

Institute of Technology - University of Washington, Tacoma

Response to the Graduate School Review

February 14, 2008

Orlando R Baiocchi, Director

Introduction

The faculty and staff of the Institute of Technology at UWT thank the Graduate School and the Program Review Committee for their diligent work in evaluating our programs and preparing the final report.

We are pleased that the Review Committee recognizes that “the Institute’s programs are following a rational curricular plan, students are attracted to the programs, and there is close interaction with local industry”. In the Committee’s words, they “met many dedicated faculty and spoke to enthusiastic students”. The Committee also stated that “the Institute is viewed along with other units of UWT as having been a transformational asset to Tacoma” and that “dedicated faculty members teach a solid curriculum that is educating traditional and non-traditional students who speak highly of their classes, the faculty and their time in the program”. Furthermore, “there is good news on a range of other topics from the enviable support of local industry to a quality computing infrastructure”. The Committee noted that “this may be the first review on record of a computer science department in which no one complained about computing resources or operation.”

On the other hand, the Committee found “serious problems largely involving senior leadership of the Institute”. Although we do recognize that there are problems typical of a fast-growing institution - and we are fully committed to solve those problems - there are a few factual inaccuracies within the report. We address these inaccuracies and respond to some of the raised issues in Section 1. In Section 2 we respond specifically to the recommendations in the review.

Section 1: Response to the Comments

- *The words (in the Report) are also intended to lend importance to the remainder of this report so it doesn’t meet the same fate as the 2003 Review Report, namely, being ignored. (Page 2)*

First, it should be noted that the Lazowska-Notkin Report of 2003, solicited by the Vice Chancellor for Academic Affairs at that time, was a consultant’s report. It was

not sanctioned by the Graduate School nor did it necessarily follow the Graduate School's guidelines for program review. The Institute and the University also sought additional opinions from other consultants and used all such reports to provide input on how to make improvements at the Institute and advance its programs. Contrary to what the report states, most of the recommendations in the Lazowska-Notkin report were adopted. Attachment I shows in detail what changes were made and, when recommendations were not followed, why not.

The Institute has not and will not ignore the recommendations in this Graduate School Review; we share the Review Committee's confidence that the "dedicated faculty of the Institute can put their house in order" (page 1 of the Report). Toward that end, Institute faculty and staff have met with the Director of the Institute and the Vice Chancellor for Academic Affairs to begin the plan for responding to the concerns expressed in this report. We have had four meetings to date (senior faculty, junior faculty, staff, and combined faculty and staff), and have scheduled an additional meeting with the Institute faculty and staff, the Vice Chancellor for Academic Affairs, and the Chancellor of UWT.

- *Both student and faculty recruiting are harmed by the lack of a vision and mission. (Page 4)*

As the Review Committee notes, the Institute does have a mission and vision. A valid question is whether or not they are fully accepted and supported by all faculty, staff, and constituents. It is a fact that some senior faculty members were hired before the Institute and its mission and vision were created. Therefore, it is not surprising that not all faculty agree with all points of the original mission and vision.

However, we are not sure that student recruitment is harmed by the lack of shared vision and mission. Student enrollment in the programs at the Institute was up for both Fall and Winter this year. In fact, the institute has currently its highest enrollment in many years for a Winter Quarter. The total enrollment was 163.5 up from 114.7 the previous year, an increase of 42.5%. This has occurred at a time when the national trend in enrollment for computer science programs has remained flat or declined.

Since the result of this year's faculty searches is not yet available we cannot offer definitive proof that faculty hiring has not been hurt by mission and vision issues. However, it should be noted that applications for the three open positions are significantly higher than applications for the positions open last year.

- *The Institute is a computer science and engineering department, and generally speaking the faculty should be capable of teaching courses in each of its programs. So, when recruiting, the positions should be advertised and hired into the Institute rather than into a degree program. (Page 5)*

We have followed this strategy of capitalizing on the overlapping expertise of faculty in different programs in some instances. Indeed, the previous searches for computer engineering and information systems faculty required candidates to have the ability to also teach computer science courses; two of the three searches were successful and the hired faculty have already contributed to the CSS program. However, we do not currently have sufficient faculty available to teach the number of hardware engineering courses needed for the program, which is why we were more specific about the necessary background of candidates in this year's search. Regardless of how the positions are advertised, we hire faculty members to the Institute rather than to specific degree programs.

- *Though strongly positive, a thread through the Board's testimony viewed the Institute as ignoring Industry. There was a sentiment expressed by several on the Board that faculty members are not interested in solving local problems. (Page 5)*

Advisory Board members who attended the meeting with the Review Committee were surprised and troubled that this was the impression left with the Review Committee. A letter to that effect is included as Attachment II.

- *The Institute is failing to provide an environment of high job satisfaction, esprit de corps, collegiality and common commitment. The faculty and staff do not see themselves as players on a team with commonly held goals, shared aspirations and mutual respect. (Page 6)*

We have made great strides toward building a sense of community and collegiality, but this is necessarily a slow process. We believe that most agree that the environment at the Institute is more collegial than it was a few years ago. We also believe that discussions triggered by disagreements on issues can be healthy and can lead to better solutions. To further improve communication among faculty and staff and increase the opportunity for discussions of potential problems, we have initiated a discussion with the UWT administration on housing the entire Institute faculty and staff, as well as the laboratories, in the same building. We will pursue other avenues for building a more positive work culture as well. We are glad that the Graduate School Review has prompted positive discussions about this work culture that will hopefully lead to long-term solutions.

- *... there is not sufficient respect for teaching, based on the numerous comments received, but the teaching load is substantial; there is little support in the form of graders and teaching assistants, and the students are academically diverse. (Page 7)*

The teaching load at the Institute is the same as that of other UWT programs, except for the full-time lecturers who have a substantially lower teaching load compared to their peers at UWT (six instead of eight courses per academic year). Class sizes in the Institute are also smaller than average at UWT. The Institute has resources to provide graders and teaching assistants for the large classes (24 students or more),

but it is difficult to find students to fill these positions. We do not have a PhD program and our Master's program is attended almost exclusively by part-time students who work in the industry or government and are not interested in such work. Many of our senior undergraduates fall in the same category. As we expand our recruitment efforts to include full time graduate and international students, and as the new freshmen and sophomore cohorts move into the upper division, more students will be available to become faculty assistants.

- *Some students observed that the timing of the courses is extremely difficult for parents with small children, a situation that was reported on only by women. Some classes, essential for degree requirements, are scheduled 7:00-9:15 PM. There is no daycare (or rather evening care) at these times, and we heard stories of finding friends and family to help out, as well as the consequences to the children. (Page 8)*

Again, this is a problem that all programs and many students at the University of Washington, Tacoma must face. However, UWT probably does better than most institutions by providing child care for qualified students, as it can be checked at:

http://www.tacoma.washington.edu/student_affairs/life/childcare.cfm.

We did not know about this program until recently, but will incorporate it into our student information materials and ensure that faculty and staff are aware of the resources available to our students.

We are challenged by the fact that simultaneously we have a relatively small program, and we are serving a remarkably diverse student population: some of our students can only attend classes during the day; others can only attend classes in the evening. Some attend part time or only occasionally, others seek the fastest path possible through the program. These diverse needs lead to predictable yet difficult scheduling problems, and despite our best efforts we cannot offer every class, every quarter, at a time convenient to every student. The compromise we work with as a general guide to scheduling our classes is to offer every core class at least once a year during the day and at least once a year in the evening. So while the report is accurate regarding the evening classes, it is also the case that the same classes are available, during the day, in the same academic year. We feel that this is the best we can do, given the size of the program and the diversity of needs in the student population.

- *... the best way to conclude is to observe that the gender profile of the Institute differs substantially from that of other computer science departments (Page 8)*

The gender profile of the Institute is in fact very similar to other similar programs in the region. If we include lecturers, the Institute has 3 women on a faculty of 17 for a percentage of 17.6%. Seattle's CS&E has 6 women of 51 for a percentage of 11.7%. Bothell has 2 of 12 for a percentage of 16.66%. Western Washington University has

2 of 11 for a percentage of 18.18%. RIT has 4 of 30 for a percentage of 13.33%. SUNYIT has 2 of 12 or 16.66%.

The Institute is committed to increasing the gender diversity of faculty at all ranks. As part of our strategic planning efforts this Spring we will establish a target for the growth of women faculty members over the next five years (we have begun discussing a target of 30%). We have already taken steps to attempt to diversify the pool of applicants for the positions advertised this year, and will continue to seek ways to recruit and retain female faculty members. The current faculty searches results are so far very encouraging: among the twelve candidates to be invited for campus interview, five (42%) are women.

- *... quality teaching seems not to be a plus, and poor teaching seems not to be a minus. Is teaching valued? (Page 8)*

Quality of teaching plays a key role in Tenure and Promotion recommendations and is the focus of attention in annual reviews. Meritorious salary increases have also reflected teaching accomplishments. It is also the main factor in the hiring and retention of lecturers and adjunct faculty. To help all faculty understand the importance of teaching, a number of internationally recognized educators have been brought to the campus for presentations and direct interaction with faculty and students. We do recognize, however, that we need better mechanisms to measure teaching effectiveness and more extensive participation of the faculty on peer reviews of teaching.

- *... other valuable manifestations of research—advising student research, publishing with students, collaborating on problem solving with local industry—apparently don't "count," either. (Page 8)*

The Institute's criteria for promotion and tenure do recognize advising student research, publishing with students, and collaborating on problem solving with local industry as evidence of scholarly activity. As an example, these criteria were applied to the first P&T case of a junior faculty who was tenured and promoted to an associate professor in 2007. The junior faculty had excellent records in advising students through capstone projects and internships. Also, more than 13 students were involved in his publications. These manifestations of research were highlighted in our Self-study and displayed in our web page, outreach materials and in our billboards all across the Puget Sound.

- *... perhaps most disturbing, there is the view that it is not what you achieve in teaching, research and service, but how you present yourself to the (insiders on the) faculty that determines tenure. (Page 9)*

Part of the responsibilities of a successful researcher is to present his or her research results – and other components of his/her portfolio - in such a way that it

can be verified and used by others within the field. We expect our faculty to be able to present and defend their work to both external evaluators and voting faculty within the Institute.

Votes on tenure and promotion decisions are taken by the whole voting senior faculty, as mandated by the university code. We have a document that describes the criteria for tenure and promotion in the Institute, and criteria are also specified within the UW Handbook. However, it is true that the faculty needs to develop both a clearer understanding of what these criteria mean and a consistent set of practices for applying these criteria in promotion and tenure discussions.

- *... more seriously, tenure decisions are being delayed in a variety of ways. (Page 9)*

We would appreciate clarification of this concern, as we are not aware of a tenure decision in the Institute being delayed. Of the four assistant professors in the program in the autumn of 2007, three have gone/are going through the process according to the standard time frame. The remaining assistant professor decided not to apply for tenure or promotion. There is, however, a record of an early tenure request being denied two years ago and of a voting faculty recommendation for postponement this year. In last year's T & P case, the Provost's office initially recommended that the assistant professor's request be delayed a year so that a more solid case could be presented for evaluation. The faculty, the Director, and UWT administration argued successfully that the case was solid and that there was no reason to delay; the Provost office ultimately agreed, and the faculty member was granted promotion and tenure.

Section 2: Response to the Recommendations

1. Adopt a moratorium on the establishment of new programs; consolidation is worthy of consideration.

Prior to receiving the review committee's report, the Institute was considering adding two new undergraduate programs: Information Technology & Systems (ITS) and Systems Engineering (SE). Although the development of the SE program started at the same time as the ITS development, the SE development has not proceeded as quickly as the ITS development. After consultation with faculty, administration and the community, we have decided to postpone implementation of the SE program even though it fits well with the Institute's vision for future growth and has received strong support from several organizations represented on our Advisory Board (IAB).

Our current plan is to proceed with implementation of the ITS program for several reasons. First, the Institute needs to create a critical mass of faculty and students to be able to develop the concentrations model suggested by the Lazowska-Notkin report of

2003. Second, the ITS program will give the Institute a degree option that is more accessible to some of our students whose math and science skills and interests are very different compared to traditional CSS or CES students. Third, based on a consultant report, as well as discussions with employers and community college representatives, there is a very strong demand for graduates of such a program and also a ready supply of students who want to complete a four-year program in information technology. Fourth, the program has already been approved by the Institute's faculty and the campus committees and it is consistent with the UWT effort to offer additional programs to the four-year students. Fifth, the incremental resources to start the program are relatively modest compared to the potential payback, including the fact that at least two of the current CSS faculty have expertise in the ITS area. Last but not least, the ITS proposal has received praise from highly qualified outside individuals like Ed Lazowska and faculty from the Information School.

By reducing by half the implementation of new programs we feel that we will have the time and resources to address the other recommendations made in the review committee's report. Although this differs somewhat from what the committee proposed, it does demonstrate that the Institute is taking the committee's recommendations seriously and is trying to use them to improve its programs.

2. Replace the hierarchical, top-heavy administrative structure with a more open, egalitarian and communicative form of Institute governance that encourages contributions and attracts commitment.

As for the administrative structure, we did seek advice from a well-known consultant who had worked for the University of Washington and we have implemented the changes he proposed. As an example, the staff has been reduced from 12.8 FTE to 8.0 FTE without compromising the quality of services provided to faculty and students. We will continue to look for opportunities to further streamline our administrative structure while maintaining the excellence of our services.

Faculty at all levels and staff participate in the Institute's important undergraduate and graduate curriculum committees. All decisions regarding curriculum are initiated by one of these committees. Junior faculty and lecturers have a significant participation in these committees. Those who are not on either of the committees have the opportunity to express their opinions at open faculty meetings where final votes on all issues are taken. In addition to curriculum process, the allocation of funds for laboratories and research projects is another example of how the Institute operates. The Institute has a Facilities Committee (open to any interested faculty or staff) that evaluates faculty or staff requests for equipment or software exceeding \$1,000. The committee prioritizes requests and makes recommendations to the faculty and/or the Director.

Nevertheless, there is a perception that not all faculty and staff are comfortable in expressing their views. We have begun conversations with faculty and staff, and will continue to work together to develop an even better form of governance. The Institute

faculty and staff will identify some specific strategies for achieve this goal. This work is also consistent with one of the goals of the UWT Strategic Plan, so campus resources and attention will also be focused on transparency of governance.

3. Define and embrace a shared mission and shared vision of the Institute and its programs.

The Institute does have a mission and vision that have been discussed at length in faculty meetings and at IAB meetings. The question seems to be whether or not they are “embraced” by the faculty and other constituents. Regarding this recommendation, a question comes to mind: what constitutes “embracing” the mission and vision? If this requires agreement on all points by all faculty and constituents, it may be difficult, if not impossible. If, on the other hand, it implies that all the issues have been discussed in open meetings where everyone is given the opportunity to speak and present their views before any votes are taken, then we would seem to have a shared mission and vision. Having both a mission and vision in place does not mean that they will not change in the future, however. In fields such as computer science and engineering and on growing campuses such as UWT, where changes take place constantly that affect industry and the profession, both the mission and vision are likely to change in the next few years. Therefore, we continue to discuss these topics among our faculty, staff, and constituents on a continuing basis.

Specifically, we are addressing the following issues for which there is no clear consensus yet: the relative emphasis that should be placed on teaching, research, and service when considering tenure, promotion, and merit increases; the extent, to which activities such as mentoring undergraduate and graduate students, curriculum development and refinement should be considered on tenure, promotion, and merit reviews; which forms of scholarship should be considered in tenure, promotion, and merit reviews; the quantity and type of service that are expected of faculty. These issues affect the daily activities of faculty and ultimately determine the future direction of the Institute

The staff is a crucial element to the Institute’s success. It is vital that the staff provide information from their work that informs potential changes in the vision, mission, and policy. Three components – faculty, staff, and administration – must work together and with mutual respect to be successful, to ensure that vision and mission are not only shared but also relevant to all of the Institute’s constituents and we will work toward a shared understanding of these expectations.

4. Hire faculty to teach across programs rather than assigning them to “degree slots.”

The committee has made an excellent point. We recognize the value of having faculty who can teach across programs, and where possible we will define positions and advertise for positions in that way. In the present instance, though, we determined that we needed to define more specifically the teaching needs for the open positions this

year. Nevertheless, the outcome of the current searches has been promising: a number of applicants felt their qualifications were broad enough to not even specify which position they were interested in and others applied for more than one position. The three committees have shared the applications and candidate files have moved back and forth between the committees as the committee members feel appropriate. At this point in time the pool of candidates has been reduced to twelve individuals, all of them able of teaching in multiple areas within the Institute's programs.

5. Increase collaboration with the Industry Advisory Board, especially in regards to research.

After receiving the committee's report, we met with our Advisory Board, shared the report, and asked the board to make suggestions on how we could address this recommendation. To our surprise, the IAB members in attendance were unaware that a problem existed in this area. As mentioned in the previous section, the IAB is submitting a letter that is attached to this response citing statements in the committee's report that were not representative of the IAB's positions. Although they understand that is possible one or more IAB members may have made specific recommendations to the review committee via letters or conversations, they were not aware of this as a concern.

In fact, we already collaborate in some respects, and will actively pursue additional opportunities. As an example of collaboration with groups represented on the board, one faculty member currently has an investigation contract with the Port of Tacoma. This contract has given one graduate and one undergraduate student the opportunity to investigate GPS-based navigation systems. This is an example of how we are trying to help local organizations and industry to solve problems relevant to them (and to involve students in significant applied research, as well). Another faculty member currently is working with the Tacoma Art Museum and other ongoing initiatives involve local non-profit organizations and local secondary schools. In the area of cyber security, faculty have participated in exercises at Fort Lewis with Army officers from that military base and from the West Point Academy. The Institute has recently started working with the staff of the Naval Shipyard in Bremerton to develop closer ties. Since the Shipyard is the largest employer of engineers in the region, a close relationship will be advantageous to both institutions.

6. Define the Institute's criteria for tenure (in accordance with the APT guidelines) focusing on realistic expectations for teaching, research and service, respect all forms of scholarship generally recognized in the field, and ensure that all faculty accept the criteria.

The CSS program adopted the Computing Research Association (CRA)'s Tenure and Promotion Guidelines approved by their board of directors in August, 1999. The CRA is an association of more than 200 North American academic departments of computer science, computer engineering, and related fields and the CRA recommendation was written by three well-known scholars in the computing area.

However, we acknowledge that there have been problems with the Institute's tenure and promotion process and we are taking active and immediate steps to address these problems. As noted in the first section of this response, our T&P problems have been compounded by the fact that the UWT guidelines do not always match or agree with the UW guidelines. Improving the Institute's T&P process will require addressing several issues, particularly the evaluation of both teaching and research, as described below. Our goal is to have a revised T&P process in place by the end of Spring Quarter 2008

First, the teaching evaluation process must be improved. Insufficient time has been taken for faculty to develop a shared understanding of the documentation that should be provided for peer review of teaching. Junior faculty have not been given enough information on the criteria that will be used to judge teaching effectiveness. This is the case not only for promotion and tenure but for annual peer evaluations as well.

Although there is an explicit process for teaching evaluation based on a review of course documents along with an accompanying reflective statement, this process has not been consistently carried out, there is not sufficient specificity on the documents that should be included, nor is there a shared understanding of how to determine teaching effectiveness from these documents. At both of the last two faculty meeting, proposals have been presented to the faculty to investigate how annual reviews, teaching and the P & T process itself could be modified to make them totally compliant with UWT procedures and to make them more understandable and useful to both junior and senior faculty. We have committed to undertaking a review of our teaching evaluation practices so that it is inclusive, supportive of faculty development, and which will yield proper information concerning teaching effectiveness.

In addition, the teaching evaluation process will also rely on the evaluation of program education outcomes. To this end, educational outcomes for all required classes in both the CSS and CES curricula do exist, but have not been consistently used. As we review this process, rubrics need to be developed to measure achievement of the educational outcomes. This process will be consistent with the process used by the Accreditation Board for Engineering & Technology (ABET) and the Computing Accreditation Commission (CAC).

Evaluation of research is a problem for many programs, not just for the Institute. This is not meant to imply that we can ignore this aspect of the T&P process; we will take steps to improve our process for evaluating research. A problem that has arisen in several recent T&P meeting is that the faculty do not agree on the criteria that should be used for evaluation research contributions. Before progress can be made on improving the T&P process, we must get faculty agreement on how we will measure research productivity.

One of the other concerns in this is the need by the Institute to regularly re-evaluate the criteria for promotion and tenure. This is especially important when there are changes of

personnel. It is also important to do so to reflect external changes to the Institute and campus, such as how the introduction of freshmen and sophomores will impact tenure and promotion processes.

7. Commit the Institute to formal mentoring of teaching for all junior faculty.

This is an area where we agree completely with the committee's recommendation. The institute has until recently inconsistently provided mentoring to its lecturers, assistant and associate professors but we are in the process of rectifying that situation.

To ensure that the mentoring process is improved and formalized, a committee was created at the January 18th faculty meeting and given the charge of presenting a plan for mentoring all faculty below the rank of full professor. The committee consists of an assistant, an associate, and a full professor. They will deliver a documented mentoring process for faculty approval by the end of Spring Quarter, 2008. We will also discuss issues specific to mentoring women faculty, and will make appropriate recommendations.

In the meantime, we have done our best to provide adequate mentoring for the only junior faculty who is not currently been reviewed for tenure and promotion. Assistant Professor Dan Zimmerman, who is in his second year at UWT, was given the opportunity to talk with all senior faculty and eventually chose Dr. Larry Wear as his mentor. During their initial meetings Zimmerman and Wear decided on a schedule of monthly meetings to discuss Zimmerman's teaching, research, and service. Zimmerman presented a plan for furthering his research and Wear proposed an interim plan for evaluating Zimmerman's teaching. They have also agreed on what would constitute an acceptable level of service. Such kind of arrangement will be no longer necessary when the mentoring process mentioned in the previous paragraph is approved and implemented.

8. Expand the Institute's horizons beyond the South Sound to embrace Southwest Washington to the Columbia.

We agree only in part with this recommendation, since it does not go far enough to satisfy the mission defined for the Institute when it was created. At its inception, the Institute was given the mission to improve computer science and engineering education opportunities for residents of the entire state. To meet this goal we are gradually expanding our recruiting and outreach programs; one of our administrative staff positions that is currently vacant will be changed into a recruiter/advisor position. Most of the Institute's efforts in the past have been focused on the South Sound and Pierce County, but that is changing. During the past year faculty visited both Centralia CC and Clark CC and made presentations to students describing the education opportunities in computing science and engineering at UWT. Plans are underway to bring students from Centralia's engineering program to visit UWT so that they can see the outstanding facilities (as noted in the committee's report) the Institute has to offer.

The Institute is also working with a group of community college faculty and administrators to provide better access to introductory classes for students throughout the state. A faculty member from Clark County CC has received a grant that will enable delivery the introductory Electrical Circuits class to students over the Web. This Spring, as a first step to providing statewide access to the course, four community colleges will offer the course. One of the hurdles that had to be overcome when implementing this plan was to develop a way to offer labs for the class that wouldn't require each CC to duplicate facilities and instructors; we at the Institute came up with a solution. Laboratory for the Circuits class will be offered at UWT on three Saturdays during the Spring Quarter. Institute faculty and facilities will be utilized to provide the lab experience for students from all the community colleges involved.

The Institute will continue to look for other opportunities to make its programs available and attractive to students throughout the state, as mandated by its mission.

9. Consider changing the name of Computer Software Systems degree to Computer Science & Systems, though this is not urgent.

We plan to follow this recommendation and request a name change for the CSS program. Although we feel this is an important step toward making students and industry aware of what our program really offers, we will delay implementation of this recommendation until the other issues cited above have been addressed.

Conclusion

We appreciate the opportunity that this Graduate School Review has provided. In particular, we appreciate the fact that the Review Committee has recognized the quality of our faculty and staff and the solid education that we are providing to our students. Since the starting of the CSS program, more than 300 graduates have joined the workforce in the region and their quality has been recognized by employers ranging from small business to large corporations. Our enrollment numbers have reached its highest point in several years and we can say without hesitation that our programs rank among the fastest-growing programs in the nation. This success has been achieved without compromising the rigor of our programs. Despite the relatively heavy teaching load, our faculty continues to excel in research and to maintain an international reputation among their peers.

While we dispute some elements of the report, we do recognize that the Institute needs to make changes. We are committed to making those changes, and believe that we will have made great improvements when we are reviewed again. We thank the Graduate School and the members of the Review Committee for providing the opportunity and the insights to make those improvements possible.

ATTACHMENT I

Response to the Lazowska and Notkin (L-N) Report

- *Every faculty member must view him/herself as a faculty member of the Institute, and must buy into the Institute's role in the South Sound region – in terms of student demographic, employer demographic, legislative expectations, pipeline issues, diversity issues, and so forth. To emphasize this, make Steve Hanks the Associate Director for Academic Programs, rather than the Associate Director for Computing and Software Systems.*

While there are still lingering points of disagreement about elements of the Institute's mission, we have made considerable progress in terms of overall identification of faculty with the Institute rather than with specific programs within the Institute. The position that Steve Hanks held at the time of the Notkin-Lazowska report was changed to Associate Director of the Institute (Larry Wear now holds that position).

- *Strongly consider abandoning the goal of accreditation. Separate pipeline issues from program quality issues. "Excellence" and "accreditation" are not synonymous!*

We followed the L-N recommendation as far as the CSS degree is concerned. For Computer Engineering and Systems (CES), however, accreditation is required. When the University of Washington had its first engineering program to become ABET-accredited, there was a commitment that all engineering programs within UW would be also accredited.

- *Strongly consider the "concentration" model that we have described (or some variant). Recognize the breadth of possible careers in information technology, and the special context of the South Sound region. Give the "concentration" model a try with information security and perhaps one other new concentration (beyond "software" which you have now). Think carefully about the benefits – to you and your students – of agility.*

While the concentration model is one that we have seriously considered, its implementation would be very difficult with the current size of our program. The composition of our student body requires a very diverse scheduling and it would be a resource-intensive proposition to provide all crucial courses often enough to all students in all concentrations.

On the other hand, the differences between CSS and CES (and the proposed ITS program) are such that they really require separate majors. These programs were proposed after careful consideration (including input from other external consultants)

and are consistent with expansion of the UWT and the needs of the Puget Sound industry. However, we have proposed two concentrations within the ITS program, for the very reasons outlined in the L-N report. (Dr. Lazowska was particularly enthusiastic about the ITS proposal).

- *In addressing student pipeline issues, recognize the importance of clarity and stability, and recognize that it is unlikely that the performance of the community and technical colleges will change substantially within the time frame that matters to the Institute. Student interests must trump all else. We see no alternative for now other than for the Institute to offer selected lower division courses.*

We indeed follow this recommendation, the CSS 142 and 143 sequence has been offered and more recently other courses have been added, including one in Computer Fluency. For the CES program we are offering joint courses with Tacoma Community College and next quarter will be part of an on-line effort (Electrical Circuits) involving several community colleges in the State; we will teach the lab part of the course. Our overall interaction with the community colleges nowadays is much more collegial and constructive than it was at the time of the L-N review.

- *Strive for clarity and stability from leadership. Don't try to be universally liked and to make everyone happy. The Institute needs a firm hand at the tiller. Find time to do reviews and expectation-setting for senior staff.*

We certainly moved in that direction although not as forcefully as the L-N review possibly expected (their verbal recommendation when the then new Director interviewed with them over was even stronger).

- *In the Chancellor's Office, continue to play an active role – a proactive role – in supporting the Institute and defusing jealousy. Also, keep striving to provide clarity and stability of mission to the Institute, in the face of an admittedly difficult political situation.*

Our current Chancellor started sometime after the report. She has been very supportive of the Institute. In a fast-growing institution like UWT the addition of new faculty, staff and administrators is very common: we do our best to keep everyone informed about the Institute' mission and the origin of its unique funding.

- *Campus-wide (as well as within the Institute), continue to be clear about expectation setting for junior faculty.*

This continues to be a challenge, not only at the Institute but at UWT as well. As the Graduate Review Committee rightfully indicated, we need to do additional work to mentor junior faculty toward successful tenure and promotion. Lazowska and Notkin were very right when they pointed out in their report the lack of clear definition from Seattle of what it is expected from Tacoma and Bothell and that is still discussed today.

Also, we have had three Vice Chancellors for Academic Affairs in the past two years whose differing views of promotion and tenure may have also muddied the expectations. We will do our part as strongly requested in the GRC review (including establishing a proper mentoring process), and will work with the UWT faculty at large to help resolve these challenges institution-wide.

ATTACHMENT II

LETTER FROM THE INDUSTRIAL ADVISORY BOARD

February 12, 2008

To: Members of the Institute of Technology's Graduate Review Committee

Cc: Chancellor Spakes

RE: Initial Response to the Graduate Review Report

Having received the Graduate Review report, the Advisory Board for the Institute of Technology discussed the conclusions contained within and would like to make comment on the report.

We appreciate the opportunity the Institute of Technology at the University of Washington, Tacoma was given to reflect and act on issues identified in the report. First and foremost, as an advisory body, we encourage the administration and faculty of the Institute to take to heart the assessment of challenges and improvements to be addressed and made by the Institute's faculty and staff. We hope and expect that recommendations will be reflected upon and adjustments, when warranted, will be made.

The Advisory Board is proud to support and provide input to the Institute, and understands the importance of making the necessary changes that will strengthen the institution. Several of the recommendations made by the review committee will help to guide this valuable community asset toward greater impact and reward for the students, the faculty, the South Sound region and the state.

However, the Advisory Board also noted errors and procedural problems with the report that present barriers to effectively acting on some of the report's conclusions and recommendations.

Though not comprehensive, some of the corrections to the report are as follows:

Within the first paragraph the report states, "Though strongly positive, a thread through the Board's testimony viewed the Institute as ignoring Industry."

We have two issues with the tenor of this statement. Many of the board agreed to and were responsive in participating in the review process via letters, phone participation and in person interviews. The study negates the multitude of examples given in which the community, industry and participating organizations used in praising the impact of the Institute itself, but more importantly the students it has graduated. By wrapping the numerous examples into a three word clause, followed by a singular negative point, the report effectively creates a bias and an imbalance in what we presented to the visiting committee.

Furthermore, the negative point itself is unsupported.

As Tomm Aldridge, Chair of the AB states, "Having been part of the review interview process as the chair of the advisory board and the Intel representative, I can say that none of us from industry said the Institute was ignoring industry. To the contrary, we all extolled the excellent response industry has received from the institute."

President and CEO of the Economic Development Board of Tacoma-Pierce County, and long time Institute Advisory Board member Bruce Kendall had a more direct response when he wrote of the report, "What "thread"? As a long time advisory board member who sent a letter supporting the institute for this review, and has participated in dozens of advisory board meetings over a period of years, and contributed money to the institute, my direct experience tells me that the "ignoring industry" comment is patently false. Moreover, the sentence is internally contradictory and provides no evidence whatsoever of the claim."

Additionally, the recommendations themselves are difficult to assess and have been met with calls for clarity by some reviewers of the report:

"There are no definitions of success in meeting the recommendations. Metrics for success generally require a time for completion, an actionable item and a clear metric indicating success. I recommend that this is an opportunity for the University, the Institute and the Industry Board of Advisors to create an action plan which is specific and measurable while addressing the concerns in the report."

"The report appears to have no clear methodology defined for how the various conclusions were reached. It appears that the review board was predisposed to certain conclusions from earlier reports and that any testimony, regardless of the source's seniority or circumstances, had equal weight. I would ask that the Institute get the review board to clarify its methodology for each conclusion so that a response can be developed from data rather than by inference."

"Unfortunately, the authors of the report have not prioritized the issues they want addressed and, in fact, went from just a few major issues to a list of seven recommendations at the end of the report which were not clearly related to the major issues."

Also noted in feedback to the report is a clarification to the call for expanding the Institute's scope to embrace South West Washington and the Columbia region:

"This statement indicates that the authors are not aware of the existing state-wide mission of the institute which has been in place since it was created. As a basic fact of our charter it gives one serious pause as to the validity of the recommendations as a whole."

The board is quite sensitive to the means by which the report was written and delivered, especially given the seriousness of the claims made by the authors. It is not stamped "draft" and it has no page numbers or footers. The lack of a "draft" stamp is no small matter. As a report by a public institution this document might potentially end up in the

press with the likelihood of doing damage to the entire university before it is even finalized.

Please take our concerns into consideration and proceed with the necessary steps to provide a more accurate picture of the Advisory Boards input, suggest metrics which support and clarify how improvements can be made regarding the noted areas for improvement, give guidance to the priority of those issues that are agreed upon and handle the documentation and process in a manner that does not unnecessarily endanger the excellent reputation the University and Institute enjoys with the community it serves.

Sincerely,

A handwritten signature in black ink that reads "Bruce Kendall". The signature is written in a cursive, flowing style.

Bruce Kendall,
President and CEO of the Economic Development Board of Tacoma-Pierce County