

THE UNIVERSITY OF TOLEDO
FACULTY SENATE
Minutes of the Senate Meeting of November 6, 2007
<http://www.facsenate.utoledo.edu>

Approved @FS mtg. 11/27/07

HIGHLIGHTS

Academic Programs update
“Epsilen” – electronic portfolio system
Economic development
Undergraduate research

Note: The remarks of the Senators and others are summarized and not verbatim. The taped recording of this meeting is available in the Faculty Senate office or in the University Archives.

Chair Floyd called the meeting to order. **Alice Skeens, Executive Secretary** called the roll.

I. Roll Call –2007-2008 Senators:

Present: Barden, Barlowe, Edwards (for Baines), Barnes, Chen, Cluse-Tolar, Fink, Floyd, Fournier, Fritz, Funk, Greninger, Horan, Hottell, Hudson, Jakobson, Johanson, Kennedy, Kistner, Klein, Lambert, Le (for Zallococo), LeBlanc, Lundquist, Martin, McInerney, Monsos, Morrissey, Nandkeolyar (for Ariss), Olson, Piotrowski, Relue, Skeens, Stierman, Teclehaimanot, Thompson-Casado, Ventura, Wedding, Wikander, Wolff,

Excused absence: Compora (for Moorhead), Hefzy, Piazza, Schall,

Unexcused absence: Ames (for Bischoff), Evans (for Lipscomb), Peseckis, Stone (for Hamer), Spongberg , Sundar (for Pope),

II. Approval of Minutes:

Minutes of October 23, 2007 were approved as distributed.

III. Executive Committee Report:

Chair Barbara Floyd:

Faculty Senate Executive Committee Report
November 6, 2007

I would like to bring you up to date on a few activities of the executive committee since our last Senate meeting

A. The issue of the merger: As I reported at one of our earlier meetings, we have hit a few bumps in the road between the main campus and Health Science Campus executive committees on some issues related to the merger of the senates. Last Saturday morning, Bill McMillen, the Vice President for Government Relations, facilitated a two-hour meeting between the two executive committees in an effort to identify what the issues were and how to move forward. Bill did an excellent job of identifying the issues, which he summarized as the following: different cultures, the fear of losing identity and power as separate senates, and our differing history and traditions. These differences were perhaps larger than we had realized, and the result was a breakdown of communication between the two groups. Bill succeeded in getting us to communicate again, and many of the “issues” turned

out to be simple matters of misunderstanding that have been exacerbated by the fact that we are continuing to function as two senates instead of one. To attempt to improve communication, we are establishing liaisons from each senate to the other senate's meetings. We have not had a chance to identify who will serve as the liaisons, so there is no one from the HSC senate here today, but hopefully at our next meeting, and all subsequent meetings until we officially merge, there will be a least one representative from their Senate in attendance at our meeting, and I will encourage them to be an active participant in our discussions. We also developed a game plan for moving the rules and appendices forward. The two chairs of the senates will be meeting with the two provosts on Friday, Nov. 16, to get their input about the rules and appendices. We will then forward a summary of their comments, along with the rules and appendices as drafted, to all faculty immediately after that meeting. I assume we will then schedule some open forum sessions where all of you will be able to attend and discuss any issues you might have about the rules and appendices. The two executive committees will then take all of these comments and make any changes we feel are necessary based upon the feedback. Once this is done, which I assume, given the lateness of the time in the semester, will be after the first of the year, we will bring the documents back for votes of the senates.

I would like to apologize for the length of time this process is taking. I can assure you that we will move forward with all deliberate speed to get these documents completed.

B. The issue of the university's strategic plan and strategic plans being drafted by the individual colleges and non-academic units: Penny Poplin Gossetti, Interim Vice Provost for Academic Innovation, will be speaking to the Senate at our next meeting on Nov. 27 about the strategic planning effort. Penny serves as the convener for the Strategic Planning Coordinating Committee, a group that is overseeing the process. That committee consists of the two provosts, the vice president for student affairs, the vice president for finance, the dean of the College of Business, and the two chairs of the senates. To date, this coordinating committee has begun an initial review of the reports prepared by the implementation work groups over the summer. We are looking at which of the recommendations of these work groups should go forward quickly for implementation. Those decisions should be made in the next week or so, although a few of the workgroups have not yet completed their committee reports. In addition, the coordinating committee has reviewed all of the mission and vision statements submitted by the colleges and non-academic units, and the vast majority of the statements were accepted without comment. A few required some minor changes, mostly for the sake of clarity, and those will be sent back to the units for amendment in the near future.

Penny will likely tell you about another step that each college is expected to do for the strategic planning process, which is to input information about the college plans into a web-based tool that ties all strategic planning efforts into the university's strategic plan. The purpose of the tool is to monitor the success of the colleges' strategic plan and to make sure that whenever possible, the college's plans are in line with the university's plan.

There will be more opportunity at the next Faculty Senate meeting to hear from Penny directly and ask her questions about the process.

C. Next meeting: As a reminder, because of the Thanksgiving holiday, the next Faculty Senate meeting will be Nov. 27.

D. Fiscal Advisory Committee replacement: At the last meeting we noted that Kati Thompson-Casado was unable to serve on the Fiscal Advisory Committee and we asked for nominations to replace her. We had several names that were submitted, we reviewed all those suggestions and Matt Wikander has agreed to serve this term on the Fiscal Advisory Committee.

E. Coalition on Intercollegiate Athletics: This email was forwarded to you, it is a group of representatives from Faculty Senates of the Division 1A Schools asking if we would like to join them and I wanted your input before I go any further with this. Alice says that this is a regular invitation that we receive and the past chairs chose not to participate. Any questions or comments on this?

Senator Johanson: I think we should have some idea that athletics has input from the academics and that this shows our involvement in that more readily.

Chair Floyd: Any other comments? If you like I will pursue this and I'm suggesting that if we do join this coalition that the responsibility of communicating with them would be carried out by the two Faculty Senate elected Athletic Department representatives, Jim Klein and Sharon Barnes and possibly Robin Kennedy. We will forward this on to all of you and ask that you communicate with them.

Senator Klein: They have a COIA and a website and you can see if this is something you want to be involved with.

Chair Floyd: So what is your experience with them?

Senator Klein: About 50-60 D-I university faculty senates belong to COIA and about 2/3 of those institutions are members of the BCS conferences. Those are the big conferences that spend big time money and have big time academic and eligibility issues. There are two schools in our MAC-Eastern Michigan and Ohio University whose faculty senates belong to COIA. For me the question is can we identify with the issues that the COIA membership is most concerned about – e.g. academic fraud or overspending in intercollegiate athletics.

Chair Floyd: Would you take a look at their website and come back at the next meeting and give us a recommendation?

Senator Klein: I can do this.

Chair Floyd: We will delay any decision on this.

Senator Klein: Perhaps Alice Skeens, UT's NCAA Faculty Athletics Representative, can assist.

Chair Floyd: Alice, would you please take a look at that website as well?

F. Safe Places Program: At the last Senate meeting you heard a report from the SPECTRUM group concerning a program called the *Safe Places Program*. They indicated at that time that they would like us to consider a resolution of support for that program. That resolution comes to you today from the executive committee, and we would like you to consider it at this time. Sharon Barnes is their faculty advisor so if any of you have specific questions on the resolution Sharon can answer them for you. But we will postpone this until Sharon comes in a few minutes.

G. University Marketing & Communications plan: We have been asked to see if it adequately represents the academic mission in the kinds of articles that the Marketing & Communication prints for the public. There have been articles coming from the Marketing and Communications Department and the Executive Committee thought it was a valid issue to look into so I assigned that to the University Affairs Committee with a reporting date in January. If you have any thoughts or concerns or comments about the Marketing and Communications efforts, such as their recent campaign which they just launched, you can forward them to the University Affairs Committee. Holly Monsos is next on the agenda with her report from the Academic Programs Committee.

Senator Monsos: You should have received email last Friday listing these three items and they are also on the webpage if any of you need more details. This is the Consent Agenda, do any of you wish to have any of these items removed from the Consent Agenda for discussion? This recommendation comes from the Committee, all those in favor please say "aye". Opposed? None. **Motion carries.**

**Academic Programs
Consent Agenda
November 6, 2007**

We submit the following **program modifications** for Faculty Senate approval. Full information on each modification can be found at:

<http://curriculumtracking.utoledo.edu/>

1. Health Care Administration
 - a. Change HCAR 4540 from elective to required
 - b. Require majors to earn a C or better in all HCAR courses
 - c. Add HIM 3200 as an elective
2. Nursing Programs
drop Chemistry as a pre-req for admission
3. Undergraduate Geology Program
Change required courses and total credit hours for:
BS Geology
BA Geology
Minor in Geology
Interdepartmental BS in Geophysics - Geology courses requirements
Geology Track for BS in Environmental Sciences

Chair Floyd: Since Sharon Barnes is here now we can move on the resolution for *Safe Spaces Program*. It comes from the Executive Committee; it needs no second. Does anyone have any questions or comments on the resolution? If not, all those in favor please say “aye”. Opposed, say “nay”. It’s unanimous. With this resolution we are endorsing the *Safe Spaces Program*. Thank you Sharon for working with SPECTRUM in getting this resolution drafted and your assistance with this program.

Next item is Prof. Barb Schneider and her report is on **Epsilen**, the electronic portfolio system.

Prof. Schneider: Good afternoon, I’m Barbara Schneider, the Director of Composition in the Writing Center and with me is Mike Piotrowski, Senior Lecturer in the English Department. He has been very important in creating our initiative to construct electronic portfolios across the first semester writing course.

Our purpose today is to provide a brief overview of that web environment because it provides students with, among other things, the software tools, the network, the storage place for the creation and the maintenance of electronic portfolios. We have provided you with the description on the hand outs. The University of Toledo has been exploring the potential of **Epsilen** for more than a year now to make it available to all the students and faculty at the University. That contract just recently has just recently been assigned to eLearning and Academic Services and they will be administering **Epsilen** going forward. They will also be providing additional information and faculty workshops in coming months. I think they are planning on unveiling it in February.

Mike Piotrowski is going to provide you with the review of this web environment and introduce you to some of the features available in it. I want to tell you about our vision on how this can work by telling you about our plan for using it in the writing program. A number of you will have to play along in order for this to work.

What we are piloting in our composition courses this semester is we are asking the students to demonstrate their achievement of course objectives by creating an electronic portfolio and entering texts and artifacts from their writing classes into a learning matrix that we can then go back in and look at, so that we can look at what students write and how writing changes in response to time and instruction during their academic careers here at the University of Toledo. They will create their first portfolio in their composition classes. We thought that composition was an appropriate place for students to initiate those portfolios because we already use portfolios in a number of our classes for student assessment. And because we want to catch their writing as they enter here so that we can

look at each change over time. We may, in fact, once we get online placements up and running, we may include their placement sample as part of their portfolio.

So they will create their portfolios in their first course and then as they proceed in our curriculum they will build on that initial portfolio. Students will add to it in their second composition course and they will reenter the learning matrix that they initiated in their first semester and add texts to it. We will then ask students to add materials from their upper division courses. In the college of Arts & Sciences we will propose that students add writing from both of their upper division WAC (Writing Across the Curriculum) courses. We're hoping that students and instructors from other faculty and other colleges will also begin to use learning matrixes and ask their students to add to their writing matrix from each of those courses so that we have samples of students' writing both in their gen. ed. courses and in their major courses.

Teachers don't have to use electronic portfolios to grade the students in their classes in order for this to be effective. We're going to use those in our writing courses and in our composition courses because that's the way that we assess student writing anyway. Let's say you have a student in an upper division engineering course and they create a report, you don't have to ask them to create a portfolio for end of the course assessment. But we would like you to ask them to enter that into their writing learning matrix so that we have a sample of their upper division writing. This will really be for the student.

The students will already have these portfolios. They will already have the learning matrix; all you have to do is remind them to enter materials into that learning matrix. You can of course create learning matrix for your own majors and for your own forms of assessment. I think potentially this can be used for all our gen. ed. courses.

At the culmination of the students academic career, students will then have a collection of work that they have produced during their tenure with us and they can use that material then in a number of ways. One of the ways that they can use it is they can use the materials that they have created here in order to create a professional portfolio for employment purposes. If you are familiar with monster.com or any of those electronic resume services, those allow students to link to just this kind of show case webpage. Students can also use these to create portfolios of their academic work for graduate school applications. And then they can use them for fun because the Epsilen environment provides a rich social networking that we help exploit in another project so that students begin using the Epsilen environment for their student government associations or their fraternities or sororities so that they become thoroughly immersed in using this kind of electronic environment, making it very simple for them to say "go to your ePortfolio, pull down your learning matrix and put these artifacts into it" because if it goes from the bottom up I think we have a much greater chance with students actively and purposely participating in it. So that's our vision for using electronic portfolios as longitudinal assessment tools.

Senator Piotrowski: The first thing that I am demonstrating here for you is a student portfolio. (Shows on screen this website: <http://bkoenig.utoledo.epsilen.org>) This is a portfolio created by one of my students last spring for a freshman composition course. Once again, Epsilen is open format so the student has complete ownership of this portfolio, even though it's set up through the University of Toledo, she has complete responsibility over what she includes in it, how she develops it, what colors she puts in here, what pictures she puts in here, all these different types of things are completely under her control. It would be the same as if we asked her to submit a paper in a binder.

We see her home page here. This is a public page so that other people that use Epsilen can visit this page and see what's here. It's not just people in this course, who can see this page, but people in other courses, other instructors, even people from other universities, so this is definitely an open

format in that sense. Students are usually good with working with this because it has many similarities to MySpace and Facebook, a way of creating an online identity.

I'll bring your attention over to the menu on the right, and show something called Share It. I will point out some of the features. In the actual portfolio aspect of this as you see here (in the Share It link), there are seven files that have been linked to her main page. Each of these represents an assignment from my composition course that the students were asked to complete. And they were asked then to upload them to this site. The final grading for the course, then uses a portfolio assessment.

There is a reflection essay and in that reflection essay students are asked to self assess and that's one of the things that's important especially in composition where we're trying to teach critical thinking skills. So then her webpage includes, as a part of her portfolio, this essay, which discusses the papers that she has written, the activities in the course and then she then makes an assessment herself how she felt she's done in the course.

Senator Fink: How long is that material kept on the computer ?

Senator Piotrowski: It is kept on the computer until you remove it.

Senator Fink: Does it present a storage problem?

Senator Piotrowski: Not for us.

Senator Fink: It's supposed to be used as a portfolio but is there anything to prevent them from being abused?

Senator Piotrowski: They could put things on it, but that's not what we teach in the classroom.

Senator Fink: My concern is the liability of this if somebody would abuse it. Can we take it down if it is not used for the purposes for which it was intended?

Senator Kennedy: Do we have a mechanism to protect ourselves against copyright infringement? For instance, if they take a Disney logo and put it in their portfolio. If we don't take it off quickly, we may be liable.

Prof. Schneider: I think all the copyright issues are answered by **Epsilen**. Students will violate copyright laws, but that does not make us responsible for them. If you go to any student's website such as **Facebook** or **Myspace**, they download stuff all the time. It's not our responsibility.

Senator Wedding: This is covered under 17USC 107 and their use of the copyright act. It's a very complicated topic.

Senator Fink: I'm still concerned if even a small percentage of students misuse it, do we have the right to take it off.

Prof. Schneider: I don't think that we do, but quite honestly I don't know that, because the students will own that space.

Senator Fink: Should they sign a contract that it is to be used as a portfolio and not other purposes?

Prof. Schneider: This also allows them here at the University to use it as their social network so it's not for academics only.

Senator Fink: What if someone posted pictures on there and they were explicit?

Prof. Schneider: I don't know what the restrictions are.

Senator Piotrowski: There is a certain amount of freedom of speech here and all sorts of things are possible. But, on the other hand, if someone is submitting this in terms of a program and a potential employer should see this, in the classroom we talk about this. What would you want to put up there to create your identify and for your future employer to see. Those things are discussed in the class.

Prof. Schneider: You don't have to be a very sophisticated web user to find tracks of things when kids put up stupid stuff.

Senator Fink: Please don't misinterpret my comments. I personally have seen a number of programs and this makes me slightly uneasy as it only takes one or two people that potentially can create a lot of problems for the University.

Senator Barlowe: Would it be possible for **Epsilen** to take down the site?

Senator Olson: Is there a cost to this?

Prof. Schneider: The University has purchased a site license for it, but I have no idea of the cost.

Senator McInerney: I think there is an interaction opportunity with **Epsilen** something like WebCT, I think it has similar functions like WebCT? Is there a discussion to replace WebCt?

Prof. Schneider: That question has been raised. In fact I had a conversation with Karen Rhoda who is administering both programs. At present there is an interface between that and WebCT so the WebCT remains our delivery system for web assisted and online courses. What they can also do is put a link to **Epsilen** inside the WebCT shell. There is some duplication of services through these two different systems. This is all very new and I think Karen has just been assigned the responsibility for the **Epsilen** system. There are some capacities in **Epsilen** that there are not in WebCT. The most important one is the ability to create and maintain portfolios so that we can do assessment of students at various stages and at the end of their academic career.

Senator Teclehaimanot: I have two questions, first one, does the system support community of learners which means can you set up groups for discussion purposes?

Prof. Schneider: Yes, and that's one of the best features of it and one that Mike used in the class last year that set up a collaborative group with the University of Alaska.

Senator Teclehaimanot: Do we have users' policy or users' guides for this system? The company should have user's guide. You can't just post information as you wish. There should be some agreements that students must sign.

Senator Piotrowski: When students register for an account there is information and some sort of agreement for those kinds of things. Also when students upload items into the portfolio there is also a policy you have to check, for example it asks if is their own work so it's not plagiarizing those kinds of things.

Senator Teclehaimanot: Are you familiar with **Wikis**? Whatever the students do it does reflect on the University of Toledo so we need to be careful and that's why I'm asking about the user guide. You might say that there should be freedom of speech. But it reflects on all of us, not just the student.

Prof. Schneider: I wish I had that information for you, but I don't.

Senator Barnes: I understood that the students have the control of what gets uploaded; do the students also have control of who can look at it?

Prof. Schneider: Yes, they have to mark it for sharing. The front page of their portfolio is open to the public. Anything else that they want to put up there they can designate that only their instructors can see it, or just the students in their class can see it. Or they can create a group so that only their friends can see it. They exercise control over it. They can mark it so that I can see their composition papers but another instructor cannot.

Senator Thompson-Casado: That's linking to my question with class use, what they uploading into their portfolio, I can see a great opportunity for discussion in the classroom with this, did you ask them to give their classmates access to see their work?

Senator Piotrowski: When they were uploading it, it automatically is public.

Senator Thompson-Casado: So what you required for your class is what they upload becomes public.

Senator Piotrowski: Right.

Senator Thompson-Casado: Did you have anyone saying, "I'm not comfortable with that?" Because I'm working with a second language and the students are sensitive with their language skills, also when they are writing a paper, they are writing for me, I'm the person they are writing for and it changes how you write the paper when you write to another teacher as well.

Senator Piotrowski: I haven't run into that yet, it is my goal that they become comfortable with this idea of publishing, but the goal of any writer is to become published. And writing is a public act in that way.

Senator Thompson-Casado: But it changes how they write when the audience is different.

Senator Piotrowski: The link "Access" that's the link where you set up **Epsilen** to go just to the certain limited groups that you created. In the context of what you are doing, I would encourage them

to write publicly. Think about a public audience and how do they differ from writing for a teacher. That certainly is an important goal of my course.

Senator Teclehaimanot: Another issue of what we have to be careful is NCATE and they should be kept confidential as well. Furthermore, we have to make sure that the user understands the ramifications of putting it out there for the public or for private. We need to define its purpose first.

Senator Relue: Who defines the purpose of them?

Prof. Schneider: For their writing component, since we are just starting out we haven't finalized how we are going to do this. But we anticipate having students download their papers, and it will link to their text so we can have somebody go in and create a sample and take 10% of completed portfolio at the end of four years. A group of us will read them not for assessment of students or assessment of teachers but to identify changes in student writing and to look at achievement of various course objectives. For example, by the end of their career at the University of Toledo in sampling 10% of the students, can the majority of them incorporate secondary resources in their text? Do they use conventions and do they know how to cite other works? What are their sentence like, are they able to write complex and compound sentences? Can they make an argument? Do they differentiate writing in a biology course from writing in their literature Capstone courses. So this way we can actually adjudicate whether or not our programs are working. There is no way for me to evaluate composition at the University of Toledo until I have a collection of student papers to have that kind of evaluation.

Senator Stierman: Can documents or Power Points be downloaded or can they only be viewed.

Senator Piotrowski: Yes.

Prof. Schneider: Can you steal another person's work?

Senator Piotrowski: Yes.

Prof. Schneider: Lastly, I wanted to show you that any discipline or any department can create for their own students and you can go on their website, www.epsilen.com and register for an account.

(handout)

What is Epsilen?

Epsilen is an on-line eLearning environment for students and professionals in academia. It is created and generated at IUPUI in Indiana, and connects students, faculty and administrators from universities all over the globe. The University of Toledo has contracted with Epsilen to make available its networking and software capabilities available to all UT students now and after their graduation.

Epsilen makes use of social networking technology for educational purposes. Students can use it to display work they produce during their college years for the benefit of employers and accrediting boards. Instructors can use it for connecting with their students and with colleagues at other universities which share their research goals. Administrators can use it for viewing information about individual students, and for designing program assessments.

What does Epsilen account consist of?

Each Epsilen account user has a unique web address that consists of two main parts: a public **ePortfolio** and a private resource management **personal webpage** with many links and tools.

Your Epsilen **ePortfolio** is a public webpage that anyone with Internet access can see. You can use it to showcase the work you have done. You can personalize it with colors, pictures, links, and descriptions of yourself. You can also control who has access to specific parts of it. You can provide contact information so that others can reach you.

Your **personal webpage** is seen only by you. It has a generous amount of personal storage space for files and documents that you create. It has an email message management system. It has networking and search functions that allow you to identify friends and associates whose Epsilen accounts you wish to interact with.

Individuals can create Group websites to link several personal accounts of people with shared interests. Instructors can create course websites that link the accounts of several Epsilen users in a common webspace with useful Course Management Tools, such as Drop Boxes for submitting assignments, Forums for on-line class discussions, and Gradebooks for keeping track of attendance and course assignments.

What is a Blog? What is Share It? What is ELM?

Each Epsilen account includes a **Blog** function. A blog is a kind of daily journal, but unlike a diary, the words you post in your blog can be read by any Epsilen users, so you are essentially publishing your thoughts for the world. Writing instructors will find this tool useful for practicing their own writing. You can give students and colleagues a feel for the ideas that interest you most.

Students can be asked to use blogs in conjunction with course work. For example, blogs can provide a place for weekly reflection on topics discussed in class. Blogs can also be set up within a Course site, so that the ideas are shared only among the students in a course.

Share It is another tool found on every account member's public ePortfolio. It provides a space for Epsilen users to post copies of essays and artifacts they have created. These artifacts can be reviewed by Epsilen members that the account holder has allowed to have access. Many discipline programs at UT have plans to use this Share It space for program assessment.

ELM (Epsilen's **Learning Matrix**) is a special tool in the Epsilen account that uses a grid system for displaying your work. Your institution or department will create a template for this grid. The grid is used to demonstrate how well you meet learning objectives in a program over the course of several years.

Chair Floyd: Thank you very much. We will switch the agenda and Tom Kvale will do his presentation next on the Office of Undergraduate Research.

Prof. Kvale: Thank you for the invitation. The Office of Undergraduate Research is a fairly new office, created about eighteen months ago, the focus is on the undergraduate research on campus and we have had a tremendous amount of support from the Council on Undergraduate Research (CUR), a national organization devoted to foster undergraduate research. Some of their members include: University of Michigan, MIT, Case Western Reserve.

Our website is www.undergraduateresearch.uttoledo.edu and we are in the process of converting to the new university web system. Before the office was created there was one program that was an undergraduate summer research and now we have created six additional ones. You may not have been aware of all the programs that are available during the academic year as well as in the summer. The philosophy behind the programs that our office sponsors is that the students initiate discussions with you for research topics. That's the key point, the interaction between you and the student. The philosophy is that they will develop a proposal and send it to my office for consideration. All programs are open to all UT undergraduates in all areas of research (unless otherwise stated, such as the FYSRE program for first year college students).

To assist in the proposal writing in research we developed about a 50 page handbook, that lists all the programs, all the reports, the deadlines, etc. More copies are available in my office. If you know any students who might be interested in this, it is also downloadable from the website. This past summer we had 41 students that participated in research programs through my office. First Year Summer Research Experience had eleven participants from six departments. In Research Abroad we had two, eighteen participated in USR&CAP, Undergraduate Summer Research & Creative Activity Program. Two of the USR&CAP did research off-campus. The UT-City of Toledo Internship Program had ten participants. All those except in the USR&CAP are brand new programs that were initiated this past summer. A sampling of some of the 41 research projects:

- *Black Women Concert Pianists Since the Twentieth Century: A Search for Female's Voice in the Art of Piano Performance*

- *Comparing Arthropod Diversity in Urban Garden Microhabitats with an Examination of Common Gardening Techniques*
- *Rural-Urban Migration and Informal Sector Child Labor in a Guatemala City Garbage Dump*

The undergraduate Summer 2007 Research Participant Survey, First Year Student participant: “*The FYSRE was a great experience and one that I would strongly recommend to future students. It offered an insight to the real world of science and research that is difficult to gain in a classroom setting.....I hope to continue my research while at the University of Toledo.*”

USR&CAP faculty mentor: “*This was a great experience for me and the student. It was very similar to one I experienced as an undergrad, which obviously helped me.*”

There were other questions on the survey that I asked of the students and the faculty. The students didn’t know the faculty were getting the survey and vice versa. One of the questions was:

Did this summer’s research experience live up to your expectations in general?

Another question was:

How do you rate your summer’s research experience educationally?

(Results of the survey are available in PowerPoint on Undergraduate Research on the Faculty Senate website: www.facsenate.utoledo.edu)

This was the first year for the course **ARS2980: Issues in Research and Scholarship**, a course that Tom Barden and I coordinated. The idea is to give students instruction in how to do research safely and ethically. We thought this was a very important course and right now is offered in the Summer. The syllabus is available in PowerPoint.

We asked Institutional Research to perform a study of the participants in undergraduate research in the seven years 2001-2007. The results were of the 84 students they were able to track, only two students did not graduate or are currently enrolled at UT, so the retention rate is about 97.6%.

The University of Michigan did a very large survey about eight or nine years ago, in which they took a comparable sets of students. One group did research, one a comparable group did not, same academic levels, same g.p.a.’s and everything else. They discovered that research improved retention, especially for at-risk students.

We then surveyed Student Government to find out what they want in research priorities. Internal funding has more than tripled since 2006. I then asked them to rank from the highest priority to lowest priority the following:

- Increase summer stipend amount
- Increase number of summer stipends
- Include summer housing
- Include summer course credit (tuition)
- Create focused, interdisciplinary research groups
- Create academic year research programs that include stipends
- Other (list)

(Results of the survey are available in PowerPoint on Undergraduate Research on the Faculty Senate website: www.facsenate.utoledo.edu)

As far as the student responses, I received 44 responses.

I need help from everyone here with the database. If they don't write proposals for research and it doesn't come through my office, it's hard for me to know what the research is. So please send me an email so I can keep track of them.

We have an Advisory Committee for Undergraduate Research and the charge is to oversee, advise and assist the Office of Undergraduate Research in promoting and conducting undergraduate research at The University of Toledo. The composition of the committee includes almost all disciplines. UT is an institutional member of CUR (Council of Undergraduate Research). I will be happy to talk to you more regarding some workshops.

For Summer 2008 similar undergraduate research programs are available as they were last Summer.

Proposal deadlines for OUR-UT sponsored programs:

Spring semester	January 18, 2008
Summer (stipend)	February 29, 2008

The students should be talking to you right now about ideas they might have for research if they want to participate. Some support for supplies or travel, conferences or publications is available. I will be happy to talk to you individually and information relating to my office is on the Power Point. When students come to me and say they are interested, I try to make the first connection. Any questions?

(To view PP presentation on the Office of Undergraduate Research go to the Faculty Senate website www.facsenate.utoledo.edu.)

Chair Floyd: Our next speakers are Frank Calzonetti, Tom Gutteridge and Mary Jo Waldock and they will talk about economic development.

V.P. Frank Calzonetti: The University of Toledo is really tied into the future and well being of the City of Toledo. If the City of Toledo is on the decline, it's going to be very difficult to have a robust research university here. It will not be a very attractive place for people and students to come or to attract talent. We have a responsibility as a University to make sure that the City of Toledo and Ohio is a very robust and vital community where people will want to come to school and to settle down here. For example, in 1951 Toledo and Atlanta were the same size. Today Atlanta is different, the growth and the dynamic character is different. Toledo is a midsize city, and the University of Toledo, a middle size university and we just don't have the numbers to dominate the city like Madison, WI, Champagne Urbana, or Lansing, Michigan where you have a large University with a lot of students, a lot of faculty, and a relatively modest size city where the activities of the University drives their economy. We're not there, so we have to do other things to reach out in ways to try to make a difference in our community. So this University has to make a difference for Toledo and for Northwestern Ohio and for the entire continent. So we will be talking about what our goals are for economic development, how we are doing to achieve these goals, where we are going that's appropriate to our area and how the science and technology corridor is related to all these activities.

Traditionally the development for many years in our country was based upon recruitment and retention of firms. Mostly manufacturing and economic development organizations had people that actually competed against other regions, put together tax packages to recruit new industry into their region. That is a traditional model to try. But things change, and about 15 years ago it was viewed that this smokestack chasing was not really related to that type of activity to make a difference. People were starting to understand the growing importance.

There are three T's in the way the university can make a difference. One is technology; this is the pathway that most universities talk about, where you have research leading toward the development of new technology leading to innovations that go out to the marketplace. That's fairly standard and

we are about that. We are also about the attraction of talent, and we all talk about attracting students and upgrading students. A lot of the discussion that we've had today was about the development of talent at the university and what we do in the classroom to advise students. And also attracting talent through hiring professors and developing the expertise of our professors and faculty. Recruiting high quality faculty makes a difference in our community and helps attract new investments. Also tolerance and the relationship between the university towns which helps to attract people who tend to have a lot of talent and ideas, and they want to be in an exciting place to live and to work. Much of what we do is about this. We are a university of about 20,000 students, a city of 300,000 and a community bigger than that. We just can't transform ourselves by the presence of the university; we have to do more than that. The strategic directions report talks about a lot of these pathways; research, innovation and entrepreneurship and we want to develop a pathway for technology transfer, as we have ways of identifying our technology, move that technology quickly through the system and get it out where we can make a difference. We want to use our technology access to advance the ties to the technology corridor. We want to enhance our own business attraction, entrepreneurship and development of technology business.

A lot of times when we are talking to people from companies who come into our region, they want to talk to us about who is doing research in this area. Where do we have these centers of excellence? How can we link up? What kind of students are in that program? That's what they are interested in; they aren't necessarily interested in what are the taxes here, what is the cost of natural gas. This talks about the so called ecosystem. Technology transfer, talent, tolerance, it all leads to what is known as an ecosystem that promotes the development of a knowledge based economy where the universities have a very important role. There's a group at MIT, Richard Lester and his group have done a lot of studies about the ecosystem of innovation. And, you can see that the ecosystem would include transfer with an entrepreneurial environment which is very important. This is just some of what an ecosystem for a knowledge based economy is and we are trying to put together these pieces to create this type of ecosystem. Also, what we are trying to do is very consistent with the national leadership and the state leadership.

If you look at Ohio's Third Frontier project, there's \$270 million available to support research and scholarships. It's focused on turning around, what is viewed at the state level, a very alarming trend and direction of the State and having a more robust science and technology based economy and innovation based economy. You can see from their RFP the opportunities that are available; it is directed toward stem education and the development of new research initiatives that will help change Ohio's knowledge economy. It is very targeted towards Ohio's areas of research that lead toward commercial outcomes in Ohio's economy. You are not going to find very much support there to support fundamental research projects that provide advances in certain areas that do not lead into the direct pathway of commercialization. That's just the way it is. At the federal level, two reports, most of you probably have heard about *Rising Above the Gathering Storm and Falling off the Flat Earth*, by the National Academy, the Office of Science & Technology Planning. Again it is really hitting the alarm that we need to change something. There's a problem with STEMM education in this country, we're losing our competitiveness, our industry is losing its competitiveness, but it is really hitting hard that we need to change K-12 education and even higher education. We need to do something immediately. Norm Augustine's report is downloadable from the National Academy of Science website. Here you will see that about 60% of the patented trademarks information technology now originates in Asia. The United States ranks 17th among nations with high school graduation rate. With numbers like these, we have to do something now. It's really a call for action. The federal government had the Senate, the House and the President over the summer approve the plan to double the NSF budget, the DOE budget and put additional funding toward STEMM education and for science and engineering research.

Another thing we are pursuing is advancement of the university research parks and incubators. This is again very consistent with what we are doing. Next is the relationship with research, innovation, entrepreneurship and redevelopment. This is why it's very important to have a link between research and entrepreneurship. Research is the driving force for us toward innovation and bringing it into the marketplace and putting it to use. But entrepreneurship is needed to start new firms. Research by itself is very important even if there is no commercial outcome. 33 jobs are created for every \$1 million in research, it also helps with attracting and retaining talented people and it gives additional national and international recognition. We are very active in applied research and working very hard in development of our technology. Some numbers from last year: we had 18 new licenses, a total 72 active licenses. Our tech transfer revenue last year was \$656,000, it will be over a \$1 million this year. We are developing technology as a platform for new technology-based firms. UT ranked 7th in the world last year in translating university research to spin-off companies. We have 10 spin-off companies. We have university incubation centers. We have a plan to bring research to \$100 million from \$63 million; on the Main Campus last year it was \$43 million. We have a lot of work to do and we are working to advance health science research. Our work attracts federal R&D facilities, ARS and a national energy laboratory. We are working to bring this research into the community. For instance, next month with the science and technology corridor we will co-host a program on SBIR funding opportunities.

Next is State of Ohio Research clusters and this is the definition of Ohio Department of Development:

“A research cluster is defined by a critical mass of distinguished and highly productive faculty and researchers, quality graduate students, infrastructure, and robust academic, business and government collaborations that have led to the attainment of international prominence in research and commercialization.”

So when we put in a proposal to the Third Frontier it will be reviewed by the National Academy of Science using that definition. That is a very high bar to achieve. So what we do is focus in selective areas. The university is working to advance our clusters and work with our community in advancing clusters. There was a study a few years back on developing clusters led by our own Neil Reid and Mike Carroll of BGSU. They identified specialized agriculture alternative energy, transportation and logistic, architectural engineering and construction services as areas of importance to our community and the University to provide leadership. At this time I will turn this over to Tom Gutteridge.

Dean Gutteridge: I am wearing two hats. One is I am the dean of the College of Business, my fifth year here at U.T. , and my role #2 is I am the Chair of the Science & Technology Corridor.

The entrepreneurship and regional economic development.

Several years ago my colleagues in the college of business transformed our entrepreneurship undergraduate major into a minor for a couple of reasons. We thought that business students involved in entrepreneurship need to get a major in one of the core disciplines, be it Accounting, Finance, Marketing, etc., but equally important that entrepreneurship be something that needs to cut across all the disciplines. The University of Toledo and Bowling Green State University co-sponsored an entrepreneurship business excellence Hall of Fame, and we honored the GM PowerTrain for business excellence, as well as several family business firms, several business centers and entrepreneurship. Rodney Rogers, my dean counterpart at Bowling Green talked about their entrepreneurship program and indicated that they are enrolling in access of 350 students and the majority are not business students. Here at the University of Toledo the numbers in minors in entrepreneurship are close to 60, and they have 360. If you look at the credit hours of the undergraduate level, the College of Business delivers typically 20-25% of them who are not business students. They have a large cadre of engineering students, administration students who are taking Sales as a minor. We want entrepreneurship to have a similar kind of enrollment. In addition to the

undergraduate program we have a MBA with specialization in entrepreneurship that is available for non-business students. Besides that, one of the things that I would caution you about is that economic development is not a forth mission for the University of Toledo. Rather we need to think of it as an application of our three missions:

- mission of learning and teaching
- mission of discovery and research
- mission of engagement and service

In the learning area, at the undergraduate level and the master's level, we incorporated it in the PhD program. Our PhD is in Manufacturing Technology Management and within that there is a cadre of courses that a person can take in the area of entrepreneurship. Engineering and the medical school have their own PhD in biotechnology that brings together engineering courses and medical courses and as electives the students can take entrepreneurship courses. We are also in the process of developing both faculty and people in the business community, the basis of entrepreneurship. Technological entrepreneurship is taking creative idea that have been patented, and somebody will turn that into a viable business. From the engagement point of view there are different components on the MBA level. We have three MBA graduate assistants who are working with regional growth partnership, with NUT, with our incubators and working with the science and technology corridor and with individuals doing a range of activities spanning marketing research, business strategic planning, process development, etc. Part of what we are doing here is the business development that Frank alluded to, the incubator. You all know we have the alternative energy incubator down at Dorr and Westwood. We have just received the funding from EDA for a 2nd incubator which will be a mix use incubator and it will be right next to the alternative energy incubator. Recently there has been an approval by the Board of Trustees for a biotechnology incubator on the HSC. Beyond that we have set up a center for technological entrepreneurship.

It is important that we take this as a cross disciplinary activity. I have an individual, Bill McCreary, he is the chief technology officer working part time on a pro bono basis heading up our science and technology entrepreneurship institute. He works with Frank as a chief technology officer, he has an undergraduate technical degree, a MBA and is getting a Master's of Law Degree from our Law School and a Master's in Engineering. What he is doing is bridging and working with the three MBA graduate assistants. In addition to that we have four academic courses: a MBA, Marketing, Undergraduate Entrepreneurship and two Capstone Policy courses where the students do project assignments and a number of those are involved in entrepreneurship kind of studies.

As a Business Dean, from our point of view, the entrepreneurship education development of entrepreneurship research, we have to reach across all our disciplinary boundaries.

As Chair of the Science & Technology Corridor, when I arrived in 2003, the technology corridor was a concept. Fast forward now and what it is NOT is a people mover. There was some discussion and maybe in our life time there will be a people mover. Under the leadership of President Jacobs, we have established an operating committee, the Board meets four times a year and we put together a mission, a vision, and seven strategic action steps. Fundamentally what we would say to you is that first and foremost it is a virtual pathway. We are partnering with the Port Authority, Regional Growth Partnership and other organizations in the area to try and bring the expertise that we have in the form of faculty and students spanning the technology area and the entrepreneurship areas to the betterment of growing tomorrow's entrepreneurial base. Secondly, it is a physical location much like the research triangle. If you look at the recap, the size of the technology corridor, the incubators already referred to, we have another EDA grant providing for the infrastructure of the Health Science Corridor via the HSC. So the corridor is spanning from Dorr and Westwood to Secor to the Scott Park Campus and to the HSC. We are encouraging more spin-outs of the University, and hopeful that other firms might want to locate here because of their opportunities to interact with scientists, engineers, business faculty and others like you.

I will now turn it over to Mary Jo Waldock.

Mary Jo Waldock: We are focused on trying to get things done. We have the administrative support body for the University economic development efforts and we have internal members representing a number of the different elements in that eco system that Dr. Calzonetti spoke about it. The University Marketing and Communications people are participating because it's important to the image of the university and our progress that the community knows that we are doing these things, and also because of the physical dimension of the corridor. Officials of the advancement and foundation are there because of the fund raising as well as some real estate aspects. The engineering dean and Arts & Sciences dean are there, Dean Gutteridge as well. The Inter-modal Transportation Institute is important because of the transportation component of the economy in Toledo and Northwest Ohio. The Urban Affairs team has been extremely valuable for their research and policy knowledge as well as the economic development analysis they can provide. Externally we were thrilled to have attracted the regional growth partnership, along with the City of Toledo, the Ohio Department of Development, the Port Authority, the Metropolitan Council of Governments, TAGNO, which is a transportation advocacy group, the Chamber of Commerce, the Lucas County Improvement Corp., and the Plan Commission, all wanting to be a part of how the University transforms the community.

Just a few milestones:

Dr. Johnson started this concept in 2003 and since that time it began to gain some traction. The merger in 2006 with the Medical College has given us quite a boost in terms of the size of the institution and fresh thinking.

There is a technology park at the HSC and the UT Clean and Alternative Energy Incubator opened in 2005 at main campus.

In 2006, Entrepreneurial Signature Program with the Regional Growth Partnership (RGP) was launched, and \$15 million became available for tech based business development. Some faculty from the University are working toward achieving some of those awards.

The State of Ohio also established an \$18.6 million grant for the Photovoltaic Center Innovation and Commercialization (PVIC). A lot of activity is going on in our building in association with that right now-- helping to develop a market for the UT research. Two businesses already graduated. you may have heard of Dr. Xunming Deng of MWOE Solar, now called Xunlight and if you have been watching the press you will see that they have received \$7 million in funding and the company is actively hiring and their production facility is on Nebraska, not far from our campuses.

Other things to be proud of are the partnership with the Regional Growth Partnership, which is working very well and providing services to us that we now will fund ourselves, and that the EDA has given us \$1.9 million for the R1 incubator and soon another \$2 million to establish another incubator.

So we feel this is beginning to develop rapidly for the University of Toledo. We would love to have faculty additionally engaged. A couple of things that we are working on in the operating group: We have already established a corridor area property database that is helping us communicate with the community about where the opportunities are around the campus areas. We have a land planning RFQ in process. So far 34 firms have applied to be considered for the planning of spaces in and around our three campuses. We have a strategic plan on the way, we've established the Corridor "Front Door" with the community, which is a recognizable spot where they can call and make connections throughout the University to Centers and Institutes to obtain expertise among the faculty and other assets inside the university. We have a Regional /National Marketing Strategy. We were in Newsweek recently, I hope you all saw the article about the deep solar research going on for more than twenty years which has now hit global media. We have aligned with the Community Economic Development community and Frank and Tom already talked on the issue of research clusters. But additional competitive clusters came out of the IBM competitiveness analysis, and gave us a sense of what is the status of Toledo, basically what is our report card. This is important information for us to

understand how we need to move forward. The Business Development and commercialization efforts that Tom Gutteridge described include a strategic business plan outline that is rapidly developing with the group because we, and the other strategic groups have to bridge our work plan with the University strategic plan, and we are underway doing that. And lastly, you will see soon from your Provost a request to participate in an inventory of our economic development activities at the University. We want to make sure we know who is where so that we can find you when people contact the University and want to know who they can contact, where our knowledge is based, and with whom can they partner. We want to know what you are doing that would contribute to that picture.

Now Tom Gutteridge will speak about where we go from here.

Dean Tom Gutteridge: Number one, as a University, we absolutely must increase the research enterprise and we want to make you aware that it is being done. We have an opportunity in the very near future to submit to the State of Ohio proposals for research clusters under Frank's leadership and a lot of individuals, both on the Main Campus and the HSC. We have to pursue more research enterprise because that's where the intellectual property comes from.

Number two, we have to find a way within the University to create a culture that really embraces and rewards and recognizes tech transfer. We do have a tech transfer office, yet in many ways our competitors are ahead of us in entrepreneurship education. Not too long ago the Regional Growth partnership sponsored *Meet the Researchers*, which is an opportunity for researchers at the university, in this case Bowling Green University, to interact with them and talk about how their research in targeted areas might be commercialized. Then they came over to the University of Toledo and did the same thing. One of the topics that I encourage that the Faculty Senate talk about to help the deans and the Provosts is what are the mechanisms to increasing the research commercialization and development of intellectual property. How do we go about getting the message of importance and the value of this? Bottom line, if you don't have research you don't have intellectual property and you don't have commercialization. If you do have intellectual property to commercialize, most often the individual scientists, the engineers, the people in the health field, they do not have the background in order to understand how to build a business out of this. We have to help develop that and find a way for encouraging the undergraduates and graduate students and our faculty to be involved and learn the basics of entrepreneurship to help grow the technology based commercialization and entrepreneurship.

Another point is understanding to expand educational attainment and workforce. Part of the economic development is enhancing the quality and educational attainment of the workforce. Just yesterday we met with a few individuals who are here from Birmingham, England and another individual who is here from Canada and talked about the importance of not disconnecting the education that is going on in all of our classrooms and what is happening with economic development. Where are the arts and the humanities? There was a recent study done at Bowling Green State University that talked about the impact on the quality of life of the humanities and the arts and their important roles. Finally, we cannot do this alone. This is a partnership and I am very clearly saying it has to be a blend of internal partnership, all of our academic units on the Main Campus and the HSC. Externally we cannot develop the economy without working with the City, the County and other organizations.

In closing, if you look at strategic directions: "*we will provide leadership in the rejuvenation of the economy of northwest Ohio, and will expand our community outreach and global engagement.*"

Thank you and I invite any questions you might have of us.

Senator Stierman: It's interesting that you picked Atlanta and Toledo as kind of a contrast in economic directions. Today Atlanta ranks with Los Angeles for having gridlocked freeways and is suffering severe water shortages due to drought, they are coveting water from Lake Erie, which we need to protect also.

Dean Gutteridge: Eastern Ohio is clearly leading the way in what we have been talking about.

Senator Funk: In terms of talent it's certainly important to say that faculty talent needs to be retained. Unfortunately there are so many examples of talented faculty that leave and take their talent on the road.

V.P. Calzonetti: I think that's one of the hardest things to do is retaining talent.

Dean Gutteridge: Fundamentally you've got to start over again.

Senator Fink: How can we help, what is it that we can do in some way to support this?

V.P. Calzonetti: Sometimes the University will view this as something different. The University must support students, faculty and the community. It's a great challenge. The University of Toledo is on the right path. Number one: understanding and embracing the fact that economic development is part of a mission and as an institution to reach out everywhere you can to make this a better place. We have a big job to do to find talent, gifted students, and keep them in our community.

Senator Fink: I agree with you that we need to focus on the economic development of Toledo and the region. However, coming from a background in strategic human resources, I am concerned that the way we currently provide rewards to current faculty and the type of people we recruit and how tenure decisions are made does not seem to match our mission. We might have to recognize that we need more than one kind of professor across colleges and perhaps within the same college. Right now the way we provide awards and award tenure seems to assume that every faculty should provide the exact same contribution in the exact same manner. Although, this will be difficult to implement, we need to recognize in the overall strategic plan and in the strategic plan of each college what kind of faculty is needed and if different ones are needed within the same college, what is the proper combination of the skill sets and activities needed by our faculty. We need people who are very good in classrooms, we need good people in research, and we need people capable of outreach to the community and who can provide important service to the university. What we need to get away from is assuming that there is one model for tenure and rewards and recognize that we must assign some of our faculty to focus on these three activities in differing degrees. Whatever model that person is assigned and/or selects, he/she should be expected to be a real contributor. Right now, we need to figure out what are the most important jobs and activities that need to be performed so that we can better match these activities to the correct personnel, with the proper skill sets, to get them done.

Senator Morrissey: I want to comment in another way. I think this was very interesting and I enjoyed the events yesterday and our visitors from Midlands, England. I would urge you and this may be more the Strategic Planning problem than a problem of your group, but I think we need to continue to struggle with this question of basic research vs. commercialization. We are evaluated in some ways by external bodies in terms of our success in basic research. At the same time we are urging research relevant to the community. We need to articulate the differences and how they relate to one another, tell the people and reward their work. And, we made tremendous investments in the last few years in basic science research and want to make sure those investments are rewarded as well.

V.P. Calzonetti: There is good basic literature to support this. As you know the State's Third Frontier Project is very much directed toward research leading to commercialization. Local economy has done better in innovation if there is a platform of fundamental research that can support innovation in related areas.

Dean Gutteridge: Few of us had the opportunity to visit Purdue and Indiana Universities in Indianapolis and in Fort Wayne. At Purdue they created their discovery parks which are individual clusters that are doing basic research that over a period of time they will grow and develop it beyond.

(To view PowerPoint presentation on economic development go to the Faculty Senate website: www.facsenate.utoledo.edu.)

Chair Floyd: Thank you. Is there any old business?

Senator Barnes: I just want to thank all of you for your support of the Safe Spaces Program, it's not just good for business, but it is very important for individual students who are struggling to embrace

their identity to know that you not only won't penalize them for who they are but also appreciate the difference that they bring.

Chair Floyd: Any new business? If not, can we get a motion to adjourn?
Motion was made and seconded.

V. *Calendar Questions:*

None

VI. *Other Business:*

Old business:

New business:

VII. *Adjournment:* Meeting was adjourned at 5:00 p.m.

Respectfully submitted,

Alice Skeens
Faculty Senate Executive Secretary

Tape summary: Kathy Grabel
Faculty Senate Office Admin. Secretary