

“Special” Special Initiative Award Application

Focused Research: A Closer Look at First Generation, Low Income Students

Gar Kellom, Director of Student Support Services – ASF

This proposal was submitted to take advantage of the timely offer to do focused research to enhance data analysis related to the upcoming accreditation visit from the Higher Learning Commission. Coincidentally, it will also support the work of Student Support Services in a study of participants in our SSS program compared to the student population in the past ten years.

PURPOSE

As the new Director of Student Support Services, the timing of this grant was perfect for an analysis of how participants in the SSS program has performed compared to the overall student body at Winona State. I consequently offered our department as a special case study of how first generation, low income students and students with disabilities have performed over the past ten years compared with other students in the university. The criteria for participating in Student Support Services is that a student has to be first generation, low income, have a disability or a combination of these criteria. As these are important student groups in the mission of Winona State, this seemed like a good time to better understand the experience of these students, how they have benefited from the services offered, what their academic performance is and what their retention and graduation rates were.

The annual goals of the SSS program are to work with 225 students each year of which 60% are first generation and low income or students with disabilities and to have 65% of the students in the program retained at the university, 75% of them achieving a 2.0 GPA and 45% graduating in 6 years. We have year-end reports on each of the cohorts but have not been able to analyze the trends over the past ten years. In addition, we do not have the comparison of these cohorts with the student population in general or with various subsets of that population. Completing this initiative served as a useful case study of this important group of students as well as provided valuable analysis of the program. Our staff will use the data to add to the SSS assessment cycle and to continuously use the results to determine how to make needed improvements and create regular assessment of the impact of those improvements.

METHODOLOGY AND DEMOGRAPHIC DATA

I intended to consolidate the demographic data of all students in the program in the past ten years. We had in the files the names from the beginning of the program 28 years ago but for this study but on this topic I had to concentrate on the period of time from 2005 to 2009. We could not use 2010 data as the grant period ends August 31, 2010. We only had summary information that was kept on first generation, low income and disability for the past 5 years. Obviously the largest group of students was the combined low income and 1st generation group but when looking at GPA, low income students were the highest at 2.76.

Eligibility Status for SSS from Fiscal Years 2005-2009

Eligibility Status	Number of Students	Average GPA
1st Generation and Low Income	358	2.6513408
1st Generation Only	229	2.4843668
Low Income Only	58	2.7605172
Disabled Only	163	2.5594479
Disabled and Low Income	92	2.6457609
Total	900	2.5986778

Although research on this dimension of the program was fairly limited on other research questions, I was able to expand the data pool. On some questions we could take a 30 year perspective with up to 3681 total students in the program since it began in 1980. One of the most interesting things for me was to see how the program had grown since the beginning. As one of the authors of the original SSS grant proposal when it was a cooperative effort between WSU and Saint Mary's I had a keen interest in this story. I met with Calvin Winbush who was a co-author of the original grant to gather some of the history.

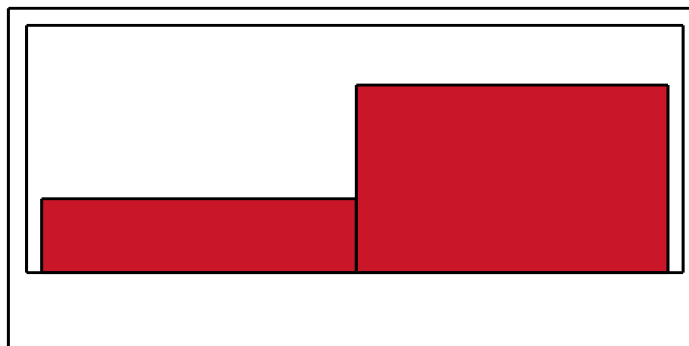
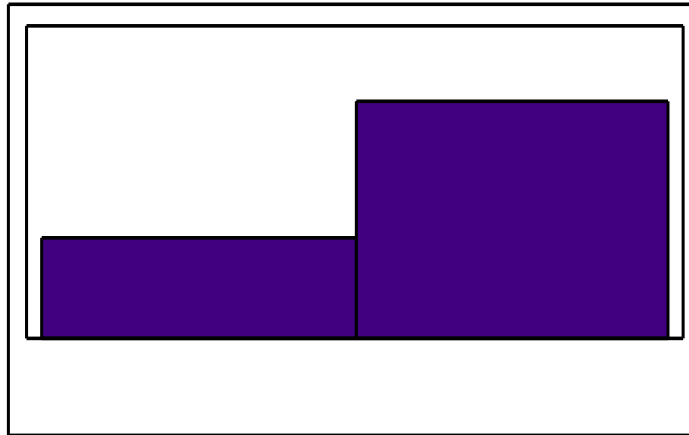
Having talked to people in Infrastructure Support and in the Alumni office I knew that it was possible to get data on past students. To get a richer picture I worked with Ed Callahan to merge our names with WSU data to add graduation date, GPA, gender and other relevant data. We also coordinated this research project with three others being done thanks to the leadership of Vice President Connie Gores. That made it possible for Ed to coordinate the data retrieval efforts for us in coordination with his other projects. Once we had this more expanded data base of SSS students we could do the comparison with the WSU student body as a whole on one Excel Spreadsheet.

RESULTS

Persistence/Retention

The first pattern I researched related to persistence of SSS students. As the annual goal of the SSS program is to retain at least 65% of students from first to second year, it was good to know we have been meeting that goal consistently. It was also interesting to see that WSU had an even higher retention rate than SSS by 1%. The first graph below shows the percentage and number of SSS students who came back for a second fall semester. (Note: This could happen two ways: they could start in the fall of say 1980, and come back for the fall of 1981, or they could start in the spring of 1981 and come back in the fall of 1981.) The second graph shows the data for WSU.

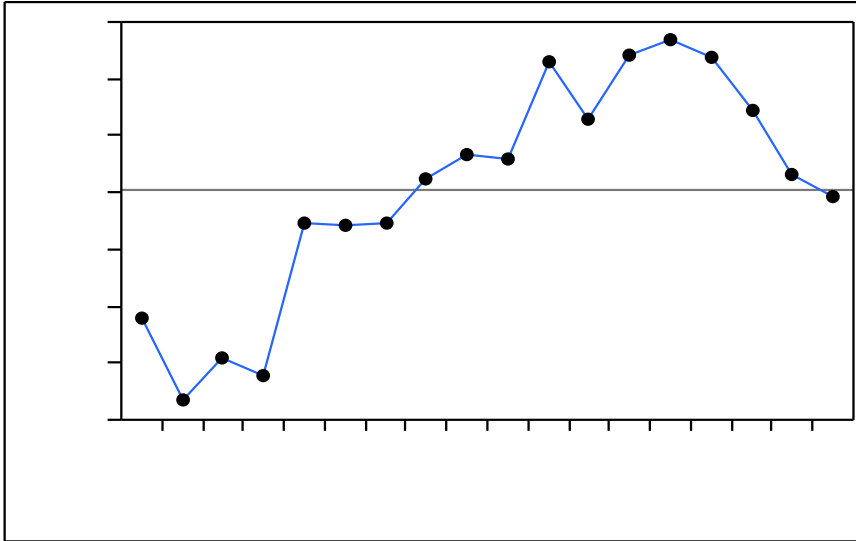
Fall Retention for SSS Students Since 1980 (upper) (71%) (Goal 65%) and WSU Fall Retention Rate (72%) Since 1985 (lower):



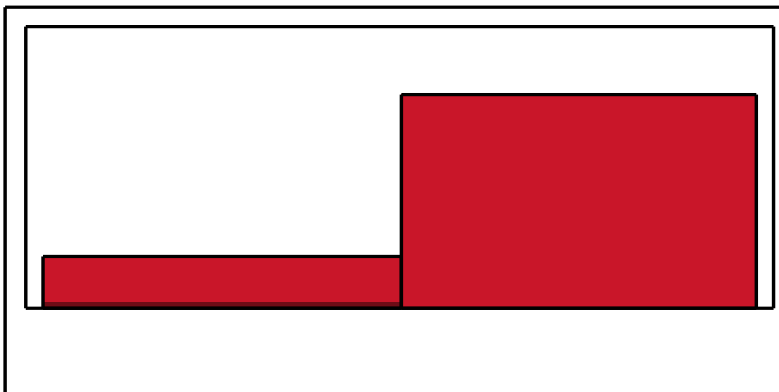
GPA

The second pattern I researched related to the major goal of the program to have 75% of our students with a 2.0 GPA or better by the end of the academic year in which they were enrolled. Digging deeper into this data could also help our department see if there are patterns that need to be addressed to help us do a better job of achieving this goal. This would be useful also in the institutional accreditation preparation. Below is the 30 year history of the average GPA of SSS students showing that the average has been 2.5 with academic performance improving for most of that time. Recent years have shown a decrease.

30 Year Trend in SSS Students GPA Performance



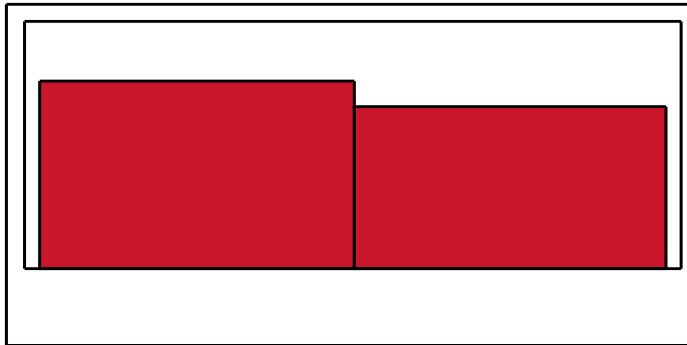
Percentage of SSS Students with a GPA of 2.0 or better (82%) (Goal 75%)



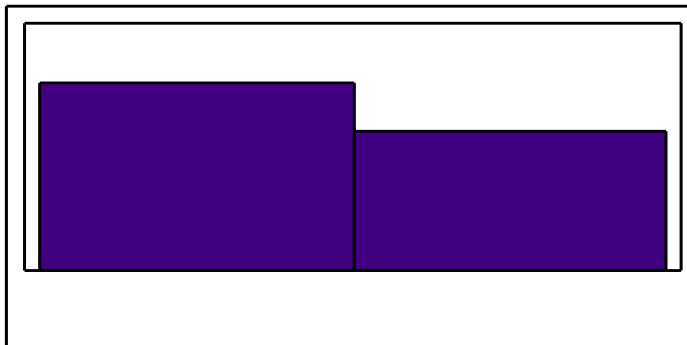
Graduation

The third pattern looked at was graduation. What is the percentage of students who graduated in 6 years? What are the percentages for the university? What can we learn from either slice of the data that can help us improve graduation rates?

SSS Students that Graduated in less than 6 years (46%) (Goal 45%)



WSU Students that Graduated in less than 6 years (42%)

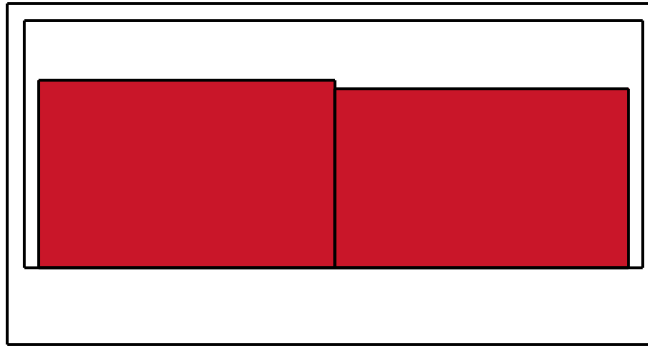


Note: This is only for students who started at WSU as first year students. This does not include transfer students or any students who started at WSU at a time other than the first year.

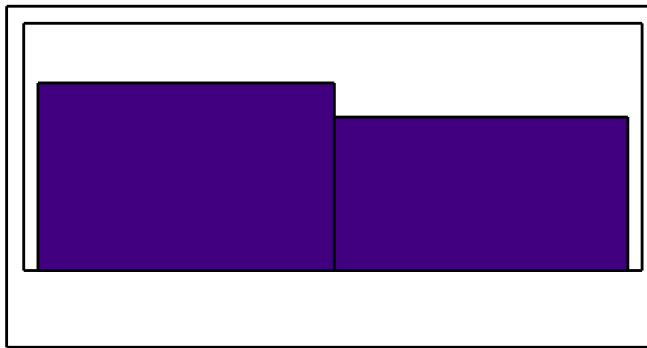
Gender

The last pattern I looked at was gender. What is the difference in the 6 year graduation rate by gender in SSS and compared to the pattern at WSU? What is the gender balance in the SSS program? What is the gender balance at WSU during the same period? Is the balance different in the program than at the university? Because student engagement is so important to student success we would like to look at any data we have institutionally with this SSS cohort and the University in general.

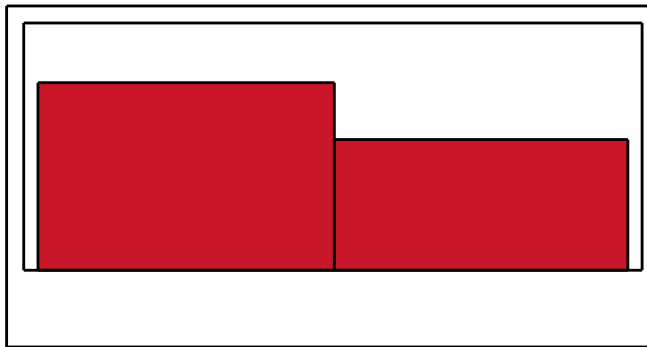
Six Year Graduation Rate for SSS Females (1980-2004) (49%)



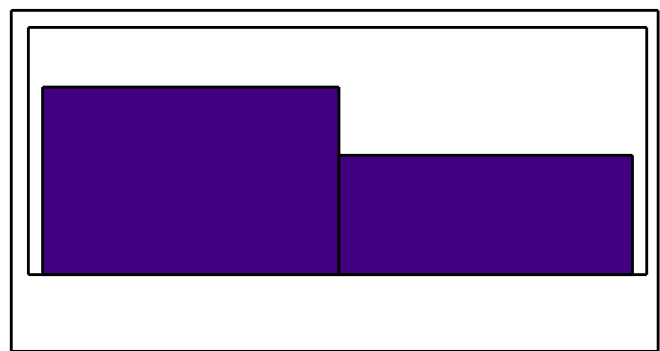
Six Year Graduation Rate for WSU Females (1980-2004) 45%



Six Year Graduation Rate for SSS Males (1980-2004) 41%

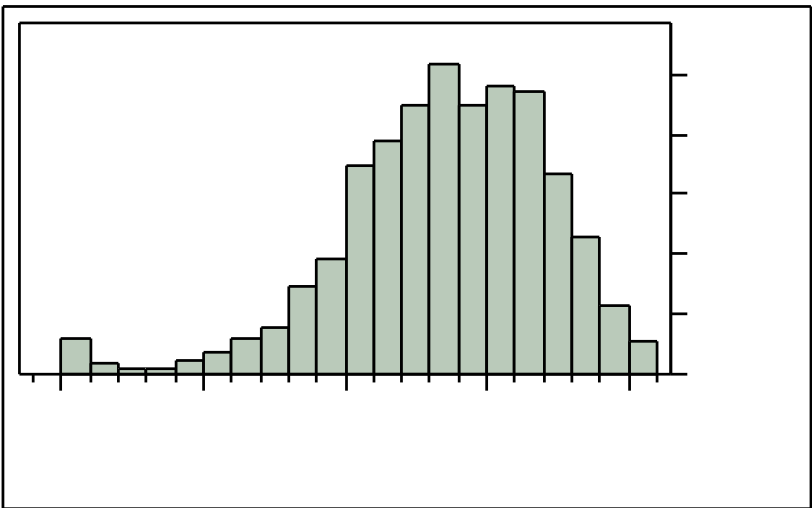


Six Year Graduation Rate for WSU Males (1980-2004) 39%



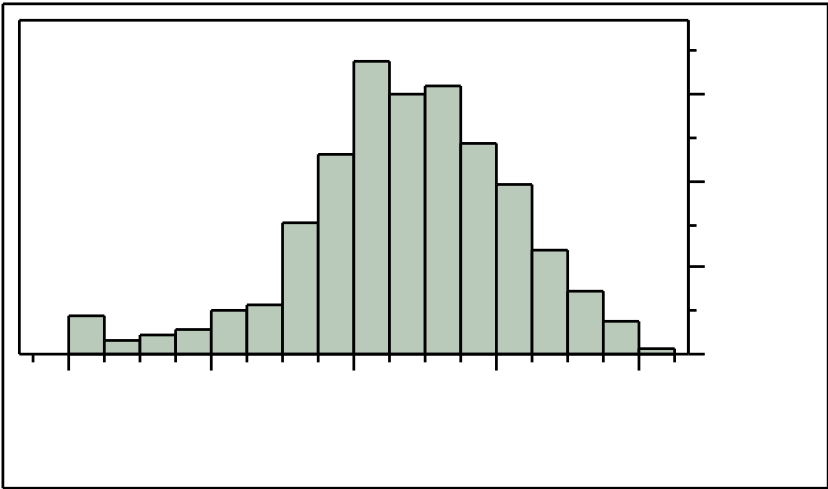
For females in SSS their graduation rate was higher than males. For females at WSU their graduation rates were also higher than males. Males in SSS had a higher graduation rate than males at WSU.

Distribution of GPA for Females in SSS (Mean 2.6) (Goal 75% above 2.0)



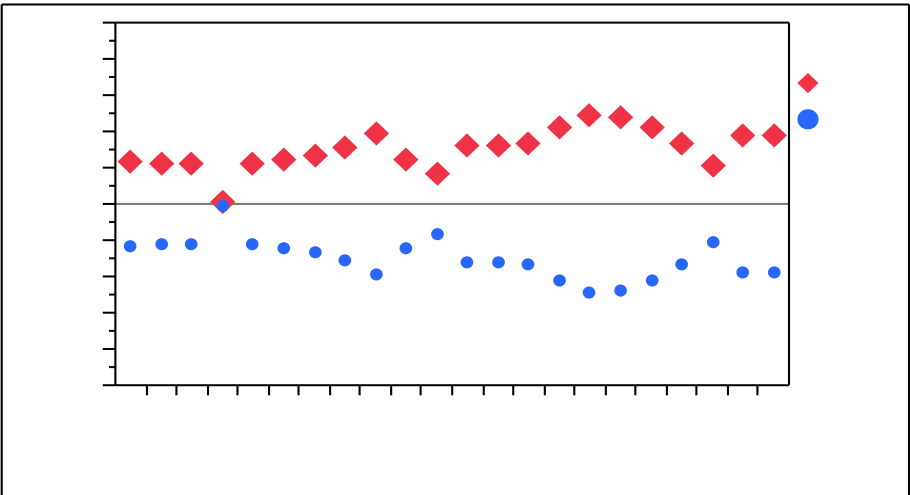
Mean	2.6015897
Std Dev	0.74684
Std Err Mean	0.0153767
Upper 95% Mean	2.6317429
Lower 95% Mean	2.5714364
N	2359

Overall Distribution of GPA for Males in SSS (Mean 2.5) (Goal 75% above 2.0)

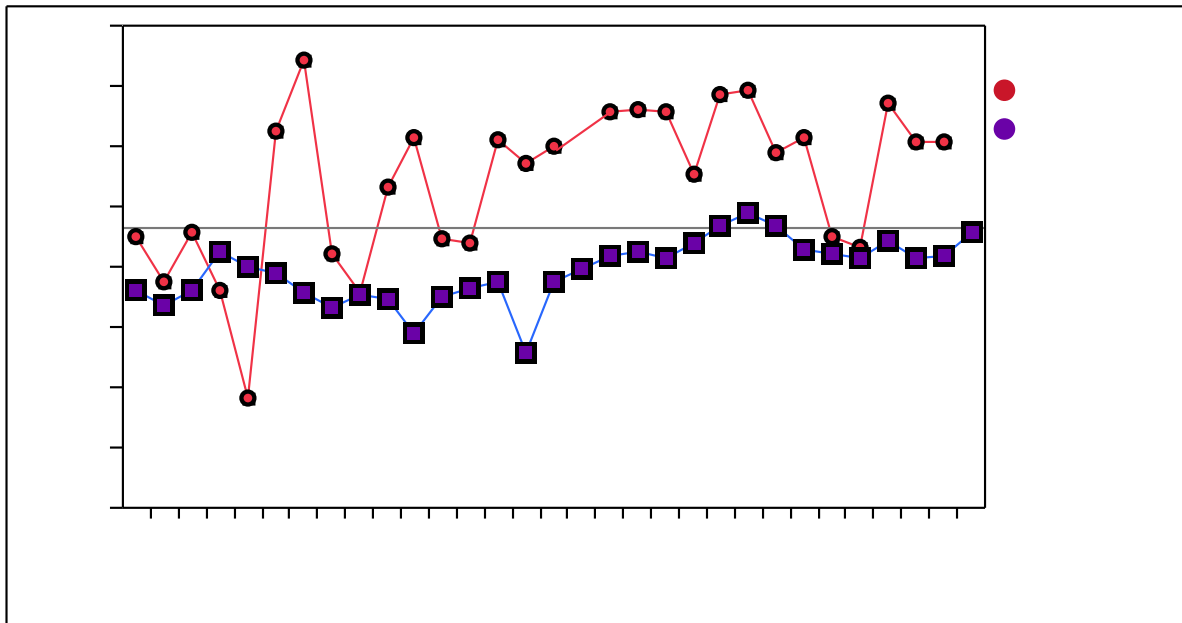


Mean	2.5372049
Std Dev	0.7364261
Std Err Mean	0.0211272
Upper 95% Mean	2.5786547
Lower 95% Mean	2.4957552
N	1215

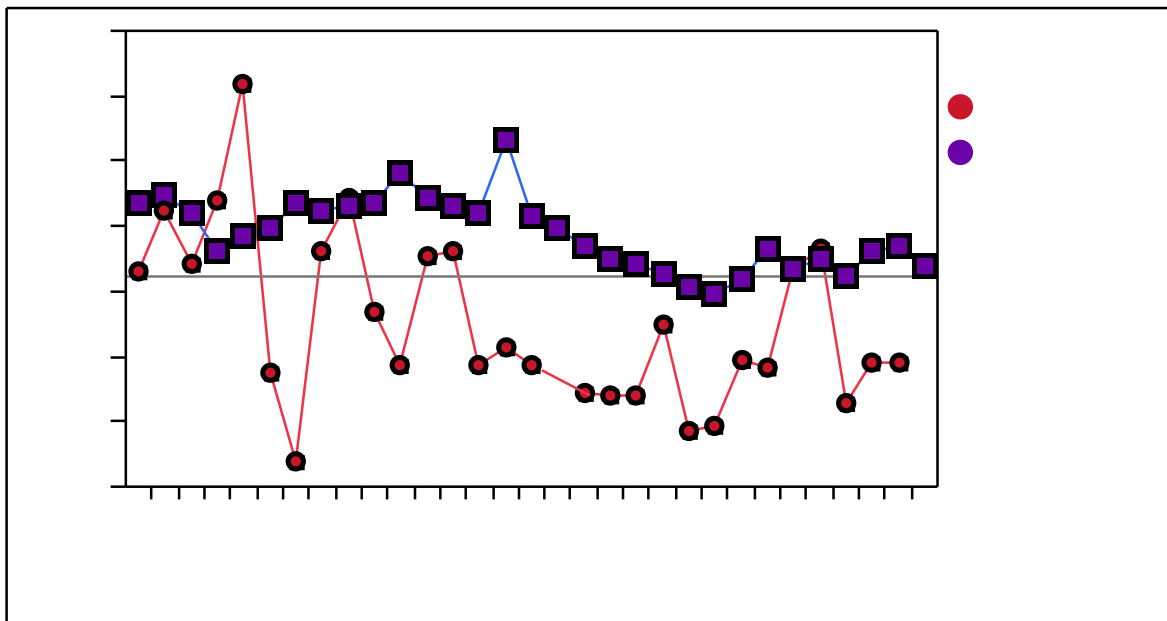
Gender Balance for SSS Students since 1980



Female Gender Balance for SSS Compared to WSU



Male Gender Balance in SSS Compared to WSU



Note: There have been 3681 unique students who have been enrolled in SSS since 1980. Each has been counted only once. For example, if John Doe spent 4 years at WSU, he is counted as 1 male student, not 4.

There have been more females in SSS consistently since the beginning of the program. That percentage is even higher than the average percentage of females enrolled at WSU. Correspondingly there are fewer males in SSS than females and the percentage of males in SSS is lower than the percentage of males at WSU.

DISCUSSION

Despite having only a few years of data from 2005-2009 on SSS students in terms of low income status, first generation background or disabilities (a total of 900 students), the demographic data indicates that the largest group in the program is first generation and low income (358 or 40%) followed by students who declare themselves as first generation only (25%) and then disabled students (18%). Students who are both disabled and low income make up 10% of the total followed by students who are low income only (6%).

The group with the highest GPA during that period of time is students who are low income only with a GPA of 2.76. Students who are both disabled and low income have almost the same GPA as students who are both first generation and low income or 2.6. Disabled students averaged 2.5 over that period of time and first generation students almost the same with 2.48. The overall GPA of students in SSS over that period of time was about 2.6.

While the data on students with the eligibility status above was more limited, it was fortunate that I were able to find data on the students in SSS as far back as 1980 or the beginning of the program at WSU. With 3681 unique individuals in the program over that time it was interesting to see what the picture looked like over that time frame. This larger view will provide a rich timeframe to assess how students have been performing on all of our key indicators.

Retention data looked at since 1980 in the SSS program shows 71% of the students being retained over that period which is greater than the goal of 65% (and for a period of time the goal was lower at 55%). While the WSU average for that period of time from 1980 to the present is 72%, the SSS average is only 1% less while often serving students for which success at the university might be a greater challenge.

Looking at the 30 year trend of GPA performance shows that on average 82% of students in the program have achieved a 2.0 or better which is better than the goal of the program of 75%. For most of that period the trend was consistently increasing from a low of 2.1 in 1981 to a high of almost 2.8 in 2004. For some reasons we do not yet know there has been a decline in the last few years back to about 2.5 in 2008. This will be a topic for the staff to discuss and investigate further.

In graduation rates, SSS students out-performed the WSU average and the SSS goal with 46% of the students graduating within 6 years while the goal was only 45% and the average for the university at 45%. No one can ever be satisfied with more students not graduating than are graduating so this too will always be a topic for improvement no matter if the goals are exceeded.

Perhaps the most interesting data collected was through a gender lens. For example, the six year graduation rate for SSS females (49%) was greater than both the SSS males (41%) and WSU females

45%). The graduation rate for SSS males was still higher than the average for WSU males (39%). The mean GPA for SSS females was 2.6 and the goal of having more than 75% above a 2.0 was clearly met. The mean GPA for SSS males (2.5) while lower than the mean GPA for SSS females by 1% was also high enough to meet the goal of 75% above a 2.0.

Most dramatically, there have been more females in SSS consistently since the beginning of the program. That percentage is even higher than the average percentage of females enrolled at WSU. Correspondingly there are fewer males in SSS than females and the percentage of males in SSS is lower than the percentage of males at WSU. This is really a topic that needs to be looked at. Clearly, the explanation for the lack of a gender balance in SSS is not the result of only the gender imbalance at WSU. There is a greater imbalance of males and females in SSS than in the university. It would be interesting to see if this is a pattern in other or TRiO programs in Minnesota or nationally.

Assessment Plan (including dissemination)

In addition to offering our results to the HLC committee we would begin using this data for continuous improvement in our program. It would be our long term goal to not only do some of this analysis annually as part of our Annual Report usually done in September and October for the previous year (we are working on 2009-10 now). The key would be to do the assessment regularly and to keep track of our findings and any changes we are making to the way we deliver programs and services based on these findings. By then assessing the successes of these changes we can incorporate a continuous improvement cycle into the way we do business.

I am also interested in presenting this at a regional conference for TRiO programs as many schools are interested in how to do a better job of assessment. I look forward to the presentation to ASF in September.

Linda Sax, a professor at the Higher Education Research Institute (HERI) at UCLA has written a book based upon the past decade of engagement data collected nationally entitled "The Gender Gap in College: Maximizing the Developmental Potential of Women and Men (Jossey-Bass, 2008) in which she posits that there are many differences with regard to college student involvement and how to engage women and men. Some approaches work well for both women and men but some work better for women and some for men. We seek to understand this complexity and to know what to use when. This cut of the data might help us devise programs and services to better serve our students.

Finally, this report is submitted with gratitude to WSU, the HLC committee and the ASF union for the opportunity to do this research and to spend summer time looking into these important dimensions of our program in Student Support Services and providing the opportunity to use this information for the improvement of our program and the university.

August 16, 2010