to Kahikoluamea

In 2007 Kapiʻolani prepared and submitted a Reorganization Plan (**Figure 1** Kapiʻolani Reorganization Proposal). The objective of the Plan was to improve collaboration and coordination of programs administratively by promoting informed efforts to allocate resources (including obtaining grants connected to or based on institutional research and assessment and data-based decision-making); to promote the integration and implementation of academic and program pathways for access and success (e.g., through coherent student services and support); and to promote the establishment of First Year (FY) academic academies, and academic clusters (i.e., coherent and articulated academic pathways). The creation of the Kahikoluamea Department as part of the College's Reorganization Plan (**Figure 1**), was a product of data-based decision-making and research in developmental education, as well as an effort to further establish an organizational structure that could implement academic pathways through contextualized academies early in a student's college experience. Kahikoluamea will operate these Academic Pathways Academies (APAs) so that they parallel and transition students into the Academic Clusters. The Reorganization organizes the College's academic programs into three clusters: Arts and Sciences, Health, and Business, Hospitality, and Legal Education. Each cluster, with its individual pathways, allows students to choose an area of study and take full advantage of the transfer agreements the College has implemented with four-year institutions in the University of Hawaiʻi (UH) system. Students who aspire to a four-year degree will be able to map out
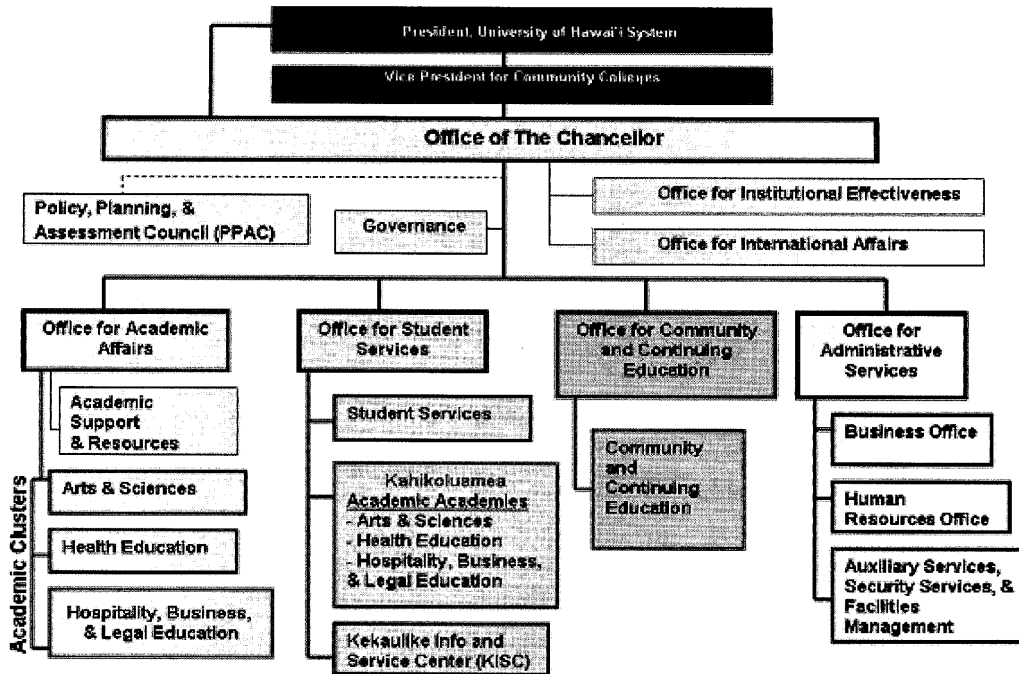
Figure 1 Kapi'olani Reorganization Proposal (July, 2007)

their course work so that they can transfer seamlessly to a four-year institution. The transfer agreements benefit the students in a variety of ways, e.g., when students are ready to transfer they register at the four-year institution as continuing students, not new students.

Kahikoluamea (which can be interpreted in the Hawaiian language as "trinity with one purpose") consolidates the College's resources, i.e., the Holomua Department will merge with the existing First Year Experience (FYE) and Malama Hawai'i Programs, in order to increase educational practices that engage students and raise their levels of persistence and achievement at the college. Malama Hawai'i is a program that offers to the student a "sense of place and connection" at Kapi'olani. The Malama Hawai'i Center is a gathering place for students interested in the study of Native Hawaiian and Pacific Islands languages, cultures, and histories. The Center's mission is to provide a passionate, positive, and productive learning experience for Kapi'olani staff and students as well as the community at large.

Malama Hawai'i offers a two-year, interdisciplinary academic subject certificate in Hawaiian/Pacific Studies. Through this program students explore ancient and modern Hawai'i in Pacific and global contexts. Malama Hawai'i offers the integration of academic and social aspects of the College campus that research has been found to have a positive impact on student persistence[13].

First Year Experience programs are designed to provide students with academic and personal support both in and out of the classroom, including reserving seats for students in first year courses, providing academic support and tutorial service, and assisting with college success strategies. As part of its FYE Program, Kahikoluamea will offer the Access to College Excellence (ACE) program. This program is designed to help students adjust to college life, whether they have just graduated high school, are returning to college after an extended break, or are entering college for the first time after several years of working or raising a family. Students who join an ACE cluster take two or more courses with a small group of students who have

shared interests. In fact, students are guaranteed enrollment in some of the most high-demand courses on campus, courses that are usually core classes that fulfill major requirements and scheduled at highly desirable times. In addition to the courses, ACE students attend a weekly one-hour seminar that is designed to reflect the specific interests and needs of each ACE cluster. During the seminar, students interact with faculty members, peers, and guest speakers; get answers to questions about classes, majors, and college policies; and find out about college resources such as financial aid, computer labs, tutoring, childcare, and much more. There is no fee charged or credit received for the seminars. This is one more avenue for students to experience and develop academic and social integration.

The proposed Kahikoluamea Department will improve the coordination and alignment of resources and services for entering students further by including programs such as Kuilei, which assists students in the transition from high school to college. Also, by coordination the efforts of instructional and counseling faculty from the academic clusters, and student organizations, Kahikoluamea, through the APAs and the integrated resources of Holomua, FYE, and Malama Hawai'i, will how the College addresses the needs of all entering new students, not just those who are academically underprepared. Research shows that the level of coordination between developmental programs can have a positive affect on student success. This coordination may be more readily accomplished under a centralized developmental program structure, i.e., under a single administrative unit with it own director, such as Kahikoluamea, than in a decentralized system, i.e., remedial courses and laboratories offered through individual academic departments. Researchers report that students participating in centralized programs (i.e., developmental courses in English) were more likely to be successful (p>0.05) than students participating in decentralized programs. Also, students at two-year institutions participating in centralized developmental programs had higher rates of retention ($p< 0.05$) than those participating in decentralized programs[14].

5. Elevating Developmental Education: FY Academic Pathways Academies through Kahikoluamea

An essential element of the College's reorganization is to create an organizational structure that promotes unobstructed pathways to the training and education students seek. Currently, developmental/pre-college education in Math and English prepares students for success in 100-level courses. However, some students can spend years, if they can persist, working in such courses before they can take classes related to the reason why they came to college in the first place. In contrast, an APA is a coherent, cohesive and comprehensive learning system of practice that links students, faculty and support staff (including peer mentors and peer tutors) with contextualized college-ready (remedial and developmental) courses; a College Success course; an Introduction to a field of study (e.g., Arts and Sciences, Health Education, or Business, Hospitality, and Legal Education), and extra curricular and required student engagement activities.

Figure 2, Health Pathway Academy to Health Academic Cluster, illustrates an example for classes taken in a Health Academic Academy, i.e., developmental English and Math classes, contextualized around various health professions available at the college. The College Success Course offers students the opportunity to begin envisioning their future. Early development of eportfolios allows the opportunity to evaluate one's work, one's self, one's learning, and one's goals. Early exploration and evaluation of academic and career goals through pathways established by the
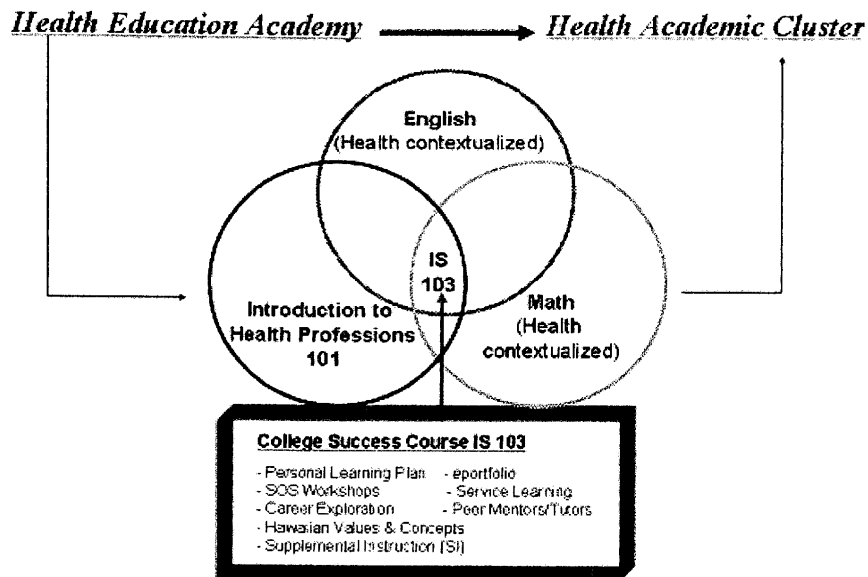
Health Education Academy ⟶ *Health Academic Cluster*

English
(Health contextualized)

IS
103

Introduction to
Health Professions
101

Math
(Health
contextualized)

College Success Course IS 103

- Personal Learning Plan   - eportfolio
- SOS Workshops   - Service Learning
- Career Exploration   - Peer Mentors/Tutors
- Hawaiian Values & Concepts
- Supplemental Instruction (SI)

Figure 2 Health Pathway Academy to Health Academic Cluster

Business Education Academy ⟶ *Business, Hospitality, & Legal Education Academic Cluster*

English
(Business contextualized)

IS
103

Introduction to
Principles of
Business
120

Math
(Business
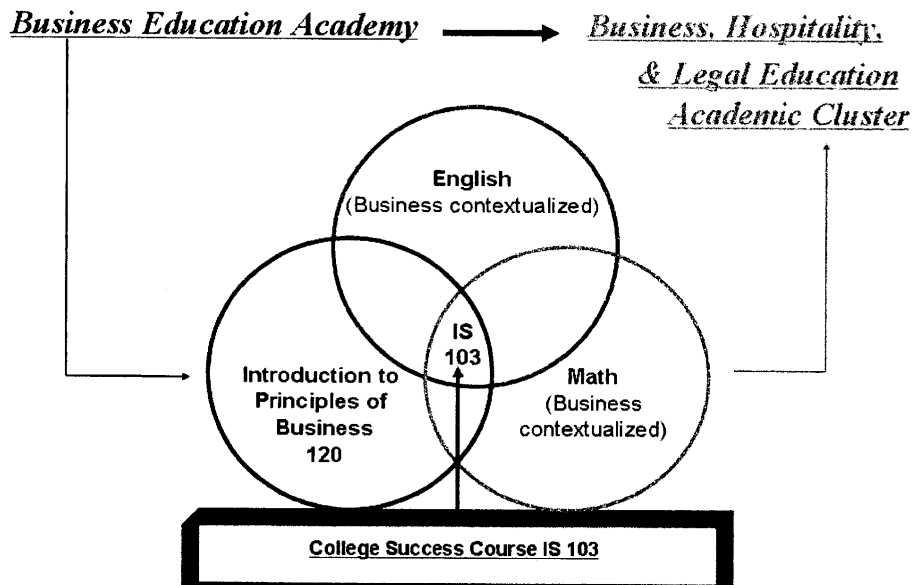contextualized)

College Success Course IS 103

Figure 3   Business Education Pathway Acadmy to Business Hospitality and
Legal Education Academic Cluster

College help students understand exactly what they need to do to follow a particular career goal. Use of and integration of Hawai'i's host culture's values and concepts, and "sense of place," in instruction, counseling and advising, and student engagement activities, honor our host culture while allowing students to be enhanced by it. Opportunities for engaging in SI, peer mentors and tutors, and being involved in service learning assist student learning and make it relevant to them and their community.

Figure 3 applies the concept of an academic pathway academy to the Business, Hospitality, and

Legal Education academic cluster. Research in developmental education has found that learning communities and paired courses improve the performance of students participating in remediation[15]. The APA model builds on this research by embedding the student's area of interest, e.g., in this case, Business, into each aspect of learning during the developmental education phase of the student's pathway journey. By including required student engagement activities, such as the College Success course, in the APAs the

College has inserted another evidence-based activity that has been shown to contribute to student engagement and success. Researchers have found that community college students who take a student success course were more likely to earn a certificate or associate degree than are students who do not take such a course[16].

Kahikoluamea offers students other resources that have been shown to be important elements of student persistence and success, e.g., new student orientation, counseling and advising, academic and social networking; peer mentoring and tutoring, and mastery of learning techniques in remedial courses[17]. In addition, Kahikoluamea will connect students to other programs on campus, such as those available through the College's Academic Support and Resources unit, which includes the Library & Learning Resources unit (LLR). For example, the Secrets of Success (SOS) workshops, offered through the LLR, help students succeed in college by giving them basic learning and study skills. These workshops are free and open to all Kapi'olani students. They give students a chance to interact with some of the best instructors on campus. More than 25 workshops on various topics are conducted each semester and through the summer. SOS workshops include such topics as time management, textbook reading, note-taking, and writing exams.

Success in APA courses allows the student a smooth transition into an academic pathway. Kahikoluamea, through its Academies, develops a collaborative partnership with major academic cluster faculty to develop a learning community that introduces developmental level students to a field of study course and college-ready courses. The CCSSE 2007 report states that colleges can help turn student wishes into concrete plans by setting clear goals and giving students the support to meet them. It further suggests that colleges can accomplish this task by providing academic advising and planning to help students create academic road maps that show the path from where they are to where they want to be[18]. Kapi'olani has established a direct organizational linkage between developmental education, the first year college experience, and college-major programs. Pathway Academies leading to Academic Clusters, combined with the programs and activities of the Kahikoluamea Department, its faculty's efforts to coordinate with other learning resources, and other instructional faculty and counselors at the College, can provide the students of Kapi'olani an organized and coordinated assistance that facilitates their ability to discover, determine, and design their individual road maps.

In addition, APAs assist students in developing a greater sense of place, community, and connectedness to not only a field of study (e.g., through a pathway within an Academic Cluster) but also the Kapi'olani community. To increase opportunities for such academic and social integration of students, Kapi'olani is completing the renovation of its Holomua space into the Kahikoluamea Center, an open, student-centered learning, technology enhanced environment. Offices for faculty, including counselors, will be situated on the perimeter of this space so that students have access to faculty when the need them. Space for studying individually or in groups, for tutoring will be available in the Kahikoluamea Center. Phase II of this renovation will create outdoor space for students to study and work, individually or in groups, in the area of Kahikoluamea and the nearby classrooms used for college-ready courses.

Finally, faculty need professional development and other opportunities to develop skills so they can maintain high standards for students, engage students in learning with innovative and active teaching strategies, and coordinate and provide support to help students succeed. Kapi'olani's bi-annual, three- to four-day Faculty Service Learning Institute was highlighted in the 2008

CCSSE Report as an example of institution-wide commitment for active teaching strategies[19]. This program affords experienced and new faculty the opportunity to better understand service learning and how to integrate it into any curriculum.

6. Conclusion

Kapiʻolani Community College has a history of supporting student success based on a culture of continuous improvement and evidenced-based planning and action. Beginning with a strong Student Services unit and excellent academic faculty Kapiʻolani has excelled in providing access to and success in its wide variety of education and training programs. Responding to the needs of its student community, Kapiʻolani has consistently sought to elevate its developmental education programs and its faculty and staff ability to provide those programs at the highest quality level. The most recent manifestation of this journey is the continued evolution of the Holomua Program to the Kahikoluamea Department. What is the improvement? The CCSSE states that colleges are most likely to engage students when they make engagement strategies and support serves inescapable[20].

To engage its students in success and fruitful learning experiences, Kapiʻolani Community College, as part of a college-wide reorganization, established a new organizational structure, the Kahikoluamea Department. Physically, Kahikoluamea is a student-centered, technology enhanced learning space that fosters community and encourages concern and passion for collaborative and active learning and teaching for the purpose of enhancing student engagement and success and to allow for the changing needs and expectations of students, faculty, and staff. In addition, Kapiʻolani has developed programs such as Academic Pathway Academies to engage students early in their college experience in an area of interest, to assist them in exploring career goals,

to afford them the opportunity to take courses relevant to their career interests, and to support them in choosing a clearly defined career pathway. The College has also developed pre-enrollment, retention and persistence strategies that identify and remove barriers to student success in order to ensure students' transition into one of the Academic Clusters' degree pathways. Finally, to complete the movement of students along a pathway from high school, to community college, to four-year institution, Kapiʻolani has entered into agreements with four-year institutions within the University of Hawaiʻi system that allow its graduates, or students with the appropriate number of credits, to transfer as continuing students to obtain a four-year degree. These agreements provide students with a clear path to their educational and career goals, while they provide Kapiʻolani with a tangible structure to support, manage, and continuously develop its efforts to improve student success.

Bibliography

1) Community College Survey of Student Engagement (CCSSE). (2007). Committing to student engagement: Reflections on CCSSE's first five years, 2007 findings. Austin, Texas: The University of Texas at Austin, Community College Leadership Program, p. 3. http://www.ccsse.org,
2) Office of the Vice President for Community Colleges, UH News Release, June 29, 2007.
3) ibid, Community College Survey of Student Engagement (CCSSE). (2007). p. 15.
4) ibid, Community College Survey of Student Engagement (CCSSE). (2007). p. 15.
5) ibid, Community College Survey of Student Engagement (CCSSE). (2007). p. 15.

6)Summers, M.D. Eric Review: Attrition research at community colleges. Community College Review 2003;30;64, pp. 69, 70. http://crw.sagepub.com/cgi/content/abstract/30/4/64.

7)Community College Survey of Student Engagement (CCSSE). (2008). High expectations and high support. Austin, Texas: The University of Texas at Austin, Community College Leadership Program, p. 3.

8)Holomua Department, Kapi'olani Community College Program Review: Holomua 2006, p. 8, www.kcc.hawaii.edu/object/io_1150324314236.html.

9)Boylan, H. R., & Saxon, D. P. (1999). What works in remediation: Lessons from 30 years of research. Research contracted by *The League for Innovation in the Community College*. National Center for Developmental Education, http://www.ncde.appstate.edu/reserve_reading/what_works.htm.

10) Sheldon, C.Q. Building an instructional framework for effective community college developmental education. Eric Digest, ED477909, 2002-10-00, p. 2, http://www.ericdigests.org/2004-1/building.htm.

11)ibid. Sheldon, p. 2.

12)ibid. Holomua Department, p. 9.

13)ibid. Summers, pp. 67-69.

14)Boylan, H., Bliss, L., & Bonham, B. (1997). Program components and their relationship to student success. *Journal of Developmental Education, 20*(3), pp. 2-4, 6, 8. http://www.ncde.appstate.edu/reserve_reading/program_components.html

15)ibid, Boylan, H. R. and Saxon, D. P., p. 8.

16)ibid, Boylan, H. R., & Saxon, D. P., pp. 10, 11.

17)ibid, Boylan, H. R., & Saxon, D. P. pp. 10, 11.

18)ibid, Community College Survey of Student Engagement (CCSSE). (2007). p. 12.

19)ibid, Community College Survey of Student Engagement (CCSSE). (2008). p. 7.

20)ibid, Community College Survey of Student Engagement (CCSSE). (2007). p. 19.