GUIDED SELF-PLACEMENT TASK FORCE REPORT: SPRING 2016 TERM



Executive Summary

- To evaluate the first semester results of guided self-placement, Dr. Higdon convened a task force consisting of:
 - Andrew Aberle, Math Instructor
 - Jennifer Dunkel, English Instructor
 - o Matthew Simpson, College Director of Research and Strategic Planning
- The task force was also directly assisted by:
 - o Vivian Elder, Dean of Academic Services
 - o Abby Benz, Assistant Director of Research and Strategic Planning
 - o Misty Tollett, Research Analyst
- The goal of this task force was to conduct a robust assessment effort to evaluate the ongoing impact of guided self-placement and identify opportunities for improvement moving forward.
- This task force first met in December 2015 and continued to meet weekly throughout the spring 2016 semester to plan and implement data collection.
- Quantitative data (including enrollment, withdrawal rates, first week movement between classes, midterm grades, support center usage and final grades) was collected and analyzed throughout the semester.
 - In order to provide results in time to act on any accepted recommendations, grades were analyzed before the completion of the processing period for Incomplete grades. The final numbers will change as this processing occurs, but the number of affected grades is too small to change the substantive findings.
- Qualitative data collection mechanisms included:
 - A survey to all English, reading, and math instructors sent during the 5th week of classes and completed by 102 instructors.
 - A survey to all instructors in other subjects with courses that could be affected by prerequisite changes sent during the 10th week of classes and completed by 152 instructors across all divisions.
 - An online open portal for instructor feedback, which remained available throughout the semester, and received 56 submissions from 47 faculty representing all four divisions.
 - Large and small group open faculty comment sessions were held, attended by a total of 121 faculty representing over 30 different subjects.
 - A survey to all students in relevant English, reading, and math courses during the 10^{th} week of classes and completed by 660 students.
 - Two faculty work-groups evaluating reading and affective behaviors.
 - Feedback received through governance council meetings.
 - Review of external literature and best practices.

- Analysis of this research led to 14 findings:
 - 1. Guided self-placement increased enrollment in college level courses and decreased enrollment in developmental level courses.
 - 2. Very few students took advantage of the opportunity to move between class levels in the first week.
 - 3. Guided self-placement did not have an effect on college-wide withdrawal or course completion rates but did have an effect within math and English courses.
 - 4. Guided self-placement increased the number of first-time students who enrolled in and passed gateway math and English courses.
 - 5. Support center usage increased among specific groups and courses, although overall visits decreased.
 - 6. Students who visited a support center for their course were significantly more likely to be successful.
 - 7. High School GPA, for recent graduates, and date of registration were identified as strong predictors of student success in English and math courses.
 - 8. Math and English faculty reported moderately lower levels of student preparedness relative to past terms.
 - 9. Faculty in other courses affected by prerequisites reported no significant change in student preparedness relative to past terms.
 - 10. Students were satisfied with their course level placement and indicated that the skill levels required were consistent with their expectations.
 - 11. The leading decision factor for OTC students' course level selection was their degree or career plan; OTC-provided resources were not widely used.
 - 12. Instructors served as the primary support resource for students outside of class.
 - 13. The lack of soft skill abilities and understanding of college expectations represented a growing barrier to student success.
 - 14. The majority of faculty comments submitted to the open portal this semester indicated a higher workload, due to student preparedness levels and/or soft skill challenges.
- Based on these findings, the task force offers the following recommendations:
 - 1. Integrate completion of the guided self-placement process into student onboarding and incorporate research findings to improve placement results.
 - 2. Increase focus on the provision of soft skill training and early establishment of college expectations for students with risk factors.
 - 3. Increase the promotion and availability of support resources for students and faculty in English, reading and math.
 - 4. Continue to monitor and evaluate guided self-placement results.

NOTE: these findings and recommendations are organized by data source (instrumentation), and the order is not intended to convey level of importance.

Finding 1: Guided self-placement increased enrollment in college level courses and decreased enrollment in developmental level courses.

In order to account for students who took advantage of the opportunity to move classes in the first week, course enrollment after the first week of spring 2016 was compared to spring 2015 enrollment at the equivalent point. This analysis showed that enrollment in college level math and English courses increased while developmental course enrollment declined.



Net enrollment decreased by 13% (527 enrollments) in these math courses, and decreased by 10% (215 enrollments) in these English courses. This decline may be due to overall enrollment trends and the discontinuation of 040 level courses; however, it also suggests the possibility that more students choose to defer enrollment in an English or math course to a later term.

Combined enrollment for developmental reading courses at this point in spring 2015 was 288 while spring 2016 developmental reading enrollment was only 78.

Finding 2: Very few students took advantage of the opportunity to move between class levels in the first week.

Only 1% of English or Math students took advantage of the opportunity to move between course levels within the first week. Faculty reported many students who received a recommendation to move to a lower level based upon their first week diagnostic did not follow the advice.

Faculty survey comments identified course scheduling issues as a possible barrier for student movement in the first week. There was a higher rate of movement at the Table Rock Campus, which

took a different approach to scheduling, but the number of students moving is still too small for meaningful conclusions.

Finding 3: Guided self-placement did not have an effect on collegewide withdrawal or course completion rates but did have an effect within math and English courses.

The implementation of guided self-placement, and discontinuation of Bridge to Success, effectively removed pre-requisites for most entry level courses across a broad set of subjects. Due to the lower number of new students in the spring, any effect of guided self-placement on college-wide completion and withdrawal rates would be limited. However, changes in readiness levels would still be noticeable in the overall trends due to guided self-placement's effective removal of prerequisites for entry level courses. The findings show that compared with spring 2015, OTC's overall course completion rate (76.2% to 76.1%) and withdrawal rate (20.1% to 19.9%) stayed effectively the same.

Course Completion Rate Trends				
	Spring 2015		Spring 2016	
Course	Completion Rate (D or Better)	Withdrawal Rate	Completion Rate (D or Better)	Withdrawal Rate
All Courses	76.2%	20.1%	76.1%	19.9%
ENG-050	62.6%	28.7%	63.9%	30.7%
ENG-101	67.3%	26.6%	61.9%	31.4%
MTH-050	63.6%	30.2%	51.5%	38.3%
MTH-105	55.3%	37.0%	58.4%	33.6%
MTH-110	61.9%	30.3%	51.2%	37.9%
MTH-128	76.6%	19.6%	58.1%	31.1%
MTH-130	63.4%	28.9%	60.4%	31.0%

Looking specifically at the affected math and English courses does reveal some change from last year. Completion rates increased slightly in ENG-050 but declined in ENG-101 compared with spring 2015.

The change is most pronounced in math courses and in MTH-128 specifically. A portion of this change may be due to the significant increase in the number of students allowed to register for MTH-128 due to guided self-placement (a 235% increase, 372 more enrollments, over spring 2015). MTH-128 performance, while significantly lower and more in line with other gateway math courses, increased completions by 155% compared to the spring 2015 semester (121 additional completions).

Finding 4: Guided self-placement increased the number of First Time students who enrolled in and passed gateway math and English courses.

Completion of a gateway math or English course within a student's first term is a strong predictor of long-term success measures (such as year-to-year persistence and degree completion). First time students for spring 2016 are most likely to be affected by the guided self-placement implementation since, unlike continuing or returning students, they would not have gone through the Compass placement process. Compared with spring 2015, there were significant increases in the number of

first time students who enrolled in college level gateway math and/or English courses (33% increase) and who passed at least one of those courses in their first term (27% increase).



With the first-time enrollment increase (33% over spring 2015) in these courses, however, there is also a higher number of students attempting but not passing these classes within their first term. These are students who could potentially benefit from additional, targeted support and/or improvements to the guided self-placement instrument. It will also be important to track these students moving forward to see how their outcomes differ from similar past students who would have started in a developmental course.

Finding 5: Support center usage increased among specific groups and courses, although overall visits decreased.

Overall, the number of support center (Speckman Tutoring & Learning Center, Carol Jones Writing Center, Speech Communication Center, Academic Support Center) visits decreased in spring 2016 compared with spring 2015 (10% decrease). An analysis of visits over time shows that this decrease primarily occurred in the final portion of the semester. Prior to this final portion of the term the number of support center visits, relative to the number of students enrolled, was slightly above last spring. Feedback from support center staff also suggests that the level of need for students visiting was greater this semester compared with past semesters.



Support center visits for some specific courses affected by guided self-placement did see significant increases. For example, enrollment for MTH-128 increased by 235% but support center visits for the course increased by 323% (204 visits in spring 2015 to 862 spring 2016). The number of first-time students visiting the support center also increased over spring 2015 (4% increase).

Finding 6: Students who visited a support center for their course were significantly more likely to be successful.

Consistent with past terms, results from spring 2016 showed that students who visited a support center for their class were significantly more likely to succeed than students who did not. This effect is particularly strong in English courses which saw success rates above 80% for those who visited compared with rates below 50% for those who did not. The effect is less pronounced for Math courses but still present.

Effect of Support Center Visit on Student Successful Completion Rate (C or Better) in Course			
Course	Did Not Visit Support Center	Visited Support Center for Class	Visited Support Center, but not specifically for class
All Courses	66%	75%	72%
ENG-050	45%	81%	54%
ENG-101	49%	80%	57%
MTH-050	40%	43%	42%
MTH-105	45%	65%	57%
MTH-110	36%	46%	35%
MTH-128	42%	47%	48%
MTH-130	46%	53%	54%

Because support center visits are typically voluntary, it is difficult to parse out the causal nature of these results: how much of the increased success is because students who choose to visit possess affective characteristics that make them more likely to be successful and how much is because of the

support received during the visit(s)? Looking at students who visited a support center only after receiving a failing grade at midterm finds that support center usage still has a significant effect. While it still isn't possible to conclusively state what percentage of the increases shown above are due to the support received, the evidence does suggest that support makes a significant positive difference.

Finding 7: High School GPA, for recent graduates, and date of registration were identified as strong predictors of student success in English and math courses.

In the task force's quantitative analysis plan, a key goal was to identify whether there were factors that were predictive of student success that could be used to improve the guided self-placement instrument. Student course outcomes were defined into a dichotomous variable (successful or not successful based on their grade) which allowed for the use of a multivariate logistic regression model to evaluate potential predictive factors. This analysis was first conducted using midterm grades to provide early results with separate models for: developmental math, developmental English, college level math and college level English. Records from both spring 2015 and 2016 were included with a 2015 control variable to assess any change in performance between terms.

The midterm results identified two factors as highly predictive of student success within every category: a high school GPA of 3 or above and whether the student registered at least one week before the start of class. The results also showed that students' midterm math grades were better in 2015, controlling for these other variables, but that there was no significant difference in English midterm grades between the two terms.

Highly Significant (p<0.001) Predictors of Student Success (Midterm Grades)				
Variables	Developmental Math	Developmental English	College Level Math	College Level English
First Time Student				
Transfer Student				
Visiting Student				
No Recent High School GPA on Record			Positive Predictor	Positive Predictor
High School GPA of 3 or Above	Positive Predictor	Positive Predictor	Positive Predictor	Positive Predictor
No ACT Score on Record				
ACT Score (in Subject)			Positive Predictor	Positive Predictor
Springfield Class				
Online Class	Negative Predictor		Negative Predictor	Negative Predictor
Registered at Least One Week Before Class	Positive Predictor	Positive Predictor	Positive Predictor	Positive Predictor
Female Student	Positive Predictor			Positive Predictor
2015 Term	Positive Predictor		Positive Predictor	
200 Level Course	Not Applicable	Not Applicable	Positive Predictor	

Results from logistic regression model using R version 3.2.4

After the conclusion of the term, this analysis was run again using final grades and with the addition of a student's ACT reading score, based on feedback, as an evaluated factor. As with the midterm analysis, a student's date of registration relative to the start of class was the best predictor of success. High school GPA also remained a strong predictor for every category except for developmental English, with the same results shown for the 2015 term control variable.

Highly Significant (p<0.001) Predictors of Student Success (Final Grades)				
Variables	Developmental Math	Developmental English	College Level Math	College Level English
First Time Student			Negative Predictor	Negative Predictor
Transfer Student				Negative Predictor
Visiting Student				
No Recent High School GPA on Record			Positive Predictor	Positive Predictor
High School GPA of 3 or Above	Positive Predictor		Positive Predictor	Positive Predictor
No ACT Score on Record				
ACT Score (in Subject)			Positive Predictor	
ACT Reading				
Springfield Class				Negative Predictor
Online Class	Negative Predictor		Negative Predictor	Negative Predictor
Registered at Least One Week Before Class	Positive Predictor	Positive Predictor	Positive Predictor	Positive Predictor
Female Student		Positive Predictor		Positive Predictor
2015 Term	Positive Predictor		Positive Predictor	Positive Predictor
200 Level Course	Not Applicable	Not Applicable	Positive Predictor	
Results from logistic regression model using R version 3.2.4				

These results suggest that a student's soft skill abilities are highly important in determining student success and that we have access to data which is a proxy for these abilities (registration date) and could be used to help better place students and identify those who may benefit from additional assistance. The significance of a student's high school GPA also suggests that for recent graduates this data point that could be used alongside other information about their high school and ACT performance to better place them in the appropriate course level.

These findings also suggest the need for additional long-term study on the effect of these factors on cohort performance under guided self-placement.

Finding 8: Math and English faculty reported somewhat lower levels of student preparedness relative to past terms.

Math (51 faculty responses) and, to a lesser degree, English faculty (44 faculty responses) reported lower levels of student readiness on the faculty survey. At least half of both math (55%) and English (50%) faculty felt that their students were less prepared this term relative to past terms. An additional 16% of math faculty felt that their students were considerably less prepared while only 2% of English faculty felt the same.

In English, 46% of faculty reported the same level of preparation for their students while only 28% of math faculty reported the same. In both English and math, 2% of faculty reported that their students had higher levels of preparedness.

ENGLISH, READING AND MATH FACULTY PERCEPTIONS OF STUDENT PREPAREDNESS RELATIVE TO PAST TERMS



Reading faculty (3 faculty responses) did not report changes in their students' preparedness level, although it should be noted that this group, in terms of faculty and student enrollment, is much smaller when compared with the other two subjects.

These survey results reflect the point at which they were captured (5th week) and may have been different at other points in the semester.

Finding 9: Faculty in other courses affected by prerequisites reported no significant change in student preparedness relative to past terms.

The 10th week faculty survey was sent to all faculty teaching courses in subjects other than English, reading and math. Only faculty who taught courses that were not in selective admission programs and did not have prerequisites were asked to respond. 149 faculty, representing 42 different departments and all divisions, replied. The majority of these faculty responded that they did not see a change in their students' preparedness level relative to past terms. This was true for all three skill sets evaluated: reading (60%), writing (63%) and math (75%).

OTHER FACULTY PERCEPTIONS OF STUDENT PREPAREDNESS RELATIVE TO PRIOR TERMS



 \blacksquare Reading \blacksquare Writing \blacksquare Math

The majority of respondents to the survey taught in General Education (59%), but these findings were consistent across divisions.

These survey results reflect the point in time at which they were captured (10^{th} week) and may have been different at other points in the semester.

Finding 10: Students were satisfied with their course level placement and indicated that the skill levels required were consistent with their expectations.

Survey results of students (660 responses, 20% response rate) enrolled in developmental or gateway English, reading and/or math courses in spring 2016 found that the clear majority (85%) were aware of available developmental courses when selecting their class level. There is a group of students (8%) who were not aware of developmental course options and would have preferred to enroll in one. This group would have benefited from additional information in their course selection process.

Looking at student satisfaction with their chosen course level, 75% or more of students in each subject were satisfied with their choice: English (89%), reading (75%) and math (83%). Of those students not satisfied with their choice, dissatisfied English students were split between feeling that they placed themselves too low (6%) or too high (5%), most dissatisfied reading students would have preferred not to enroll in a reading class (19%) and most dissatisfied math students would have preferred a lower level class (14%).

STUDENT SATISFACTION WITH COURSE LEVEL

■ English ■ Reading ■ Math



The survey also assessed how course requirements for writing, math and reading skills in all courses compared with their expectations. The majority of students felt that the skills required were consistent with their expectations: writing (64%), reading (70%) and math (58%).

STUDENT PERCEPTIONS OF WRITING, MATH AND READING SKILLS REQUIRED IN ALL COURSES



Of the three subjects, students were most likely to feel that the math skills required by their courses were higher than expected (24%).

These survey results reflect the point in time at which they were captured (10^{th} week) and may have been different at other points in the semester.

Finding 11: The leading decision factor for OTC students' course level selection was their degree or career plan; OTC-provided resources were not widely used.

The student survey presented students with a list of decision factors, identified through internal research and an examination of similar surveys at other two-year institutions, and asked students to identify any that they used in selecting their English, reading and/or math course level. Consistent with the findings at other institutions, a student's degree or career plan was the primary decision factor (44%), with course availability the second most used factor (21%).

Student Decision Factor(s) in Selecting English, reading and/or math course level				
Factor	Percent of Students Used (Inclusive)	Percent of First-Term Students Used (Inclusive)		
Degree or Career Plans	44%	37%		
Course Availability	21%	25%		
ACT/Compass Score	18%	9%		
OTC Advisor Recommendation	14%	13%		
STAR Session	11%	22%		
OTC Guided Self-Placement Website	11%	16%		
Other	10%	10%		
Advice from Parent/Family Member	10%	14%		
OTC Instructor Recommendation	9%	5%		
Advice from Peer	8%	11%		
Length of time to graduation	8%	11%		
Cost	6%	7%		
Advice from High School Counselor or Teacher	5%	7%		

ACT/Compass scores were the third most used factor (18%), reflecting the fact that more students in the spring are returning students who would have completed the prior placement process.

The next three factors are OTC provided resources: OTC advisor recommendation (14%), STAR Session (11%) and OTC Guided Self-Placement Website (11%). Looking only at survey respondents who are in their first term at OTC, the group we would most expect to complete the guided self-placement process, still only 16% listed the website as a decision factor and only 13% listed an advisor's recommendation as a decision factor. These are higher rates of usage compared with returning students, and more first term students also cited the STAR Session as a decision factor (22%), but still not at the expected level of usage.

Finding 12: Instructors served as the primary support resource for students outside of class.

Survey results show that English, reading and/or math students in need of additional assistance are most likely to turn to their instructor. The top support resources students used was contacting their instructor outside of class (46%) while 19% also made use of instructor office hours.

Support Resource(s) Used by Students	in Developmental or Gateway		
English, reading and/or math courses			
Resource	Percent of Students Used (Inclusive)		
Contacting instructor outside of class	46%		
Another student	37%		
OTC tutoring services	28%		
Instructor office hours	19%		
Private tutoring or outside assistance	9%		
Other	4%		

37% relied upon their fellow students for support, making that the second most used resource. OTC providing tutoring services was the third most used support resource (28%).

These results suggest that faculty efforts to provide students with additional support was a key factor in the consistent success and withdrawal rates observed in the first term of guided self-placement.

Sample Faculty Comments on Student Preparedness

- "Students are simply not prepared to put the time in that it requires to master the material. We worked through a unit and each day went great. But then homework was terrible because they would wait until the last minute to try and throw it together."
- "So in summary, at this point in the semester, I am most worried about those students who aren't coming to class or who aren't doing the work. It is difficult to help students who don't attend class."
- "I have several students who have already 'checked out' of the class either by not coming to class prepared (not doing the reading), arriving considerably tardy, or not arriving at all."
- "Readiness doesn't seem to be the problem, it's their Time Management that is the on-going obstacle."
- "There seems to be a lot of soft skills missing from the students. Showing up to class on time, turning in assignments, reading the instructions, navigating a website before asking where something is located. These are very basic things that I'm noticing more and more are missing from the class as a whole."
- "Students do not seem to want to read their course work prior to class. I am not sure if this is a habit learned in high school, but it is like pulling teeth to get them to read the text. I also have trouble with plagiarism every semester."

Finding 13: The lack of soft skill abilities and understanding of college expectations represented a growing barrier to student success.

The challenge of soft skills is not necessarily a result of self-placement, or new to this term, but a strong theme in faculty comments was that the largest barrier to student success was a lack of soft skills (time management, study skills, punctuality, etc.) and/or not understanding the expectations of college classes. A sampling of comments on this theme can be found in the sidebar to the left.

Feedback from faculty on this issue is supported by the fact that a student's registration date relative to the start of classes, which is a proxy for soft skills such as level of organization and motivation, is consistently one of the strongest predictors of student success.

If students do not attend class or understand that assignments must be completed, no amount of quality instruction or available subject area tutorial support is likely to put them on the path to success.

OTC has also heard from area employers that soft skills are highly valued in potential employees and are lacking in many candidates.

Sample Faculty Comments from Open Portal

- "My students have had more major medical crises than ever before. I have had XXX, one XXX, one XXX, one student with XXX, one brother who had XXX, and one brother XXX. This is all in one class. All but two of those students are still attending, but most are not passing."
- "(Student) said his XXX class is consuming his time and that he knows it is taking away from his other classes.... this student's situation is a good example of how a significant deficiency in one class can have an impact on another class."
- "I do not believe that I was able to get much useful information about student success in the first week from the XXX diagnostic, but I couldn't say whether another method would have done any better."
- "We have long been (rightly) encouraged to make the beginning of the semester upbeat, to start out on a good note, to have some positivity. Now, at the beginning of XXX, I have to tell my students that many of them are probably in the wrong class. . . It wasn't at all upbeat for the first week of class."
- "This class is immature and not ready for college. I have chronic tardies. During a test, 8 students were tardy –some as late as 30 minutes for a 50-minute exam! Because of this, I instituted a policy of locking the door after 5 minutes. Tardy students will not be admitted. I've had to spend class time talking to my students about college expectations."

XXX = specific information redacted for confidentiality

Finding 14: The majority of faculty comments submitted to the open portal this semester indicated a higher workload, due to student preparedness levels and/or soft skill challenges.

While some faculty did share that they saw no difference in the preparedness levels of their students, the majority who participated in the open portal (approximately 60%) did report at least some difference.

Many of these comments identified soft skill issues, or life challenges manifesting as soft skill issues, as a growing challenge to student success and burden on instructors. This feedback is consistent with the faculty survey results.

While the grade results show that many of these students can succeed at the level which they have placed themselves, this feedback suggests that many require additional support to do so and that this is adding to faculty workload. This is also supported by what students tell us about their primary resources for support as they rely primarily on their instructor for support outside of class.

Concern was also expressed about the difficulty of creating a positive class climate in the first week while also having to administer a diagnostic that may inform some students that they are in the wrong class level.

Recommendation One: Integrate completion of the guided selfplacement process into student onboarding and incorporate research findings to improve placement results.

The survey results from spring 2016 showed that a majority of students did not use the guided selfplacement process or advising resources to select their English, reading or math course level. To ensure all students benefit from guidance, completion of the guided self-placement process should become an integrated step for student onboarding.

The lack of significant movement by students in the first week, combined with concerns expressed by faculty, provides further support for ensuring that students use available resources and that those resources are improved to best resolve placement issues before the start of class.

- The guided self-placement instrument could be incorporated into a different platform, such as OTC's new online orientation software, to better integrate into the onboarding process while still being made available as a resource to prospective students.
- For recent graduates, high school GPA has consistently shown to be a strong predictor of success. Screening questions at the beginning of the self-placement process could help best place those students using known factors. In addition to high school GPA, these screening questions could include their ACT score within each subject, as well as questions on the number and type of classes students completed within that subject on high school. Faculty from each discipline could help map which types of high school courses within each subject cover the pre-requisite skills for each OTC course level.
- A student's level of soft skills, for which registration date relative to the start of classes is an effective proxy, should also be incorporated more significantly into the process. This could aid in proper placement as well as help to identify those students who would most benefit from additional soft skill training to help prepare them for success.
- Students identified their degree or career plans as their primary deciding factor in course selection. This could be incorporated in the self-placement process by the inclusion of an early question identifying a student's plans and then providing them a description of the skills required for success within that field. This could help all students understand that their English, reading or math course is not simply a box to check for graduation but provides valuable skills for success. It could also help ensure that a student's course selection, particularly in math, best aligns with their plan of study.
- Integrate the Adult Education and Literacy (AEL) and English as a Second Language (ESL) resources into the placement process to inform students of their availability.
- Further improve the guided self-placement process' utility for students by analyzing questions for readability and the presence of unnecessary jargon. Provide practical questions and information that help establish student expectations for the level of skills required in each area to succeed in college courses.
- If possible, collect individual student responses to the self-placement questions and provide the results to advisors (to help provide appropriate guidance) and instructors (to have an earlier understanding students' skill levels in their classes).

Aligned with Findings: 1, 2, 7, 8 and 11

Recommendation Two: Increase focus on the provision of soft skill training and early establishment of college expectations for students with risk factors.

Feedback from faculty, combined with quantitative analysis showing that factors strongly related to students' soft skill abilities are the best predictors of success, shows that the lack of soft skills and/or an understanding of college expectations represent an increasing barrier to student success. Without these abilities, students are unlikely to succeed while at OTC or after leaving OTC to pursue a career or further education.

- A more intrusive approach to providing support for those students identified as needing it could better help promote student success. With most resources in this area currently provided on a voluntary basis, those students most likely to benefit from these resources are often also the least likely to use them without outside intervention. For example, new students with known risk factors could be strongly encouraged to enroll in a soft skills course (such as CAC-120).
- Evaluate and develop soft skill course offerings to ensure that they meet the needs of OTC's student population. Consider creation of co-requisite soft skill courses paired with developmental and/or gateway English, reading and math courses.
- Because online courses often require higher levels of soft skills for student success, and have higher withdrawal rates, it is particularly important that students are made aware of course expectations prior to starting and that soft skills support is also available to students in an online format.
- Soft skill development workshops should be held throughout the semester to help students who may need assistance in a specific area and provide ongoing support resources that students can be directed to as needs are identified.
- Provide mechanisms faculty can use to help establish early expectations for their course and professional development opportunities to aid in their use.
- Increase collaboration with area high schools to establish expectations early and better prepare future OTC students.

Aligned with Findings 7, 8, 12, 13 and 14

Recommendation Three: Increase the promotion and availability of support resources for students and faculty in English, reading and math.

The results from guided self-placement's initial term of implementation suggest that students generally can succeed in their level of placement but that they often require additional support to do so. To better provide for student success, while also reducing the additional burden this has created for faculty, additional support resources for both students and faculty would be helpful.

Support resources beyond the instructor should help to provide the needed individualized support without monopolizing instructor time at the potential expense of other students.

- Ensure that support centers have the capacity and ability to meet student demand in each subject and at each location or course modality and that instructors have the ability to refer students to receive needed support. Analysis of support center visits consistently shows that these visits are highly effective in improving student performance and should be a key resource in providing this additional external support.
- Evaluate the need for creating a reading support center given the identification of reading skills as a barrier to student success across disciplines.
- Expand the support center mentoring programs to provide additional opportunities for peer-to-peer assistance.
- Utilize instructors who previously taught developmental courses to provide subject area tutorial support for students.
- Increase the availability of co-requisite PASS courses in the English department and evaluate the implementation of similar co-requisite courses for math. Evaluation of the co-requisite model for math courses, or additional support resources, is particularly important because it is the subject showing the most change so far from guided self-placement. The co-requisite model allows instructors to effectively continue providing students with additional support outside of traditional class-time.
- Provide subject area workshops and boot camps for students who do not need a full developmental course but could benefit from some remediation. Identify ways to better promote attendance for students who would benefit.
- Create accessible websites with links to useful external and internal support resources by subject that can be provided to students at the beginning of relevant courses.

Faculty in these courses could also benefit from additional support resources:

- In the surveys, many faculty shared impressive classroom techniques and innovative approaches used in their classes. It would be beneficial to create a mechanism for the sharing of these experiences to allow for collaboration among faculty.
- Provide professional development to faculty to aid in dealing with students that have challenging soft skill levels. This should include education on the resources that are available to help students dealing with life and/or financial challenges as well as how to refer students to receive assistance.
- Provide support for faculty to identify students with reading deficiencies and inform them of the resources available to assist those students.
- Develop a referral system for instructors to send students identified as needing additional assistance to the appropriate support center. Create different visit types to better align with the varying skill levels of students in need of additional support.
- Re-consider the first week assessment process to ensure that it best aligns with creating a successful classroom environment and provide improved guidance.
- Ongoing evaluation of faculty feedback and support needs.

Aligned with Findings 3, 5, 6, 8, 12 and 14

Recommendation Four: Continue to monitor and evaluate guided self-placement results.

While results from the spring term did provide valuable information, there will be a significantly larger number of first-time students in the fall and it will take several terms to fully transition away from the institutional memory of students who went through the old placement process. Continued data collection, both quantitative and qualitative, is required to assess the impact of self-placement on this larger group. This continued monitoring will also allow for the assessment of any reforms implemented prior to the fall term and allow for the possible identification of additional reforms or policy changes. It will also allow for the assessment of more comprehensive measures of student success including: year-to-year persistence, graduation rates, transfer rates and employment outcomes. This research should also include regular, meaningful analysis of student learning outcomes in affected courses and expand qualitative data collection to include advisors and relevant support staff, as well as faculty.

The task force model of research, including faculty representatives, has been effective and would be beneficial to continue.

Aligned with Findings 4, 9 and 10