

Integrating Technology into Higher Education: Dangerous Discussions, New Conditions, Old Truths About Faculty/Professional Development

Steven W. Gilbert, President, The TLT Group
April, 2005

Challenge: Expectations/Options Overload – New, Permanent Condition

Expectations keep growing faster than the resources available to meet them.

Solution: The Right Mix

- *Universal, Lifelong, Hybrid Professional Development;*
- *Constructive Assessment;*
- *Collaboration and Dangerous Discussions*

This paper:

<http://www.tltgroup.org/ProFacDev/RationaleDangerousDiscussions.htm>

Dangerous Discussions:

<http://www.tltgroup.org/ProFacDev/DangerousDiscussions/home.htm>

Faculty/Professional Development:

<http://www.tltgroup.org/profacdev/home.htm>

"New Crunch, Myths & Cost-Effective Strategies":

<http://www.tltgroup.org/CostEffective/NewCrunch.htm>

Overloaditorium:

<http://overload2005.blogspot.com/>

Great Changes – Great Challenge for Professional Development

Great changes in the ways new information technologies are used to improve teaching and learning require great changes in the thinking and behavior of professional educators – and in learners. Providing long-term, educationally sound, practical support services and educational opportunities to enable and encourage faculty to change and improve even more rapidly than in the past and in a more organized fashion is essential and a major undertaking. At most colleges and universities, the current level of budget and staff for professional development is simply inadequate to achieve and sustain the kinds of educational improvements that now seem possible with technology.

Expectations Overload, Options Overload

Higher education has entered an era of unprecedented Expectations Overload – the result of information overload, message overload, and options overload. “Options overload” is the pressure to integrate an unending series of too many attractive options into teaching and learning. We are not simply going through a short term process of adapting, diffusing, and adopting one set of major improvements, after which we can return to some semblance of former stability. Information overload, message overload, and options overload will continue to be characteristics of our lives for the foreseeable future. [Accelerating growth of Options Overload in education is in part a consequence of Moore’s Law about the accelerating growth of information technology capacity.] Expectations keep growing faster than the resources available to meet them. To take full advantage of the unending flow of new options, the faculty must engage in an unending sequence of inventing and learning how to use them effectively.

Faculty, Students at the Heart

Faculty and students are the heart of higher education. Neither group is either static or homogeneous. For any major improvement in education, the needs, abilities, preferences, and judgments of both groups should be solicited and respectfully considered. The wisdom and leadership of senior faculty who have demonstrated long term commitment and success as teachers and researchers can be especially valuable. Any approach that challenges the professional and personal integrity of faculty and ignores the variety of their abilities and gifts cannot credibly address the important differences among learners’ goals, needs and abilities.

The potential for using technology in teaching and learning provides new opportunities for higher education to meet the full constellation of students’ needs. Of course, well-qualified dedicated faculty members are at the heart of education and are essential to defining and achieving what can be accomplished with technology. The rapidly changing pattern of students’ experience with and mastery of technology applications provides both great opportunities and great challenges. Meeting the expectations of those who already have excellent access to technology and skills in its use as well as those whose access has been severely limited or who were otherwise engaged is a responsibility of

increasing significance. As the trend continues for students from different locations, ages, and life situations to enroll in the same college course, faculty need training and support in using technology to identify and meet the range of students' needs. (Students' needs vary at least as much with respect to technology access and skills as anything else!)

An essential step is to engage leaders from the faculty and other key constituencies in an ongoing process of identifying appropriate technology applications and their educational uses that should be made available to all learners and teachers ... and of identifying technology applications likely to benefit only significant minorities for specific purposes.

The goal is to enable all faculty and learners to take fullest advantage of the technology options that might become available to them. Every student who successfully completes a recommended course of study within a college or university should have had opportunities to use educational applications of technology at least as good as those available in comparable institutions anywhere else in the United States – or the world. Similarly for every faculty member in good standing. “Opportunities to use” includes not only direct access to the necessary hardware and software, but also direct access to a variety of options for learning how to use them and for getting help when encountering puzzling operations or dysfunctions.

Consequently we need professional development - an ongoing, evolving *educational* structure of supporting resources, staff, and services that is universal, lifelong, hybrid, and reflective of the best kind of education we know how to offer.

Complex System of Professional Development – Limited Reach – Except Technology

Professional development for higher education in the United States is an almost incomprehensible network of overlapping associations, organizations, movements, materials, etc. - perhaps more varied and complex than higher education itself! Many faculty members are often actively looking for ways to improve their courses. The vast majority are receptive to improvements that they encounter, but only if those improvements can be understood, adapted, tried, and integrated within the limitations of faculty members' discretionary time. Unfortunately, many faculty members also receive confusing messages from the complex reward/compensation/prestige system about the direction in which they should focus their efforts.

I estimate that most efforts to introduce new approaches to teaching and learning never reach more than 10% of the faculty in higher education – the uses of certain technologies are the notable exceptions. I estimate that less than 5% of all faculty and academic administrators are even aware of the valuable “Seven Principles for Good Practice in Undergraduate Education” after more than 15 years of relatively active dissemination. Meanwhile, it took less than 5 years for electronic mail to be used by a majority of faculty and students in conjunction with their courses.

The continuing effort to integrate information technology into teaching and learning can provide both the excuse and the means for achieving longstanding goals for improving education!

Need Multiple Options for Professional Development – Art, Science, Collaboration

Teaching and learning are still part art, part science and to ignore either is to risk losing too much. Education can be viewed as having three basic dimensions: providing access to information, delivering knowledge, and engaging people. The art of education lies in communicating in ways that engage learners and teachers more deeply with each other and with ideas. The science of education lies more in organizing information and skills, making them accessible, and enabling learners to master them. Professional development programs that appear to focus too completely on either the science or the art tend to be - rightfully – resisted by faculty who are more comfortable and skillful with the other. Multiple options are essential to meet varied and changing needs for professional development. (Like higher education itself!)

The potential educational and administrative benefits are almost certainly great for the increasing possibilities of linking Web resources, student information systems, telecommunications media, classroom presentation technology, tiny personal telecommunications and computing devices with Web access, text audio and video communication options. (Even if the specific benefits are difficult to predict!) Taking full advantage of new options for using information technology to improve teaching and learning requires more collaboration and coordination within and among colleges and universities.

Consequently, professional development programs should encourage and support collaborative team participation among individuals who have responsibilities that were not previously well-integrated: for example, faculty, library, tech support, registrar, student affairs... Collaboration techniques and technologies are essential to enable these disparate and diverse individuals to work together more synergistically, efficiently, effectively, and happily. [Fortunately, information technology tools and services for supporting some kinds of collaborative work are improving rapidly.]

Assessment for Professional Development

Most formal feedback or assessment systems as applied to teaching and learning are not functioning well enough for professional development. These efforts are continually diluted or diverted by the fundamental conflict between collecting data for the purposes of judging individual students, faculty, and staff vs. collecting data that can be used by these individuals to improve their own ability to function effectively in those roles. Meanwhile, some of the informal feedback systems work quite well for those most naturally skilled or meaningfully experienced in their use.

Conclusion – The Right Mix

Each college and university, each state system, needs to establish a balanced mixture of broad goals for professional development, underlying conditions and competencies. For example:

- **Avoid Reductionism: Access, Delivery, Engagement**
For some kinds of learning for some people some of the time, there is nothing better than a traditional classroom structure. For others, there is nothing worse.

Acknowledge the legitimacy of each major kind of teaching/learning (providing access to information, delivering knowledge, and engaging people) and the need to match different combinations of them quite appropriately with different teaching/learning situations. Avoid the seduction of reductionism: Avoid talking and acting as if only the mechanistic delivery of knowledge and skills were all that mattered for all higher education. Accept the implication that some kinds of uses of technology are likely to be highly efficient, cost-effective, and generally desirable for some kinds of teaching/learning. But that other combinations of learning needs, etc. may not be served well at all by most new uses of information technology.

- **Achievable Levels**
Set realistic, achievable levels for each of the following kinds of goals (e.g., “Next year, fund 5% of the faculty for work on big projects and provide training and support services for 15% of the faculty to serve as active mentors or helpers to their colleagues. In the following year...”)
- **Compassionate Pioneers Transform Courses**
Support a few additional pioneering faculty members each year in undertaking expensive and risky projects with transformative potential. Encourage faculty members who also demonstrate a commitment to helping their colleagues take advantage of these powerful projects. Favor projects that develop strategies with the potential for improving entire courses or course sequences.
- **Modest Innovations WITHIN Courses**
Support programs that encourage many faculty members to recognize that some of their own “modest” innovations in the use of technology in their courses could be quite valuable to many colleagues. Provide resources that make it easy and satisfying to share information about these advances.
- **Annual Update of Competencies**
Support a program for annually updating descriptions of desired conditions, competencies, and performance measures (including the uses of “adaptive technologies” for making all aspects of education more accessible to those with disabilities). Involve faculty members, technology professionals, librarians, instructional designers, etc. in this collaborative updating process.

- **Assessment**

Support programs that include a requirement that participants develop and use forms of assessment designed to collect data that will enable further improvements and that encourage faculty members to share assessment results with colleagues that can help others replicate successes and avoid failures. [This can only happen effectively when faculty members are confident that divulging negative results will not result in some form of punishment or embarrassment.]

- **Balanced Combination**

Support balanced combinations of professional development programs, resources, and activities including:

- **Low-Threshold Applications & Other Collections**
Support programs that enable more faculty members to take advantage of Low-Threshold Applications/Activities (easy and inexpensive to learn, adapt, use, assess, improve, and share) and other kinds of instructional resources that can be easily found in collections such as MERLOT.
- **“Showcases” of Admirable Work**
These might include places to visit (physical place on a campus as well as online options - Websites, Blogs, ...); announcements (Listserves, RSS, ...); events – annual, seasonal, etc. local, regional, state; or tours – regularly or occasional or by appointment.
- **Teaching/Training Events**
Including face-to-face workshops; online workshops; individual tutorials/consultations, etc.
- **Guidance/Support**
Including reference librarian; help desk staff, etc.
- **Mentors**
Including work with individual colleagues; offer small workshops within own departments or division.

- **Collaboration**

Support programs that favor the collaborative work of diverse teams including faculty members, technology professionals, librarians, et al. Every one of the recommendations listed above can be implemented most effectively through collaborative efforts within colleges and universities. Most of the goals described in this paper can be achieved most efficiently through collaborations that cross institutional boundaries. Effective collaboration begins with effective communication.

- **Dangerous Discussions –
Information Technology Can Obstruct or Facilitate**

Currently in the United States more people than ever are afraid to disagree. Unfortunately, the same forces that are diminishing the quality of public discourse are clogging the flow of honest, open, respectful discussion on college and university campuses.

Colleges and universities can demonstrate that it is indeed possible to engage in “Dangerous Discussions” successfully, even in the current political climate. As members of academic communities we, especially, should be able to deal honestly, openly, respectfully, and constructively with issues where there are real differences of opinion among diverse groups of people who do not communicate with each other often or easily. We should be able to analyze and argue about the quality and interpretation of data, even when the implications challenge our convictions.

Information technology can obstruct or facilitate Dangerous Discussions. For example, online text and voice communications can help support more varied opportunities for frequent, honest interaction among participants who are less comfortable in face-to-face discussions. An opposing example: the internet can amplify the risks of anonymous exchanges. [But even anonymity, used with careful preparation, can be an effective tool for bringing strong opinions to light.]

The TLT Group is gathering a diverse, committed group of those interested in helping people within the academy deal with “Dangerous Discussions” in higher education more successfully and using information technology as part of the solution. The principles, techniques and activities we are developing are appropriate for use by various groups ranging from student project teams to meetings of the president’s cabinet. As we work to facilitate constructive discussions face-to-face and online, We invite you and others from your institution to join us.

Some of the many provocative topics which have emerged so far are:

- Challenging Beliefs and Political Values
- Personal vs. Professional Roles
- Membership in Special Groups
- Class Size – Student/Faculty Ratios Online and On Campus
- Role of College of Education
- Evaluation of Courses by Students
- Resource Implications for the Changing Role of Faculty and Professional Development