Last time I visited the School of Computer and Information Sciences was in 2002. So I have witnessed the continuity of the evolution of this School. In the leadership of the new dean, Dr. Peltsverger, it has done remarkably well. Since my last visit, the school has moved to a new and impressive building filled with the cutting edge Information technology. There are four ultramodern computer labs, student work area with computer monitors at their disposal. For faculty, they have research labs. I did not find any of these facilities during my last visit.

For each of the degree program my findings are as follows:

**Master of Science in Computer Science**

**Program Productivity Performance Indicators:**

A. **Enrollment:**

From the most recent self study, it is obvious that the no. of graduate students has upward trend. That is strength. But most of these students are coming from overseas. For a regional institution, the focus should be regional students and then supplement it with International scholars, and not the other-way round.

B. **Number of Majors:**

The trend here is also upwards. For a regional school the number of majors is impressive given that the national trend has already peaked. [the weakness is same as in section A].
C. Number of Students Graduating Annually:

As a program productivity indicator, this is weak. Need significant improvement. There is effort on the way to increase this productivity; I will also add to it that you concentrate recruiting the WR-Air force Base. You will find quite a few qualified candidates who might want to update their skills.

D. Faculty Student Ratio.

This indicator is good. Faculty/student ratio is respectable.

E. Program Retention and Graduation

This indicator is not satisfactory as the graduation rate has declined over the past five years. [From 50% to 23.33%].

F. Diversity among the Graduates:

This measure is excellent, as majority of the graduates are from diverse ethnic background. This indicator shows the spread is better than even the national average.

G. FTEs Generated by Faculty in the Home Department:

According to the Delaware study data (Appendix D) it is at 25 percentile (and slightly less than GSW average). Thus it is considered weak. Need improvement.

H. Program’s Responsiveness:

This indicator is very strong. The change in syllabus and continuous evaluation of curricula demonstrates the department is meeting the need of the rapidly changing times. Clearly shows that the school is listening to the Advisory Board, and also to the regional employers.

I. Relative placement of the program among comparable USG institutions:

In last five years, the relative ranking of this program is unchanged; it can be seen as good news or as bad news. I rate it as weakness.

J. Complying with the GSW Mission:
Strong. The program complies and contributes strongly towards the institution’s mission statement.

K. Productivity Summary:

Program is strong with one apparent weakness. It has low enrollment and most of the graduate students are from overseas. A regional university can not sustain a program which is solely dependent on foreign students. With the changing climate in favor of global outreach, I suggest to partner with some foreign universities for a sustained growth and supply of students. In the mean while, market the program in the region well. For example, WR-air force base. You need to exploit the closeness of such a huge resource for enrollment.

Program Quality Performance Indicators:

A. Curriculum’s Continuous Evaluation and Improvement meets the workplace challenges:

Strong. Graduate courses are being taught by graduate faculty. The curriculum is well representative of the industry needs and is in line with the professional associations.

B. Faculty Standards:

Strong. Faculty credentials are in par with the academic standards of SACS guideline. All graduate faculty are Ph.D. holders in their respective disciplines. The range of faculty expertise is varied and meets the research expectation.

C. Facilities:

Strong. This feature is probably the strongest of all indicators. There are three well equipped large class rooms, 4 computer labs, student lounge, and two server rooms. Faculty offices, conference room and faculty work room for social interaction among the academic staff. Each faculty office is well equipped and their basic equipment/software need is adequately met.

Library facilities are also adequate. There are suitable collection of books and journals and library is also equipped with electronic resources such as GALILEO and GIL and also has the interlibrary loan facility.

D. Program Budget:

Week. The strong point would be the support for computing equipment. But this discipline is very fast changing by nature. A strong financial commitment is needed
from the administration. There is not adequate support for faculty development, conference presentation/attending. Financial constraint is also responsible for faculty to teach 12+ hours per semester. Faculty salary budget has gone down in ’06 while the operating expenses have virtually remained the same in last five years.

E. **Hi-Tech Class rooms and Program Delivery Support:**

This feature is, again, is strongest among all the program quality indicators. Since the move into the new and renovated building, the school holds the cutting edge class room delivery system. Because of this feature, it has become possible for the faculty to give their students hands-on experience on the applied projects and concepts. Students are the ultimate beneficiaries of this state of the art facility.

F. **Program Diversity:**

This is a strong indicator. The school has very diverse set of qualified teachers. They have done a good job of keeping the curriculum in pace with the global perspective. School has scholar exchange program with overseas institutions. The exchange program is live and well. The school invites scholars and practitioners to give seminars in the diverse hi-tech fields.

G. **Selectivity and Academic Achievement Awards in the program:**

One of the bench mark of the quality of the program is the kind of students come in the program. The selection process is based on sound criteria and good standards. The GRE and GPA scores are on the rise. The graduating students have an average of 3.6 GPA. But the program is based mostly on overseas students and they tend to be better than average due to the law of large numbers. So in my opinion this category is Satisfactory at best..

H. **Program’s Responsiveness to the changing discipline needs:**

Strong. The ‘faculty’ and ‘state of the art facilities’ combination has taken a strong lead to change or modify the direction if and when needed.

I. **Student Learning Outcomes:**

In the graduate program, I found that all students were enthusiastic about their internship programs initiated by the school. There was a feeling of accomplishment in their statements. Their desire to have more hands-on courses is implemented in the curricula. Students have just built a Learning Outcome Repository and Analysis
System. It was not operational at the time of my visit, but should add value to the program evaluation. Strong.

J. Conclusion:

Program is strong. As mentioned earlier, this program covers the areas that reflects the regional/national need of the employers. However there are certain aspects of the program, if improved will improve the quality of the program itself.
1. Resources for faculty development
2. Faculty salary is below the region-average for the CS discipline
3. Reduce faculty teaching load from 12 hours to 9 or less.
4. Encourage faculty to engage themselves in grant proposal writing. This is time that the university has a center that all the disciplines can be trained in grant writing.
5. Encourage regional student enrollment.

Till you see the enrollment increasing, my recommendation is to maintain the program at its current level.
Bachelor of Science in Computer Science

Program Productivity Performance Indicators:

A. Enrollment:

From the most recent self study, it is obvious that the no. of graduate students has downward trend. That is program’s weakness. Many upper division courses are under-enrolled.

B. Number of Majors:

The trend here is also downwards. Thus an obvious weakness. Here one can not ignore the fact that the national trend for the CS majors has suffered a setback.

C. Annual Degree Productivity of the Program:

As a program productivity indicator, this is week. Need significant improvement. There is evidence of efforts on the way to increase this productivity.

D. Faculty Student Ratio.

This indicator is good. Faculty/student ratio is respectable.

E. Program Retention and Graduation

There is not enough data in the self study report the strength of this indicator. A definite weakness.

F. Diversity among the Graduates:

This measure is excellent (strong), as majority of the graduates are from diverse ethnic background. This indicator shows the spread is better than even the national average.

G. FTEs Generated by Faculty in the Home Department:

According to the Delaware study data (Table 6) it is under 50th percentile. Thus it is considered week.

H. Program’s Responsiveness:

This indicator is very strong. The change in syllabus and continuous evaluation of curricula demonstrates the department is meeting the need of the rapidly changing
times. Clearly shows that the school is listening to the Advisory Board, and also to the regional employers.

I. Relative placement of the program’s Degree Productivity among comparable USG institutions:

In last five years, the relative ranking of this program is unchanged; [table 8 is not showing 2006 column] it can be seen as good news or as bad news. I rate it as satisfactory.

J. Complying with the GSW Mission:

Strong. The program complies and contributes strongly towards the institution’s mission statement.

K. Productivity Summary:

Program’s weakness is in the area of enrollment. In the past the national trend for the enrollment for CS dipped and stayed flat. Now that the trend is upwards again, GSW should take advantage of it. As this problem is tackled, most of the other problems will self eliminate.

Program Quality Performance Indicators:

A. Curriculum’s Continuous Evaluation and Improvement meets the workplace challenges:

Strong. Courses are being reviewed and revised to reflect the changing world environment. The curriculum is well representative of the industry needs and is in line with the professional associations.

B. Faculty Standards:

Strong. Faculty credentials are in par with the academic standards of SACS guideline. All graduate faculty are Ph.D. holders in their respective disciplines. The range of faculty expertise is varied and meets the research expectation.

C. Facilities:

Strong. This feature is probably the strongest of all indicators. There are three well equipped large class rooms, 4 computer labs, student lounge, and two server rooms. Faculty offices, conference room and faculty work room for social interaction among
the academic staff. Each faculty office is well equipped and their basic equipment/software need is adequately met.

Library facilities are also adequate. There are suitable collection of books and journals and library is also equipped with electronic resources such as GALILEO and GIL and also has the interlibrary loan facility.

D. Program Budget:

Week. The strong point would be the support for computing equipment. But this discipline is very fast changing by nature. A strong financial commitment is needed from the administration. There is not adequate support for faculty development, conference presentation/attending. Financial constraint is also responsible for faculty to teach 12+ hours per semester. Faculty salary budget has gone down in '06 while the operating expenses have virtually remained the same in last five years. In the long run it is not healthy for a young program to develop.

E. Hi-Tech Class rooms and Program Delivery Support:

This feature is, again, is strongest among all the program quality indicators. Since the move into the new and renovated building, the school holds the cutting edge class room delivery system. Because of this feature, it has become possible for the faculty to give their students hands-on experience on the applied projects and concepts. Students are the ultimate beneficiaries of this state of the art facility.

F. Program Diversity:

This is a strong indicator. The school has very diverse set of qualified teachers. They have done a good job of keeping the curriculum in pace with the global perspective. School has scholar exchange program with overseas institutions. The exchange program is live and well. The school invites scholars and practitioners to give seminars in the diverse hi-tech fields.

G. Selectivity and Academic Achievement Awards in the program:

One of the bench mark of the quality of the program is the kind of students come in the program. The selection process is based on sound criteria and good standards. SAT scores are showing continuous improvement over the years. So in my opinion this category is Strong.

H. Program’s Responsiveness to the changing discipline needs:
Strong. Addition of new faculty gives department freedom to offer major courses at regular frequency. The ‘faculty’ and ‘state of the art facilities’ combination has taken a strong lead to responsiveness to change.

I. Student Learning Outcomes:

It looks like it is satisfactory. GSW is doing all it can to assess the learning outcomes. Talking directly to students gives me the feeling that their desire to have more hands-on courses is implemented in the curricula. (Graduate)Students have just built a Learning Outcome Repository and Analysis System. It was not operational at the time of my visit, but should add value to the program evaluation.

J. Conclusion:

Program is Strong with one weakness, and that is low enrollment. As mentioned earlier, this program covers the areas that reflect the regional/national need of the employers. However there are certain aspects of the program, if improved will improve the quality of the program itself.

1. Resources for faculty development
2. Faculty salary is below the region-average for the CS discipline.
3. Reduce the faculty teaching load from 12 to 9 hours.
4. I have not seen much in terms of distance learning. Encourage it.
5. Encourage regional student enrollment. [Establish new programs with WR air force base for example.]

Program is viable. Till you see the enrollment increasing, my recommendation is to maintain the program at its current level.
Bachelor of Science in Information Technology

Program Productivity Performance Indicators:

A. Enrollment:

From the most recent self study, it is obvious that the number of enrolled students has upward trend for last two years. That is program’s strength. It has room to improve. This category is Satisfactory.

B. Number of Majors:

This category is Satisfactory. Here one can not ignore the fact that the national trend for the IS related majors has suffered a setback.

C. Annual Degree Productivity of the Program:

As a program productivity indicator, this is Strong.

D. Faculty Student Ratio.

This indicator is weak. This is resource related problem. More resources can eliminate this problem.

E. Program Retention and Graduation

The retention of the first time freshmen has not improved in five years. A weakness.

F. Diversity among the Graduates:

This measure is excellent (strong), as majority of the graduates are from diverse ethnic background. This indicator shows the spread is better than even the national average.

G. FTEs Generated by Faculty in the Home Department:

According to the Delaware study data (Table 6) it is under 50th percentile. Thus it is considered week.

H. Program’s Responsiveness:

This indicator is very strong. The change in syllabus and continuous evaluation of curricula demonstrates the department is meeting the need of the rapidly changing times. Clearly shows that the school is listening to the Advisory Board, and also to the regional employers.
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K. Productivity Summary:

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c. Reduce the faculty teaching load from 12 to 9 hours.
d. I have not seen much in terms of distance learning. Encourage it.
e. Encourage regional student enrollment. [Establish new programs with WR air force base for example.]

Program is viable and has potential to grow. Till you see the enrollment increasing, my recommendation is to maintain the program at its current level.

Two issues that I would like to include for the school wide consideration:

1) More information is needed on the quality of the on line courses.
2) There should be a process in place which report the results of data collected from current students, alumni, and employers.

Submitted by:

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