

Meeting Minutes: Committee on Academic Affairs

July 14, 1998

Sea Palms Resort

St. Simons Island, Georgia

MINUTES

The Administrative Committee on Academic Affairs held its Summer meeting on July 14, 1998 at the Sea Palms Resort at St. Simons Island, Georgia. Chairman Mike Thomas called the meeting to order at 10:40 a.m.

The minutes of the May 11, 1998 meeting were amended to change the emphasis in Dr. Muyskens' comments regarding the Distinguished Professor program to indicate his hope that institutions would be able to choose to propose lesser grant amounts for this program accompanied by a smaller required match.

I. SENIOR VICE CHANCELLOR'S REPORT

Dr. James Muyskens indicated that Dr. Dorothy Zinsmeister, who is on leave from Kennesaw State University, would pick up during the 1998-99 year responsibilities previously held by Dr. Linda Williams in the area of faculty development. She will also work with the Academic Advisory Committees, participate in the teacher preparation initiative, and serve in general OAA administration.

He then reviewed a list of Central Office Academic Affairs Goals and Objectives for the 1998-99 year, which included major new initiatives. (Copy attached.)

a. Committee Reports

Subcommittee of ACAA Executive Committee

Dr. Lloyd Benjamin, Chair, (Members: Frank Butler, Janis Reid, Joan Elifson.) presented the recommendations of the Subcommittee and entertained questions and comments. A period of lively discussion followed with there being support for the concept of the "home" institution and for the need for integrity of the Core Curriculum, and a discussion of the implications of the proposal on enrollment and credit hour production. A motion to amend the proposed recommendations was made to strike the sentence in the second paragraph which read, "The home institution cannot withhold permission for a transient eligible student to take approved core courses with common names and numbers." The amendment failed, and then the Committee's recommendations were passed.

Ad Hoc Committee on Learning Support

Dr. Janis Reid, Chair, (Members: Linda Exley, Elliott McElroy, Gregory Powell, Bettie Rose Horne) presented the recommendations of the Committee and there was a period of discussion. Members discussed the advantages and disadvantages of the current policy and the impact of the proposed revision. It was clarified that institutions not wishing to adhere to the proposed policy regarding

Developmental Studies organizational structure and budget requirements could request an alternative arrangement from the Senior Vice Chancellor for Academic Affairs. The Committee's proposal was adopted.

Ad Hoc Committee on Transfer of Credit Principles

Dr. Joan Elifson, Chair, (Members: Bill Bompert, Jerry Hardee, Tim Hynes, Doug Tuech, John Upchurch.) presented the revised report of the Committee regarding principles to be used to assist institutions in reviewing transfer credit particularly from non-regionally accredited institutions. Dr. Elifson indicated that the word "offered" in the second paragraph should be replaced with "required," and the heading for Section A should read "Transfer Credit Requiring Review." The members agreed that this revision should be sent to the Regents Administrative Committee on Records and Admissions (RACRA) to check for feasibility, to determine to what extent the principles in the document should be "may" versus "must" statements, and to recommend what kinds of information should appear on student transcripts. The Committee's report was adopted as revised.

II. ACADEMIC COMMITTEE RECOMMENDATIONS

Academic Committee on Physics and Astronomy

The Committee adopted the recommendation regarding the name change of the academic committee. Regarding the recommendation that all System institutions be required to meet the guidelines for the American Association of Physics Teachers, members requested that the Chair write to the academic committee and indicate to its members that this issue is one which addresses itself to each individual institution and should not be mandated from the System level.

III. NOMINATING COMMITTEE

Dr. Ron Henry, Chair, presented the slate prepared by the Committee (Members: Lloyd Benjamin, Frank Butler, and Joan Elifson) that Dr. Tom Jones from Columbus State University should become Chair-elect of the Administrative Committee on Academic Affairs for the 1998-99 academic year. No other nominations were made, and Dr. Jones was elected unanimously.

IV. 1999 SUMMER MEETING

Dr. Thomas announced that next year's summer meeting would again be held jointly with the vice presidents for student affairs and would be held on July 25-27 at Brasstown Valley Lodge in Young Harris, Georgia.

The meeting was adjourned at 12:40 p.m.

President G. Wayne Clough's speech entitled "**Electronic Technology - The University's Two Edged Sword,**" was presented to the University System of Georgia Chief Academic Officers at the Summer 1998 meeting.

Central Office Academic Affairs Goals and Objectives for the 1998-99 Year

Board of Regents Major Initiatives

- Instructional Technology/Distance Education
- Teacher Preparation Implementation
- Comprehensive Planning
 - Monitor enrollment targets-Fall 1998 - Fall 2002
 - Incorporate supply/demand database into academic planning
 - Track off-campus credits

Foreign Language Instruction Initiatives

Admissions Phase In

- Monitor Institutional Phase In (Including Presidential Exceptions)
- Convert Databases for Semester Conversion
- Admissions Standards for International Students
- Developmental Studies--Savannah, Monitor Sites
- SAT II Standards for Remaining Areas
- Postsecondary Options-Implement 4th Math

Semester Conversion

- Core Curriculum Web Site
- Core Curriculum Implementation
- Transfer Policy Implementation

Program Review

- Incorporate Results of State Needs Assessment
- Follow-Up New Programs Approved 3 Years Ago
- Incorporate Program Accreditation Guidelines
- Develop and Implement Distance Education Policy

Policy/Planning Initiatives

- Common Data Initiatives (DOE/DTAE/DOL/INS)
- Retention and Graduation Rates
- Student Satisfaction Survey
- Standardize Certain Banner Tables
- Research Advisory Committee
- Curriculum Inventory Report-revise data system

- Office of Plan/Policy Analysis Web Site

Needs Assessment and Planning-Continue

- Savannah/Coastal Georgia
- Metro Atlanta
- North Georgia
- Teacher Education and School Personnel Supply/Demand

ICAPP Information Technology Programs

International Programs

- Study Abroad Expansion
- Faculty Exchange and Travel
- Curriculum Development

Facilities/Academic Affairs Cross Teams Visit Campuses

Student Initiatives

- Common System Admissions Application, (GA-EASY)
- HOPE Data (SFA/Data Base/Financial Report)

Faculty Development

- Faculty Grants, Workshops, and Conferences

System Academic Structure

- Academic Advisory Committees

GPECC Initiatives

- Transfer of Credits
- Data Exchange
- Bridging to Traditional Degrees
- Monitor Student Success in BAS programs

P-16 Initiative

- Standards-based Admissions Pilot
- Early Mathematics Placement Test Second Pilot

- P-16 Linked Student Database Pilot
- P-16 Strategies for Meeting 2001 Admission Requirements
- Continued work of Local P-16 and PREP
- Strategic Plan for Georgia, as a Partner State, to Meet Recommendations of the National Commission on Teaching and America Future
- P-16 Evaluation

Pre-College Programs

- PREP Database
- Strategic Plan Development FY 99-01
- Implement PREP Year One Evaluation Recommendations
- Implement Communications Plan at Grass-roots Level

Learning Disorders

- Review & Revise Procedures
- Report on Services for Students w/Disabilities

Revise Board Policies and Academic Affairs Procedures/Manuals

Office of Information and Instructional Technology

- Conversion of Accounting and Payroll Software for Year 2000
- PeopleSoft Implementation
- Coordination of Y2K Efforts
- BANNER Implementation
- Develop a Distance Learning Model for USG
- Distance Learning/Internet Training
- Connecting Teachers and Technology
- Faculty Development Workshop
- USG Teaching and Learning Grants
- GSAMS Training
- GALILEO
- PeachNet
- GaFIRST NetworkSupport

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Electronic Technology - The University's Two Edged Sword

Presented to University System of Georgia Chief Academic Officers

Sea Palms Island

July 11, 1998

by G. Wayne Clough, President, Georgia Institute of Technology

Good evening. It is a pleasure to be with the chief academic officers of the University System of Georgia. I have been asked to share with you some thoughts on the changes being wrought in educational delivery by technology and telecommunications and the implications of this for the future. Let me note at the outset that everyone should understand that just because Georgia Tech is an "Institute of Technology," this does not mean our teaching and learning environment, and incentives to change in this environment, are any different than those in any other school. Yes, many of our faculty are at the forefront of research in telecommunications and educational technology, but such efforts are a far divide from implementing wholesale changes in the curriculum, revising the student/faculty equation, or undertaking large scale delivery of educational services using advanced telecommunications. It has been only recently that we have undertaken institution-wide efforts to integrate advances in educational technology and telecommunications into our curriculum and mission. This work derived largely from faculty-led studies that recommended the changes with our administration serving primarily to facilitate faculty initiatives.

I don't think it would be unreasonable to say that today we all, to some degree or another, are benefiting from advances in telecommunications and educational technology. Yet at the same time we all understand that there is an element of threat in the rapid emergence of alternative methods of educational delivery. With Georgia Tech home to one of the largest collection of faculty in the nation doing research on telecommunications and computing, I periodically get the feeling that I can hear some of them sawing on the limb we are sitting on.

This is an awkward time for educational leaders. In a sense, we are in a race and feel we should be running faster than we are, but we don't know which direction to run in, or how far the finish line is from where we are today. Most of us are leery, if not a bit cynical, of the claims of the technological wizards, since most of us at one time or another have taken a turn at riding the forefront of the technology wave. Nine times out of ten this has proven to be a short and embarrassing ride. Too often the technology you invested in proved to be leapfrogged by another before the lab is assembled, turned out to be incredibly costly to maintain, required a massive investment in faculty time to create something of value, or had little true educational value.

No institution, and none of us, wants to be in that situation, but we are faced with hard facts that tell us we cannot simply wait for the smoke to clear. The use of computing and telecommunications technology is becoming so pervasive, the expectations of our customers will not allow us to play a pat hand.

Consider the following:

1. Ownership of personal computers has reached 1 out of 4 homes in the U.S.; in the Atlanta Metropolitan

area, a recent survey showed as many as 65% of the households owned computers with fully 50% of these linked to the Internet.

2. Use of computers by teens is extensive, with 90 percent reportedly using this technology at least several times a week. Fully 92% of teenagers are reported to think computers will improve their educational opportunities; these computer literate teens come to education with a different mode of thinking than past generations, with more emphasis on self-learning and interactive dialog via the network.
3. Growth of Internet use is explosive and shows no signs of diminishing. There is particularly rapid expansion now spreading beyond U.S. boundaries.
4. Use of electronic course delivery is growing; it is estimated that one million people received courses via video and other media this past year. This figure is up considerably from previous years and approaches one tenth of the number receiving courses in traditional classrooms. Phoenix University, a virtual institution of higher education, now enrolls 48,000 students with plans to grow to 100,000 shortly.
5. Expectations by employers for high-level computer skills are at an all time high. The case of the design of the Boeing 777 is illustrative. This incredibly complex plan was designed by 500 companies in 12 different countries using software systems that were compatible. No model was ever made before the prototype took its maiden voyage. The future of design has been changed forever.
6. Moore's Law, which predicts the power of the computer chip will double each year, continues to be accurate, meaning the past exponential rise of computing power will continue into the near future. And there are good reasons to think that the power of fiber transmissions and wireless networks will follow similar paths for years to come, adding to the amazing growth in information and communications access.

Perhaps no more dramatic illustration of the impact of new technology on education could be demonstrated than by the explosion of interest in the Mars Pathfinder mission through Internet access to the NASA Pathfinder homepage. Millions of students all over the world followed the progress of this mission on a daily, if not hourly, basis. In many ways universities are already being transformed by these kinds of dynamics. Illustrations of some exciting developments that are either in the pilot stage or close to implementation include:

- Classrooms with video feed and electronic whiteboards that allow faculty lectures to be directly recorded, along with student notes from their own electronic pads, then immediately accessed by students' in-room computers.
- Multi-location design project interaction where team-to-team information is exchanged via electronic whiteboards and the Internet.
- On-demand learning offerings delivered directly to desktop machines at the home, office, or dorm room via the Internet.
- Instant access to knowledge through linked libraries and custom-designed search engines using personal agents that know your own preferences and needs.
- Widespread delivery of university services such as health care using telemedicine.

Yet in spite of the impressive potential that lies in technological innovation, universities have been slow to capitalize in many areas, one of the central ones being in the core of academe, the classroom. In his book, *Being Digital*, Nicholas Negroponte contrasts the case of a surgeon and a faculty lecturer from the 17th century who

are both transported to the 21st century. In the operating theater of a modern hospital the 17th century surgeon would recognize little and be unable to do anything. But the 17th century faculty lecturer would feel right at home in most of today's classrooms. The lecturer's clothes might even be taken as a new wave of fashion.

Because of our slowness to respond and the pace of introduction of new technology, there are jeremiads predicting the university, as we know it is on the verge of becoming obsolete. Well-known management consultant Peter Drucker said in the March issue of *Forbes* magazine, "Thirty years from now the big university campuses will be relics. Universities won't survive. It's as large a change as when we first got the printed book . . . Higher education is in deep crisis. Already we are beginning to deliver more lectures off-campus via satellite or 2-way video at a fraction of the cost. The college won't survive as a residential institution."

An earlier, and more thoughtful, alarm for the university as we know it was sounded by Dr. Eli Nome, director of the Columbia Institute for Tele-Information, who said "while new communications technologies are likely to strengthen research, they will also weaken the traditional major institutions of learning, the universities. Instead of prospering with the new tools, many of the traditional functions of universities will be superseded, their financial base eroded, their technology replaced and their role in intellectual inquiry reduced."

If Drucker and Nome are right, the phrase "connecting education to the future," could mean doing so without much help from the traditional university. They have a strong point, and doubtless some colleges and universities are going to be left behind in the future. Yet their analysis assumes an "either/or" scenario which neglects certain important factors. First, much of the present growth of electronic educational delivery meets a different demand than that satisfied by traditional higher education. This is evidenced by the simultaneous growth of enrollments in both the electronic and traditional educational sectors, a trend that will continue for some time into the future. Second, the "either/or" assumption does not recognize that many universities will be aggressive in use of telecommunications and educational technology in expanding outreach and in enhancing their campus-based missions. The latter observation is validated in that the exciting objects I cited earlier are drawn from efforts underway at traditional educational institutions, including my own.

In fact, universities have a number of inherent advantages over virtual education suppliers, at least for the time being. For starters, virtual institutions haven't yet found a way to field a football or basketball team. They even haven't picked up on the need for funny looking mascots and school colors that only an alumnus could love.

More seriously, there are other advantages that will hold for the traditional university for at least the next decade:

- For undergraduate students especially, time spent living on campus or nearby is a learning experience in itself--a rite of passage if you will. In this sense, the university assumes responsibility for the growth of the individual in a holistic sense.
- A virtual educational experience does not provide the opportunity for personal interaction between faculty and student. (However, I will admit this is something there may be too little of in the modern research university as well!)
- In many fields such as science and engineering, laboratories and the experiences in them are essential. Although virtual experiences can enhance the physical, they cannot replace the learning that comes by

actually "doing it."

- Universities provide for faculty interaction, hands on teaching of students, and facilities for research, and this forms the basis for much of the nation's knowledge creation.
- Finally, most people still place high value on the reputation of the institution where the degree is obtained. For example, while the "Western Governors Virtual University" is an interesting idea, a degree from hundreds of high-quality traditional universities has more built-in value because it comes with the name and the quality of the institution behind it.

The advantages of traditional universities are substantial and represent fundamental values that can be further enhanced by the appropriate use of telecommunications and educational technology. Yet, we must be realistic and admit we face serious challenges.

- Physical Plant and Technology Infrastructure

You can begin with the matter of the facilities and fixed assets that universities and colleges own. Nationwide, too little attention has been given to maintaining existing facilities with a resultant significant deferred maintenance problem. Using modern technology to deliver education in 50-to-100 year old classroom buildings is difficult, if not impossible. Providing adequate communications links to campus buildings that may be underserved by the basics like sewer and water, is a problem of major proportions. Finally, most conventional classrooms are configured for lectures, and in the future there will be an increasing emphasis on self-learning along with group and studio type work. Finding the means to tackle the modernization of the campus physical plant is one of the most difficult issues we face.

- Incentives versus Disincentives

Campus incentives and disincentives are another issue we have to address. Universities, and the structures they must work within, often have built-in disincentives to change. For example, what is the incentive to change from the culture of teaching by lecturing to one of reliance on self-learning, if faculty reward systems do not recognize curriculum innovation? How will outside oversight agencies accommodate a system, which emphasizes less time in the classroom when there is already pressure to have more of this? Will enough flexibility exist within state regulated systems to allow public universities to compete on a level playing field with private universities in delivery of distance education? How will we resolve territorial issues between units of public university systems? Hesitation in answering these questions can significantly delay response by traditional institutions to the new market forces, and force them into at best a defensive posture, or at worst, a position from which all good markets are closed to them.

- The Need for Deliberate Speed

While we need to work to eliminate unnecessary barriers, we also should respect that there are real reasons to proceed with due deliberation. In spite of the expectations of true believers, educational technology is not a panacea, nor is it going to eliminate the need for faculty. Implementation of new technology should be

planned so that the focus is on improving quality, such as adding to the amount of time a faculty member can spend with students or utilizing the much greater access to information and stimulation that is being provided. Careful research and assessment is required and pilot programs are needed to see what works and what doesn't. Finally, successful systems should be tested for scalability to determine if pilots can really work for larger applications.

- Telecommunications System Security

Finally, with growing use of networks for information transfer and access, protection of the security of information becomes ever more important. This is one issue that transcends both traditional and virtual educational delivery. Former Georgia Senator Sam Nunn, a defense expert, is quoted as saying that 250,000 known hacker attacks are made annually on U.S. defense computing and information systems. It is now known how many of these are successful, or how many other attempts are made. While university systems are not associated with the life or death issues of our national defense, they must be secure if they are to be trusted.

To this end, Georgia Tech recently established a national center for cybersecurity, and this has proven a very popular concept. Interest has come from a variety of industries, including the banking and credit sector, record keepers, supply system managers as well as from governmental agencies, including the CIA.

The challenges I have mentioned make it clear that the path to the future is going to require creative and resourceful efforts to provide solutions. To a large extent, universities need to remember the wisdom of the old Georgia swamp philosopher, Pogo, who said "we have met the enemy and he is us." There is much work that can, and should be, done internally. I am sure none of us has all of the answers to the challenges we face. Yet there are some avenues available to us that will allow us to move forward while we wait out the technological wave.

First, consider the perplexing matter of division of labor within a state between public universities that desire to deliver distance learning. Resolution of this problem is vital for public institutions since virtual learning providers or private schools have wide flexibility in designing their strategy to deliver distance learning. The latter institutions can pick and choose choice educational and geographic markets, charge what the market will bear, and not be concerned if they are competing with the local established state institutions.

On the other hand, public universities are constrained to service limited geographical regions, have tight controls on the tuition and fees that can be applied, and are expected to deliver a wide variety of educational offerings. One solution to part of this conundrum is to treat the state in terms of a statewide educational marketplace, and service it by assigning one institution responsibility for coordination of offerings for a certain segment of the market, such as engineering, business or computer science. The responsible institution, in coordination with the governing agency, then sees to the delivery of the "best practice" offerings from all of the public institutions in the state. In this way the public system creates an advantage over private or virtual providers by allowing

students access to a robust variety of courses and those that are the best from each institution.

To implement a "state-wide" market concept, public universities have to overcome an aversion to competition. One largely misplaced fear is that institution-bound students will opt for distance learning over a comparable campus offering. Most students who use distance learning will be part of the emerging market that is not presently served. That is, they represent an expanding pie, not one that is sliced into smaller pieces. In the off chance that an institution finds campus students opting to take the "best practice" distance learning course, then this should be taken as a sign that they need to improve on-campus offerings to make them competitive.

We can also find strength in the diversity of our system if pilot projects are undertaken that span different types of institutions. For example, there is no reason that students in the RETP institutions cannot participate with students on Georgia Tech's campus in design projects using the technology pioneered by Boeing. This would help the RETP students transition to our campus since they would have already worked with Atlanta-based students before they arrive. Dozens of similar projects could be undertaken for non-engineering students that would help them transfer between our institutions. We should seek to find technological developments that can be used to link the students from differing types of institutions.

Finally, we should empower those faculty who are willing to take the risks associated with the use of educational technology and encourage them to work with those in sister institutions. For example, when Ga. Tech undertook its computer requirement for entering freshmen, we completely revised our calculus course using computer systems to provide visualization tools for complex solutions. Finding out that others were doing similar things, faculties from Tech and 11 other schools set up a quarterly GSAMS session where they share ideas and accomplishments. A good example of how empowered faculty find the best ways to use technology for our benefit.

In conclusion it is my opinion that we cannot wait any longer to become aggressive in the utilization of the new tools of information and educational technology. While there are issues to be resolved, if we wait, others will dominate markets that are important to our future. We must move with dispatch, but with a view to maintaining quality. An underlying principle that should guide us is to engage our faculties so that they are full partners in the plans that evolve. Lets get our track shoes on and get into a trot so we will be warmed up enough to be able to catch up when we see the course more clearly. Finally, as we re-design our curricula and learning environments, lets remember that those that employ our graduates are still looking for well-rounded people, those who can solve human problems, and communicate with their fellow workers. Our graduates are expected to be able to use high-tech computing and communication tools, but this is a second priority to the broader abilities needed to succeed in life.

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