Student Engagement, Retention and Graduation:
An Action Plan

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I. Introduction

Every year, several thousand students enter the University of Hawaiʻi at Mānoa, almost evenly split between new and transfer students at the undergraduate level. The majority come from the state of Hawaiʻi but large numbers come from the rest of the United States and from around the world. With only a very few exceptions, these students enter Mānoa intending to obtain a degree from here and join the proud ranks of our alumni, but every year hundreds of those students (nearly 40% of those who enter) do not succeed in this quest. Our aim in SERG is a simple one: to increase the rate at which all students who enter Mānoa succeed at Mānoa and graduate from here with a degree.

The Student Engagement, Retention and Graduation Committee (SERG) was formed in Spring 2015 with the charge of developing a plan to address this challenge. Composed of faculty, administrators and students from across the campus, initially chaired by the Vice Chancellor for Academic Affairs and now co-chaired by the Associate Vice Chancellor for Academic Affairs, SERG has engaged in an intensive process of brainstorming and consultation with groups across campus, including focus groups of students, the Faculty Senate, the Deans, and already existing campus structures such as the Council of Academic Advisors. As the timeframe for the Strategic Plan of which this is part is 2015-2021, SERG was from the beginning envisioned as more of a loose-leaf notebook than a bound book—i.e., we plan to begin with an initial set of ideas that will be augmented as progress is made on the original set. As our thinking evolved, we made a formal distinction between those issues where we had a clear action plan and identifiable steps forward and those issues that needed further study. In the case of the latter, these issues may result in action items being added to the plan at a future date.

Our first need was a clear picture of how we were doing at the start. Attachment A provides the data on our graduation and retention rates and there is a lot of good news contained here. The 6-year graduation rate has increased from a low of 48.2% in 2009 to 57.1% for the most recent cohort in 2015, while the 4-year rate has increased even more rapidly, moving from 17.5% to 27.9% in five years. This is a tremendous achievement that the entire campus should be proud of, and it was made possible through years of improvements in such areas as course availability, advising, the development of clear four year degree plans, and many other steps. In other words, it didn't just happen. As reported in our last WASC Interim Report, we have put considerable effort into raising undergraduate retention and graduation rates. The strategy we outlined there of "long-term persistent incrementalism" remains central to our approach as envisioned in this document as well (WASC Interim Report: http://www.uhm.hawaii.edu/wasc/pdf/interim_report_2015.pdf). But that achievement—as impressive as it is—hasn't changed the fact that roughly 3 of every 8 students who enter Mānoa as freshmen do not graduate from Mānoa. The 8-year graduation rate has remained essentially unchanged between 62% and 63% for the past few years. So, we have made changes that enable students to graduate more quickly, but the underlying percentage of students who graduate hasn't really changed.

Appendix A also points to the most reasonable explanation of why our larger graduation rates remain stagnant. The other statistic that has not budged is the rate at which students return for their sophomore year. This number has oscillated in a narrow band between 76% and 79% for the past

10 years. Most of the students we lose are lost in their very first year here—we have been losing between 21 and 24% of students in year 1, with a further loss of between 14 and 17% during the next 7 years. So the odds of graduating from Mānoa are extremely good if a student returns for the sophomore year, but we are losing more students than we should (and more than comparable institutions do) in that first year. What this tells us is that even though we continue to have many good ideas, which will speed students' progress towards graduation, the increase in our 4 and 6-year graduation rates will stall at some point unless we can begin to make progress on retention as well. So our plan—to return to the name of the committee—needs to stress student engagement and retention as well as graduation. We believe that the plan outlined here does that and represents a rich menu of action steps to be taken now.

What Mānoa has not done in the past is to set quantifiable goals to be reached, but a commitment in the new Mānoa strategic plan is to have a limited number of measurable goals for each initiative. In recent years, we have made the most rapid progress in the four-year graduation rate, so presuming that this progress will continue, we have set the goal of a four-year graduation rate by 2021 of 35%, which would be an increase of 7.1% over where we are now (over 1% per annum). This, it should be noted, would represent a doubling of this rate in a decade. We have set more modest goals for the six-year graduation rate and the second-year retention rate increase of .5% per annum, which would allow us to reach a 60% 6-year graduation rate and an 80% second year retention rate by 2021. (See Appendix B for a graphical representation.) So 35-60-80 is our goal for this initiative.

There are many different ways to organize an effort such as this one, so a word on how this plan is organized. Our brainstorming in the committee defined 5 key areas where we thought progress could be made: affordability, administrative hurdles, transitional issues, communications, and improving learning. There is some overlap among these categories, but roughly speaking they work to categorize the kinds of issues we think students face during their voyage through Mānoa. The first challenge is affordability. Although our tuition is low for a public flagship, it is several times higher than the University of Hawaiʻi community colleges. Many of our students are low income, and students all face the high living costs we have here in Hawaiʻi, so the overall cost of attendance is a challenge.

A second challenge is administrative hurdles. UH's bureaucracy can be frustrating for anyone to deal with, and we face the challenge of how to re-engineer our business processes that are paper-laden and frequently require face-to-face interaction at set times in an era when student expectations are based on Amazon.com and smartphone aps.

Any student entering Mānoa faces at least one substantial transition: an incoming freshman from anywhere faces the transition to college, a transfer from a community college has the transfer to the four year world to negotiate, any student from outside Hawaiʻi has the transition to Hawaiʻi to negotiate (and in many cases, the transition to the United States), while many of our in-state students face a transition to Oʻahu and the (relatively) large city of Honolulu. So a third area is how can we help students with all of these transitions.

A fourth challenge is improving communications internally and externally. We have an array of programs on campus with helpful staff designed to assist students with all the issues they face, but communication on campus often is sub-optimal and students don't always know where to go to get the help they need. Reviewing and updating our university and department and program web

presences is one area. Developing reporting mechanisms for students who have stopped attending classes is another initiative to help flag and address issues before detrimental outcomes occur. Facilitating communications to faculty, staff, and students regarding the importance of student retention is another critical area. Each of these arenas would be helpful in improving student engagement and success.

Finally, students need to pass the classes that are required for their majors if they are to graduate with those majors. We have low success rates in many of the key gateway courses: students may fail the course or they may withdraw or take an incomplete. Anything short of completing the course with a passing grade will affect progress to degree. So the fifth area is improving learning: what can we do to improve student learning, especially in key courses, so that students can progress through their required courses in a timely manner?

What follows is the action plan on improving student engagement, retention, and graduation, mostly organized around these five different areas of concern. There are, however, two overarching initiatives being proposed that don't fit neatly into one of these five categories, the Guided Pathway System (GPS) and the Mānoa Graduation Promise. Preceding the action steps inside each for the five categories is a brief overview of these two initiatives. In addition, it should be noted that this is not a complete list of every issue the SERG committee has discussed or deems important; instead, it is the list of action steps we are agreed upon at this time. There are issues under discussion that have not yet led to action steps or a plan of attack, so in addition to this action list, we have a 'parking lot' of issues in need of further consideration or research (listed in Appendix C). As action steps are generated for these issues, as new issues emerge, and as steps outlined here are taken, the plan will evolve.

II. Guided Pathway System (GPS) and Velocity Analysis

A major development at Mānoa over the past 10 years has been the development and evolution of what began as a degree-audit system known as STAR. STAR has moved well beyond its point of origin and in its latest phase has two important capabilities that are central to our goals to improve student engagement, retention, graduation. As such, even though these developments have a timeline that precedes SERG and involve entities outside of Mānoa, we think it important for a description of these developments to be part of the SERG plan.

The newest version of STAR (STAR 2.0) has the capability to track individual students' progress towards graduation in terms of a percentage of requirements completed and not just in terms of credit hours earned. This is important because students can think they are on track to graduate in 4 years by taking 15 credits a semester, but they will not be on track unless they are taking the right 15. This can be graphically represented, so that all students can grasp whether they are on track simply by comparing the slope of their line to one that moves up at 12.5% a semester.

We believe that simply having this capability is already having an effect helping reduce time to degree, as students use this resource or work with their advisor to make choices that move them in the right direction towards graduation. Because so many students transfer to Mānoa, it becomes important for STAR usage to be spread as widely as possible. A particular challenge is that STAR usage is less common on other UH campuses even though it can be used to plot transfer plans across campuses as well some degree paths on individual campuses.

However, STAR 2.0 can also aggregate the results of individual student pathways. Each student has an academic progress or pathway graph which he or she can see in STAR. The same data that creates each individual graph can be used at the aggregate level to identify the "velocity" with which a set of students is progressing. Hence "velocity" is based on the rate at which a student completes degree requirements. It is the rate of change of the velocity (acceleration/deceleration) that we are most interested in, as it alerts us to potential issues. So, for instance, the rate at which all the students with a given declared major progress can be computed and compared to other programs. Only if students complete an average of 12.5% of their requirements each semester (or 25% in a given year, allowing for summer school) will they graduate in four years. We expected to find—and did find—that programs with more elective requirements tend to have a higher velocity than more structured programs with fewer elective requirements but we also found that programs with similar requirements have different aggregate velocities. In that case, something in how the program is being offered may be slowing students down: if, for instance, a required course isn't offered at the right time in a student's program or isn't offered as frequently as it should be, that will affect velocity and time to degree negatively.

With the help of some external grant funding, a velocity consultant has been hired in the STAR who is working with individual programs and departments in order to identify and address such systemic issues within a degree program. At this time, using the velocity process is voluntary, and is a matter of individual departments contacting the STAR office and asking for help. Given that voluntary nature of departmental involvement, which we are not proposing to change, it is hard to project targets or measurable specific to these interventions. But the velocity plot STAR has developed has an x-axis of program velocity and a y-axis of changes year-to-year, so across time we hope to see movement from the lower left to the upper right quadrant. Any change that departments or programs make to their offerings because of this analysis should contribute to that movement, which in time should lead to lowered time-to-degree.

The next development involves not just a look backwards at past progress towards degree but by using the what-if projection ability of STAR, turning this into an optimal academic pathway forward, and this we are calling Guided Pathway System (or GPS). No matter where a student is in his or her degree program, regardless of whether the student is an incoming freshman, a transfer student, part-time or full-time, etc., the GPS is able to map out the student's optimal path forward to graduation. Hence, no matter where the student is in his or her degree program or what requirements the student has already completed, the GPS will be able to identify the best path forward semester by semester to graduation. The easiest comparison to existing technologies is the GPS that keeps on recalculating your path even if you miss the exit.

This gives student and advisor alike a number of new tools. Each time a student or an advisor plans a schedule for the next semester, the pathway consequences will be perfectly clear: are these the right courses that will enable the student to stay on track? Is the student's velocity increasing or decreasing? If, for example, a student is going at a rate of 25% a semester for three semesters then suddenly drops to 10%, there can be an alert to this effect so that the student has the ability to change his or her course choices before the end of the registration period. If the student is having second thoughts about his or her choice of major (as most students do), the what-if ability of STAR will allow the student to consider alternative pathways with a much more precise sense of what those alternatives will entail in terms of requirements and pathways.

Lastly and perhaps most significant is the shift of the GPS model from an opt-in model to an opt-out model. This is being done by taking the current student course registration interface (where any course can be taken) and removing it and replacing it with GPS registration whereby students will register through the GPS and be placed into the courses that meet their degree requirements unless they intentionally opt-out. This will effectively merge GPS and Velocity which we believe from an institutional "process" perspective will result in a gradual alignment of our instruction and student support structures.

The state is providing funding to ensure this technology is rolled out across the UH system enabling "*optimal transfer pathways*" to be developed where students who are at a community college and have the aspiration to transfer will have an optimal transfer pathway that illustrates exactly what to take at the community college and when to transfer. What other effects this roll-out across the entire UH system will have for Mānoa is yet to be determined, but we believe this new technology is an important part of the game plan going forward for increasing student engagement, retention, and graduation.

III.   The Mānoa Graduation Promise

The technological developments which are part of the GPS and Velocity discussion make other changes possible, and we think it is time to consider making the following commitment to our incoming students.   We recognize that this is a major shift that requires an extensive discussion, so it may well be that the timetable outlined here is too ambitious.

We think it is time to take the next step in making it possible for students to graduate on time with the courses they need for the degree they wish to pursue. We are calling this "The Mānoa Graduation Promise," and this is our promise. To all freshmen entering Mānoa in Fall 2017 and hereafter, if you follow the four year degree plan for your major and take and complete 30 credit hours a year, *we are proposing that we promise you that the courses you need for that major will be available*. If you follow the program and for reasons beyond our control, a course you need is not available, the Department will substitute another class that makes sense for your course of study and allows you to graduate on time.

For this to work smoothly, a number of things will have to be in place. We now offer the lower division general education courses that are needed every semester, with most offered in the summer as well. The challenge is in the upper division and more specialized courses for Mānoa's 100 undergraduate majors. So every department will need to review its requirements and to review its offering of courses, both to reduce any unnecessary complexity in the requirements for its own majors and to review its offerings, to make sure that enough seats are offered in the courses that are required for its own and other majors on campus. This will take additional resources as well as a better match between scheduling and requirements. By Fall 2019, this curricular and scheduling review would need to be complete, so that the students moving at that point into the upper division and major-specific courses would be able to continue on pace and fulfill the requirements for their major.

This is a promise, not a blank check. Requirements will not be waived if students could have taken a required course earlier and chose not to follow the four-year plan. There are a small number of programs on campus that are not open to all students and have an internal admissions process: we do not guarantee admission to those programs and therefore will not override the college or school-

specific decision making process. And of course, this requires that students stay in good standing in both the academic and non-academic realm.

IV. Subcommittee Action Items

AFFORDABILITY

As we mentioned in the introduction, despite low tuition for a public flagship, many students are low income, and all students must deal with the high living costs on the island. Thus, we asked ourselves, how can the Mānoa degree be made more financially feasible for students?

1. Implement Open Educational Resources (OER) in order to dramatically expand the number of courses with zero textbook costs.

Currently, if all Mānoa students bought all of the textbooks required for their courses, they would spend cumulatively over $20 million per semester. Because of this financial burden, many students try to get by without some textbooks and they are taking fewer courses, both contributing to lower student success. OER are teaching, learning and research materials that reside in the public domain or have been released under an open license. The OER initiative at Mānoa aims to reduce the cost of education, improve student success, and promote academic innovation by providing faculty more options for curriculum design. *Over the next five years will invest in promoting the widespread adoption of OER across the curriculum and the development of new OER material, with a focus on courses that will have the greatest positive impact on students.*

2. Award UHF scholarship funds in a more timely and comprehensive manner.

Currently, many scholarship accounts held at UHF go unawarded; in any given year, $5-6 million of scholarships funds fall into this category, and the value of these awards melt with time, given the annual increase in the cost of attendance. One reason is that decision making about these accounts is highly decentralized. Without overriding that decentralization, *we want to move the deadline for departmental/college action up so that after that deadline the Financial Aid Office can see if unawarded scholarships match the profile of students whom they are currently packaging for financial aid.* If so, then the Financial Aid office will work with the unit to make the award.

3. Focus financial aid on undergraduates meeting institutional merit qualifications.

The peer-to-peer fellowship program was designed to provide Mānoa's best and brightest with opportunities to serve the campus community with a merit scholarship award as compensation. This fellowship is similar to an internship with projects and service that move the campus forward. For example, we have fellowships in veterans support services, sustainability, recruitment, legislative liaisons, etc. Student fellows in these areas are leading efforts to improve the campus. For example, the legislative fellows work with ASUH and GSO to craft testimony, network with legislators, and work on bills/ideas of student interest. This service opportunity allows student Fellowship recipients to support other students, engage with the campus community, and gain transferable skills and experience in a professional setting. Students selected for the fellowship receive a merit scholarship award, provide 12-15 hours/week of service with a program that allows students to positively impact their fellow students, and engage in Fellows community learning via Laulima which fosters

engagement with peers in a reflective, community, cohesive environment. The action is to continue to return 20% in aid for institutional merit scholarships for undergraduate students. *We will reallocate institutional merit to target academically achieving students who have unmet financial need for peer-to-peer campus fellowship service.*

Peer to peer fellowship program run through the Career Center – Jodie Kuba (Career center)

4. Provide automated eligibility for incoming UH students to UH campus student jobs.

Currently, an administrative override is required to give entering freshman students access to search for campus and federal work study student jobs in the *sece* system. Information in the operational data store is not available until the student registers for classes. *In support of the early registration for first year students, the plan is to reduce the additional step for entering freshman students to log-in and access campus student job information.* Furthermore, we will increase student access to user-friendly student employment (campus jobs, internships, and career opportunities). We plan to rebuild *sece* for responsive web design for all devices (mobile, tablets, PCs) for students to access and manage campus student employment, internships, and career opportunities. We plan to create in-app tools that meet more modernized, student needs such as saved searches, career management features, and automated notifications.

5. Increase student access for utilizing need based Federal Work Study.

Currently, the *sece* system provides students and employer with a static view access of a student's FWS award. This initiative seeks to provide students and campus employer with access to early identification of FWS awards and tools in the *sece* system to manage FWS student employee earnings, award, and balances. It will also create automated message notification at student log-in to increase communication of FWS award availability.

ADMINISTRATIVE HURDLES

The bureaucracy can be overwhelming to those who understand its operation, but simply impossible for many students to understand. A key factor in ensuring we retain and graduate students is to identify the numerous points where our processes and policies hinder progress to the degree. This section is governed by the question, how can academic procedures be more user-friendly for Mānoa students?

1.   Move transfer student registration to an earlier time to allow for individual student and UHM Departmental planning (Transfer Student Barriers).

Currently, transfer students are the last group of students to register approximately 10 days prior to the start of each semester. This results in transfer students being unable to plan their first semester (classes as well as family and work responsibilities) or secure parking passes. Ideally, transfer students would register after the completion of the continuing student registration period but before their current time, which is the week before school starts. *We will revise registration times for transfer students to better facilitate planning for their first semester at UHM.*

2. Address the greatly varying articulation of non-UH courses to increase consistency in evaluation of transfer coursework (Transfer Student Barriers).

Each UH campus evaluates and articulates courses from non-UH schools and often determines their value differently. Students who attend a mainland school and then transfer to a UHCC will receive an evaluation of courses for that campus which includes credits for general education requirements. Later when the student transfers to UH Mānoa these courses are re-evaluated and often times determined to be electives. This creates confusion for transfer students and slows down their time to degree as they find out they now must complete an additional general education course they thought they had completed. *We will work to articulate transfer credits across campuses so students are not delayed in their graduation.*

3. Clarify access to advising services at UH Mānoa for transfer (and ultimately all) students.

Currently, there is confusion regarding which advisor a potential or new transfer student should see at UH Mānoa. Further, it is often unclear how a student should go about meeting with an advisor as each unit has their own preferences regarding advance or same day appointments and walk ins. *It is necessary to develop a clear and visible pathway to advising that includes the numerous advising options available to students at UHM.*

4. Improve the Kaʻieʻie application process to make it easier for students and to provide an accessible way for neighbor island students to apply as the program expands.

Currently the Kaʻieʻie program requires a paper application that must be submitted with payment. There is no online option. This slows down the process and complicates payment as students must submit checks or cash, or complete a credit card authorization form. Since payment is not taken immediately we often have payment issues. As Kaʻieʻie expands to our neighbor islands this paper process is outdated and difficult. It requires that applications be mailed via certified mail or hand carried to campus during trips. *An online application will make the process easier and increase accessibility.*

5. In-hall (or at the Housing Success Center) advising options.

Student Housing Services collaborated with other departments, mostly via the Residential Learning Programs (RLP), to offer after hours advising each semester. They have received positive feedback about this program from students who value the convenience or cannot make business day appointments for advising due hectic schedules. *The next step is to offer undeclared peer advising in the housing success center (HSC) next year, during business hours and after hours. Tentatively these would serve as an option for undeclared students who are more available to meet when MAC is closed (Wed mornings and evenings). This would be by-appointment and students can make appointments in the HSC or at MAC.*

6. Electronic submission of theses and dissertations.

Historically, masters theses and doctoral dissertations were submitted to Graduate Division in hard copy. We moved to a CD submission process several years ago. *In 2016 we will be piloting and*

transitioning to a fully electronic submission process via ProQuest. This will streamline the process for graduate students.

7. Streamline the application system for graduate students.

Our current graduate application system involves an online application submitted to the Office of Graduate Education while program-specific admission materials (namely letters of recommendation and statements of purpose) have to be submitted to other offices (sometimes electronically, sometimes hard copies). This antiquated and cumbersome system should be centrally modernized. *The goal is to streamline the graduate school application process and provide a uniform mechanism of application across all programs.*

TRANSITIONAL ISSUES

Students arrive at Mānoa from high schools, as transfer students from community colleges, and often from other parts of the country or the world. In each case, there are struggles to adapt to the UHM experience. In this section we took up the question of how to best smooth the transition for students as they embark upon their degree?

1. Eliminate GEAS (General Arts and Sciences) major designation and replace with Exploratory designation.

Prior to the creation of the Mānoa Advising Center, undeclared students have been coded in Banner as General Arts & Sciences. This designation still exists as a holdover. It is inaccurate and causes confusion and misdirection of students. *MAC and the Registrar will change the overarching term for these students to Exploratory and align them with the national meta-major classifications (Social Sciences, Business & Industry, etc.) so that students can indicate their areas of interest and MAC can provide appropriate services to each interest area.*

2.   Move the advising of all declared "pre" students to their intended school or college.

Certain majors (Shidler, Engineering, Nursing, Dental Hygiene, and Social Work) have internal admissions processes: students already at Mānoa nonetheless need to apply to these units to become declared majors.   However, it is also possible for students to declare their intent to become a Business major, say, by declaring "pre-Business." *All such students should be advised by the school or college they intend to join. And thus a plan to shift advising based upon the "pre" declaration will be developed and implemented.*

3.   Move Declaration of Major on-line.

Students now need to fill out a form to declare or change their major that requires their appearance at the Registrar's office, an unnecessary step that slows down their declaration and also slows down any change in major status, causing a certain amount of confusion and noise in the system and possibly preventing students from getting the advising they need. *Developing an on-line system will avoid unnecessary administrative steps.*

4. Implement mandatory advising for all exploratory students every semester.

Exploratory students, who have not yet found a major, often require multiple advising appointments. Currently, mandatory advising is offered to all incoming freshmen in their first four semesters. Incoming transfer students and incoming transfer students who are on academic action also have mandatory advising. Two additional advisors are in the process of being hired. The primary task of the new advisers, while increasing mandatory advising times, is also to develop a variety of programs that will assist students to identify their learning interest areas as a prelude to selecting an academic major to begin work of a degree. It is also this group of exploratory students who will be a prime user of GradesFirst to address the at risk challenges of students without a major. *Once the new advisors are fully trained, MAC will be able to provide much needed multiple advising appointments for students.*

5. GradesFirst roll out.

GradesFirst has been successfully used with the athletes to better monitor success in courses. *GradesFirst will now be used to monitor exploratory students in MAC.* Particular attention will be placed on tracking and offering supportive services to sophomore students to assist their selection of a major and tutorial support as take introductory level courses in their majors. In order to test the utility of GradesFirst, one department in SOEST has also been included in our assessment to evaluate the effectiveness of the software and its practical use. If student retention rates improve in these populations expansion of GradesFirst to other units will follow as additional funds become available.

One academic adviser in MAC will be designated as the GradesFirst overseer, to assist units. All contracts with GradesFirst have been completed, and UH System approval of access to Banner is already in application. The next step will be to begin the training in MAC and SOEST on the use of GradesFirst.

6. Improve the Non-Resident First Year Retention Rate at UHM.

The first year retention rate at UHM has oscillated between 76% and 79% over the past fifteen years. Historically, out-of-state students have had significantly lower retention rates compared to their in-state peers. The retention rate for residents is 87.3%, compared to a 66.3% retention rate for students from the continental United States.

Three action steps are proposed for immediate action. One, a selected study, already underway will survey non-resident students to determine why they leave at the end of the first year. The study is in process and our first results will be available this summer. The design will allow our committee to see if these results are consistent with other student surveys that have been done on similar issues and perceptions of the institution, and determine specific action steps if needed. Second, the Access to College Excellent (ACE) learning communities currently reaches approximately 35% of our incoming freshmen class. The ACE learning communities are theme designed connected to specific majors on campus, 9 credits in size with a 1 credit support course designed to address specific first year issues for students, like financial literacy, information

literacy (library work), and course planning. Students completing the ACE learning communities have a significantly higher retention rate than other students putting their own schedules together. *The second proposal is to expand the current learning community program for non-resident students by designing specific courses that would meet General Education Requirements and engage students in understanding the Hawaii culture, the UHM environment, and create a broader network of support services for new students to the campus.* Finally, the third proposal would be to expand our successful Sophomore Experience (MSE) to include the second semester of the freshman year and evaluate this expansion to determine its effectiveness. Currently our MSE has received national attention for its highly integrated social and academic identification of sophomore needs. The retention rate of students completing their sophomore year has remained steady and tied to our new proposed Exploratory Project, could in the years ahead provide an extremely successful model of movement through the initial semesters on campus. *Our final proposal would begin involving all second semester freshmen to participate in the MSE.* Some thought has been expressed that some non-resident students come to the campus already sure they are leaving after one year. After establishing the second semester freshmen program, and seeing if it has the impact we anticipate, we might restructure again to include all incoming students even earlier. Resources are required to implement the three aforementioned retention strategies.

COMMUNICATIONS

How we improve communication is always and important consideration, especially how we communicate with students. In this section our driving question is: How can campus wide communication be improved to better support student success at Mānoa?

1. Improved Website Communication.

The current website is static and information on how to apply takes multiple clicks on the "apply now" button before arriving at a screen where one might be able to apply. *Develop a more interactive website experience that invites students in and makes the University appear more dynamic.*

2. Develop reporting mechanisms for students who have stopped attending courses.

Currently there is no easy way to report students who have stopped attending courses until grades are entered and faculty are prompted to include information about the last date of attendance. However, with some minor repairs to communication, it may be possible to find out earlier when students begin to encounter problems and stop attending courses.

As of Fall 2015 the initial effort to report students who register for classes but do not attend was implemented. Faculty reported students in this category to the registrar who contacted the student to let them know they would be dropped from the course if they did not attend. *Follow up with early reporting to determine if it helps flag students who are not attending courses.*

3. Improve communication with faculty about student retention.

A "Why Retention Matters" presentation to Faculty is one of the ideas that came from the prior Committee on Enrollment Planning. One possible way to begin to communicate this to faculty and to students possibly is to use the "Kelli" presentation as a traveling conversation piece with

departments. This presentation was given to the Academic Procedures Committee (APC) in December and was found useful by the committee members. A second method is to develop a department–by-department communication strategy that brings the relevant information to the departments and elicits comments from them. *The next step is to develop a brief description about retention issues and communicate it to departments.*

IMPROVING LEARNING

At the heart of SERG is a goal of improving learning for students driven by the question, how can student learning experiences at Mānoa be improved? This question is central to student engagement and success.

1. Improve learning in low success rate courses.

MIRO has conducted an initial study which has identified the top 50 low success rate courses and the change in success rate in these courses between 2009-2011 and 2012-2014. The data suggests that course redesign can make a difference, since redesigned courses such as Psychology 100 and Math 100 have had perceptible reductions in the rate at which students fail to proceed through the class (i.e., fail, withdraw or get an incomplete).

Each dean has been asked to come up with an action plan concerning those courses by March 15, 2016.   There are a menu of possible interventions in these courses that are being considered, and it will be possible to develop an action plan in detail in this area only after these plans are developed course-by-course.   The lack of detail here should not be taken as indicating that this area is unimportant; on the contrary, this is probably the key area in which we need to make progress, especially for retention to the sophomore year.

As part of the plan to improve learning in low success rate courses, UHM is in the process of applying for a grant through the Howard Hughes Medical Institute. The focus of the grant is to expand our capacity for inclusion by engaging all students and ensuring their success in STEM fields, UH Mānoa proposes an integrated two-part strategy aimed at: redesigning gateway math and science courses to better accommodate the learning needs of underrepresented students through improved pedagogy; and incorporating closely mentored research experiences throughout the undergraduate STEM degree. These strategies will increase persistence and graduation rates of STEM majors through proven techniques like mentoring, active learning, and social supports, and will capitalize on existing institutional knowledge and current successful programs that can serve as models for the entire campus.

2. Create a comprehensive curriculum that all exploratory students follow.

A sequence of courses that emphasizes advising, career exploration and engagement has been identified for exploratory students. *One step is to rename all classes under the "OUE" designation instead of CAS and IS. Another step is to expand the reach of these courses by training graduate assistants and/or undergraduate mentors to assist with the course delivery in a similar manner to ICS 101 or HIST 151.*

3. Mānoa Career Center: Develop a co-curricular transcript.

Increase the retention of students via co-curricular programs and learning by recognizing student learning via social, cultural, ethical, personal and professional growth through co-curricular involvement.

4. General Education Office development of SENCER programming for students and faculty to improve student success.

The General Education Office will be partnering with the Nation Center for Science and Civic Engagement (NCSCE) to address larger concerns about the retention of first year students by focusing on those general education courses with low rates of student success. SENCER (Science Education for New Civic Engagement and Responsibility) an initiative of NCSCE, provides professional development and STEM educational reform for individual faculty interested developing a new approach to teaching and learning. The SENCER Summer Institute (SSI) provides individual faculty and teams opportunities to develop new teaching approaches and techniques while also providing time for teams to work on their specific goals. The General Education Offices will work with NCSCE, SENCER Center for Innovation, and SENCER Hawaiʻi to provide professional development opportunities for UHM faculty both on campus and through participation in the SSI. The long term objective is that curricular and pedagogical reforms will increase first year students' interest in STEM as well as improving success rates in general education courses. *GEO will coordinate with the relevant faculty and Deans to bring the SENCER approach to rethink crucial gateway courses.*

### 5. Center for Teaching Excellence: NSF Teaching Science by Doing Science at UH Mānoa Project.

This NSF program is a collaborative project between the CTE, Physics and Astronomy and the Hawaii Institute for Geophysics and Planetology. The goal is to create a professional development program for science faculty addressing the studio-learning model of teaching (in this version, structuring classes around student investigations using archival data, and using these investigations to motivate the teaching of core course content). This program is also a vehicle for teaching and learning basic pedagogy as it relates to teaching science. *The next step is to train 4-8 faculty per year, starting off small. If the pilot is successful, the program will expand.*

Appendix A: Graduation Rate Analysis[1]

The graduation rate is the percentage of students in a given cohort who graduate within a specified period of time. According to the federal government's data collection system — the "Integrated Postsecondary Education Data System" (IPEDS), college students' graduation rates are measured based on the first-time, full- time cohort, which is formed by incoming undergraduate students who attend college for the first time (no prior college experience) and have a full-time credit load during their first semester. In higher education, the 4-, 5-,6-, and 8-year points are typically used to measure a first-time, full-time cohort's graduation rate.

The following graph shows rapid growth in 4-year graduation rates among first-time, full-time cohort students at UH Mānoa. From years 2010 to 2015, UH Mānoa's 4-year graduation rate increased over 10 percentage point, going from 17.5% (cohort 2006) to 27.9% (cohort 2011), which amounts to a 59.4% increase. To be specific, 17.5% of first-time, full-time cohort students who entered UH Mānoa in 2006 earned a bachelor's degree within 4 years, whereas 27.9% of first-time, full-time cohort students who entered UH Mānoa in 2011 earned a bachelor's degree within 4 years. A significant higher graduation rate indicates a rapid rise in students graduating on time.

The 5-year graduation rate has risen from 43.4% in 2010 (cohort 2005) to 50.6% in 2015 (cohort 2010) - a total of 7.2 percentage points, or a 16.5% increase. Because the 2005 cohort is the earliest cohort MIRO has data access to, the 6-year graduation rate can only be measured from 2011 (cohort 2005). The 6-year graduation rate shows a slight increase of 2.1% from 2011 to 2015, and the most recent 3 years' 8-year graduation rate has remained constant at around 61.4%.

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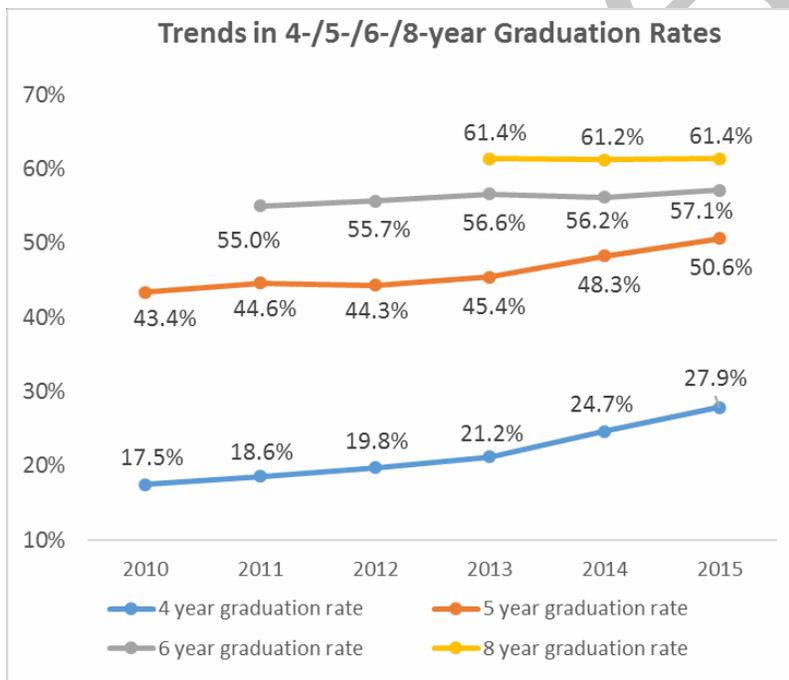
[1] Appendix A is a report produced by MIRO and can also be found on MIRO's website at:
http://manoa.hawaii.edu/miro/wp-content/uploads/2014/06/2015graduationratesbrief.pdf

To put UH Mānoa's graduation rates in perspective, peer institutions' graduation rates are provided using IPEDS' 2014 Data Feedback Report (DFR). Figure 11 of the DFR report provides the median graduation rates (cohort 2005) of UH Mānoa's 9 peer institutions. According to this report, the median of peer institutions' 4-year graduation rates is 29%, the 6-year graduation rate is 59%, and the 8-year graduation rate is 63%. The following graph shows UH Mānoa's 2005 cohort (same cohort as the peers' data) as having an 18% 4-year graduation rate, a 55% 6-year graduation rate, and a 61% 8-year graduation rate. As shown earlier, UH Mānoa's current graduation rates for 4-, 6-, and 8-years are 27.9%, 57.1%, and 61.4% respectively.

For readers' information, UH Mānoa's peer list was created in 2012 and was approved by the Board of Regents (BOR) in the same year. Peer institutions were chosen by using similar characteristics to UH Mānoa. MIRO's analyst used cluster analysis and IPEDS data to identify 9 peer institutions. Our peer institutions can be found on the MIRO website.
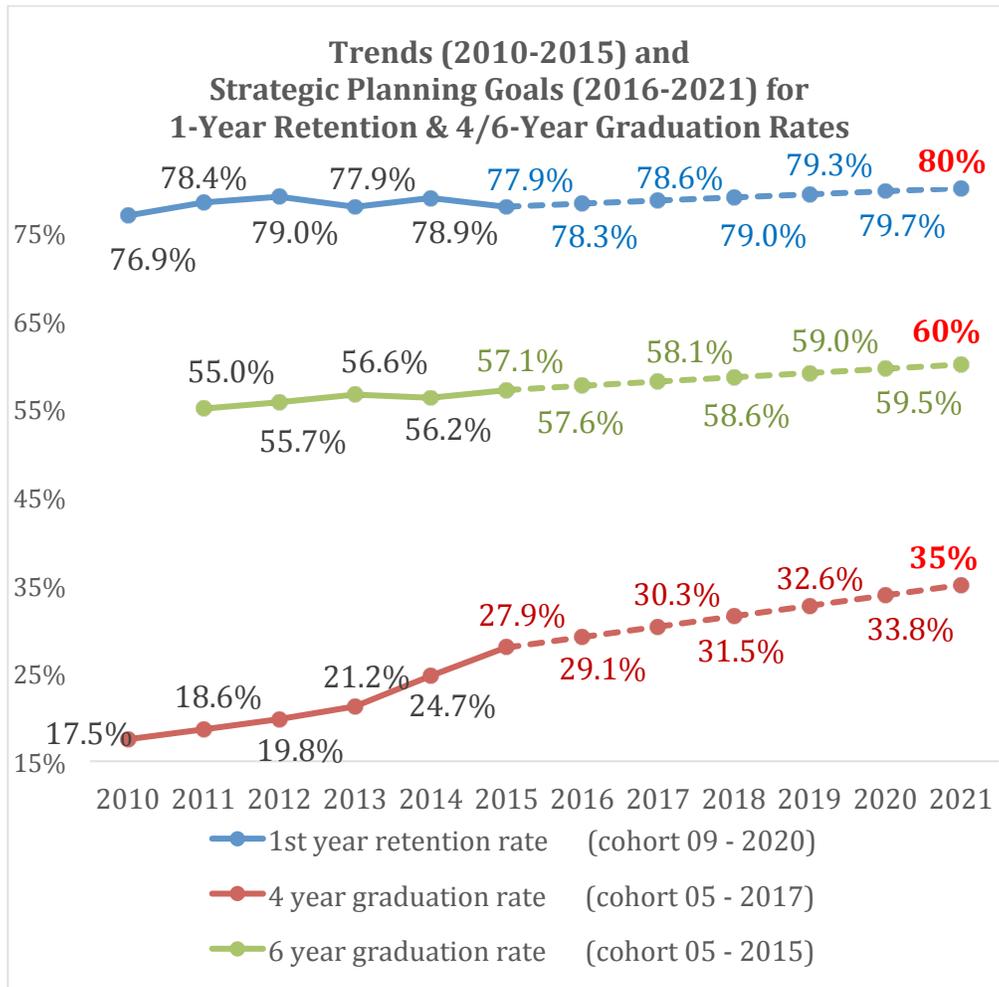
Figure 11. Bachelor's degree graduation rates of full-time, first-time degree/certificate-seeking undergraduates within 4 years, 6 years, and 8 years: 2005 cohort

NOTE: The 6-year graduation rate is the Student Right-to-Know (SRK) rate; the 4- and 8-year rates are calculated using the same methodology. For details, see the Methodological Notes. N is the number of institutions in the comparison group.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS): Winter 2013-14, 200% Graduation Rates component.

Appendix B: Enrollment Trends[2]

**Trends (2010-2015) and
Strategic Planning Goals (2016-2021) for
1-Year Retention & 4/6-Year Graduation Rates**

1st year retention rate (cohort 09 - 2020)
4 year graduation rate (cohort 05 - 2017)
6 year graduation rate (cohort 05 - 2015)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1st year retention rate (cohort 09 - 2020)	76.9%	78.4%	79.0%	77.9%	78.9%	77.9%	78.3%	78.6%	79.0%	79.3%	79.7%	80%
4 year graduation rate (cohort 05 - 2017)	17.5%	18.6%	19.8%	21.2%	24.7%	27.9%	29.1%	30.3%	31.5%	32.6%	33.8%	35%
6 year graduation rate (cohort 05 - 2015)		55.0%	55.7%	56.6%	56.2%	57.1%	57.6%	58.1%	58.6%	59.0%	59.5%	60%

[2] Data produced by MIRO.

Appendix C: Further research planning and discussion items

Tuition adjustment incentives to address Non-Resident Retention and Graduation Rates at UHM.

The difference in retention rates and ultimately graduation rates between Resident and Non-Resident students continues to be significant. In several previous studies, Non-Resident students and parents often cite the lack of larger financial assistance packages and/or scholarships as a primary reason why Non-Resident students do not continue at UHM and return to the mainland.

Currently, the largest clusters of Non-Residents come from WUE states such as California, Colorado, Washington, Oregon, and Arizona. Non-Resident students pay 150% of what Resident students pay in in-state tuition. WUE requires that a state can require no more than 150% of Resident tuition, but it does not bar a state from lowering the rate below 150%.

The current proposal would lower the tuition WUE students are charged by 10% (to 140% resident tuition) if they meet the following criteria:

1.   the student continues into their sophomore year in good academic standing

2.   the student has a declared major, and

3.   the student is making satisfactory progress to degree.

The proposal also extends the 10% reduction to junior and senior year. This means that if the WUE student with a declared major continues to make satisfactory progress to degree into their Junior and Senior years, they will be charged 130% and 120% respectively. The specific dollar amounts would not be fixed but would be based on and depend on the amount of Resident tuition charged in any given year. The saving can be automatically deducted from the tuition charged or returned to the student in the form of a Non-Resident Grant.

This proposal addresses three issues. One, we, as an institution, must recognize the rising cost for Non-Resident students to remain at UHM and in Hawaiʻi past the first year and the additional costs of students being far from their homes. Meanwhile, we must also acknowledge that Resident student families have a long term investment in UHM, and thus, some differential between tuition for Non-Resident and Residents is fair and warranted. Second, if the number of Non-Resident students increases significantly as a result of this financial proposal, the new tuition revenues will more than likely off set the 10% adjustments per year. Third, this plan could provide an excellent selling point for recruitment to Non-Resident parents trying to cover the growing cost of providing an excellent education. It might be the leverage we need to actually increase the number of students entering, persisting and seeking to graduate from UHM.

NSSE Results and analysis.

MIRO administered the National Survey for Student Engagement (NSSE) in spring, 2015. Aiming to use NSSE data to improve student success, three focus areas were identified: supportive environment, diverse perspectives, and student accountability. Collaborating with various offices on campus, MIRO will conduct multiple presentations with different constituencies regarding sharing and using NSSE results, and more data will be collected from different units to identify current efforts and/or initiatives in the three focus areas.

Research the implication of holds on student records for ongoing student success.

Research needs to be done to identify how significant a problem holds on registration is for current students. The registrar provided a report of hold data that suggests there are numerous types of holds placed on registration, but it is difficult to fully understand the impact. Anecdotal evidence suggests that holds can hinder registration, especially health, library and housing holds for fines or payments.

Research and provide analysis of students who leave after the first year versus those who stay.

In order to best address our retention issues between the freshman and sophomore years, additional research into why students leave must be conducted.

Compare transfer students' success at UHM based on transfer pathway (Ka'ie'ie, Auto Admit, Standard Application).

There are currently three different routes to UH for transfer students: standard application, Ka'ie'ie Degree Pathway Program, and Automatic Admission. Both the standard application and the Ka'ie'ie program require student planning and an application fee, while the automatic admission route is an electronic offer sent to students with no application fee. Data is needed to see if there is a difference between transfer students entering UH via each pathway.

Review and revise registration processes.

Registration processes are confusing for first year students. The difference, for example, between priority, standard and transfer registration dates is unclear. There is a need to review and revise the registration process for all students.

Develop better registration processes for Veterans.

Currently, undergraduate and graduate students who are veterans need to navigate many obstacles to register for classes using their military and VA benefits. Veteran students who enroll in higher education with appropriate campus-based support services are more likely to persist and graduate than their non-veteran student peers. Hawai'i is a highly militarized location, and Mānoa can attract the large population of veterans, who are currently enrolling

at higher rates at local for-profit campuses, by increasing support for the Office of Veteran Student Services and providing more streamlined support services.

Plan regarding billing.

There are concerns about how the timing of registration for continuing students, transfer students and freshmen, and the presentation of the student bill for registration work together.

Freshman Convocation.

In the suggested additions to the action plan, there's mention of a Freshmen Convocation, which Student Housing Services can definitely play a role in developing and/or supporting.

Common Book.

To promote student engagement and provide additional continuity to the freshman learning experience, a common book program could be implemented. Each year, a different book could be chosen and additional programming could be developed associated with the book.

Upper division general education.

An unusual aspect of our general education program is that the focus requirements are mostly upper division in nature. In many cases, these are not outlined in the four year degree plans. We need to review the number and nature of focus courses in each major to see if student progress is being hindered by having to go outside the major to fulfill these requirements in ways that may require extra courses and credits for graduation.

High credit students.

Both students who fulfilled all their requirements at Mānoa and those who transferred in typically take more than the required 120 credits to graduate. We need to do some transcript analysis of high credit students and perhaps some interviews in order to ascertain what structural issues there might be leading to the higher number of credits.

Academic Actions.

Several years ago, we changed our practice concerning putting students on academic probation, and we have been generally happy with the results.   However, it is probably the time to ask, are we doing enough for these students? Is there more we could be doing for at-risk students in general?

STAR for Graduate Programs.

The Office of Graduate Education is working with the STAR team to pilot the utilization of STAR for graduate degree programs. Many graduate students are confused about whether

they have completed curricular requirements and what the milestone steps are that they should attain by which semester or year in the graduate program.

Graduate Student Professional Development Series.

To help graduate students build the skill set they need for success in graduate school and beyond, the Office of Graduate Education is revising and updating the PFF (Preparing Future Faculty) and DCS (Dissertation Completion Series) programming. The Spring 2016 series will offer an array of topics for graduate students at all phases of their graduate education. Some examples include financial literacy, writing workshops, IRB sessions, grant writing, publishing, etc. A longer range plan is to investigate credentialing a professional development series.

3-Minute Thesis Competition.

The Three Minute Thesis offers the opportunity for graduate students to cultivate presentation and research communication skills. Graduate students have to consolidate their ideas and crystalize their research discoveries and its significance to a lay audience (with 1 PowerPoint slide, no animation, and in 3 minutes). This competition started at the University of Queensland but the concept grew to many universities across the world. The Office of Graduate Education will have a soft launch of the competition in April of 2016.

Mānoa Sophomore Experience Support Programs/Services:

The Mānoa Sophomore Experience (MSE) may implement the following programming ideas to assist with the retention of first to second-year students. Implementation would require MSE to be a separate office with a director and adequate support staff.

> **Summer Bridge Program** - Since the largest number of students are lost from first to second year, a new summer bridge program, in which students would enroll in a summer course, have various involvement activities and meet in a once a week engagement class could keep students on the island.

> **Peer Mentoring Program** - This program would pair a successful upperclassman with an underclassman for personalized peer mentoring (social, emotional, career and classroom topics) throughout the first and second year to openly share their concerns / challenges, receive advice and support and learn about the sophomore slump.

> **Professional Success Coaches** – Coaches could assist with some advising, but focus on other services targeting co-curricular and career engagement and opportunities in order to: Provide support to help students relate academic/educational goals to life (personal/professional) goals; identify resources to enhance both academic success and personal development; and assist in developing plans of action to achieve goals.

Mentoring by Faculty - Freshmen and sophomores would be partnered with a faculty mentor ideally from the student's major to provide students with insight into that major, academic requirements, career opportunities, involvement opportunities, advice and success tips from a faculty perspective.

Events/Activities:

Sophomore Retreat - A specially selected group of 15-20 second-semester freshmen and sophomores would participate in an off-campus, two-day retreat including activities promoting leadership, team-bonding, civic responsibility, diversity, and self-reflection on past and future experiences.

Outreach at Housing - Host activities in the freshmen and sophomore residence halls to promote team bonding, connections amongst students and UHM, and the personal and academic skills to be successful at UHM.

Celebration Event - At the end of each semester, all freshmen, sophomores, and peer mentors who have participated in any of the MSE activities would convene to celebrate the accomplishments and conclusion of that semester.

Freshmen and Sophomore Newsletter - A monthly newsletter would provide these students with important information relevant for their academic standing such as narrowing down their major options or looking into study abroad opportunities. A "student of the month" section could feature the accomplishments of an outstanding freshmen or sophomore.

Sophomore Scholarships

MSE currently offers fellowships specifically for second-semester freshmen and sophomores via STAR to recognize exemplary freshmen / sophomores, and motivate them to persevere at UHM. The total amount currently available is $3,000 and last year was divided amongst 5 recipients. If the funding allocated was increased to $20,000, it would reach 3 times as many students.

Appendix D: SERG Committee Members

Krystyna Aune -- Dean, Graduate Education
Jennifer Brown -- Advisor, Mānoa Transfer Coordination Center
Ron Cambra – Assistant Vice Chancellor for Undergraduate Education
Robert Cooney – Chair, Faculty Senate Executive Committee
Kyle Duser -- Director, First Year Programs
Yao Hill – Mānoa Assessment Office
Megumi Makino-Kanehiro – Director, Mānoa Advising Center
Amy McKee, GSO Graduate representative
Gary Rodwell – Information Technology Specialist, Office of Undergraduate Education
Amy Schiffner – Associate Professor, Department of Dance
Roxie Shabazz – Assistant Vice Chancellor of Enrollment Management and Director of Admissions
Rosemarie Woodruff -- Director, Learning Assistance Center
Yang Zhang – Director, Mānoa Institutional Research Office (MIRO)
Kelly Zakimi (Undergraduate rep, ASUH)

Appendix E: Detailed Graduation Rate Spreadsheet