

# Professor Slideshow

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## Introduction:

The availability of technology and publisher distributed presentation software packages coupled with the drive on many campuses to incorporate (infuse) appropriate technology in the classroom has resulted in a decided shift in the nature and method of classroom instruction. While this shift has been taking place across the entire campus, it is particularly notable in business programs. A walk down the corridors of any business classroom building increasingly reveals semi-darkened rooms where students watch pre-prepared slideshows that now increasingly substitute for the traditional lecture based teaching methodology.

Given the prevalence of this practice, it is appropriate to explore a variety of methods for assessing its effectiveness as a mode of instructional delivery. To that end, this initial study attempts to establish benchmark measures regarding, (1) the frequency of use, and (2) students' perceptions of the efficacy of these tools.

## Background:

The question of value-added by the introduction of appropriate technology to the classroom is one that has been and continues to be explored. For our purposes, the ACOT (Apple Classrooms of Tomorrow) serves to illustrate the point that appropriate use of technology does indeed increase the potential for student learning.<sup>i</sup> Given that appropriate use of technology *can* increase the potential for student learning, our focus here is whether or not the use of specific technology in specific ways positively impacts the potential for learning from the students' perspective.

Further, given the fascination with such presentation technology, it is easy to forget that there are several impediments to the introduction of that technology into the classroom. Specifically, faculty must have an understanding of what technology can and cannot do within education. There must be appropriate training for faculty. Properly designed software must be available. The proper technology and support must be present. The classroom material presented through the use of such technologies must be relevant to the learning process.<sup>ii</sup> Lastly and equally important, the technology employed should address the subject with appropriate pedagogy.<sup>iii</sup>

The point must also be made that the literature is replete with warnings that technology integration is more than merely utilizing a computer as a typewriter, calculator, or film projector. Rather, integration begins with solid planning by the teacher so that the use of technology is meaningful and relevant to the educational experience of the student.<sup>iv</sup>

## Methodology:

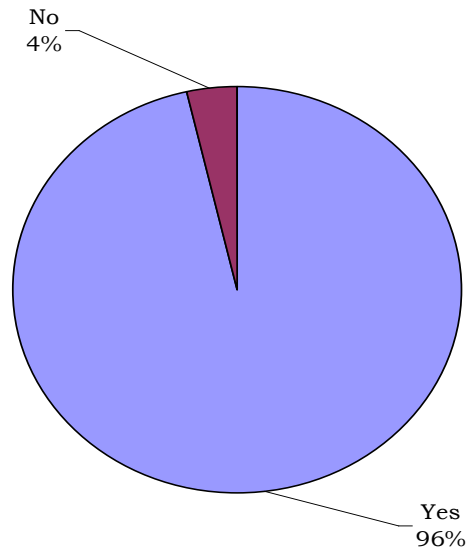
For the first iteration of our investigation, we distributed the survey (Appendix 1) to students taking courses in the College of Business Administration at Savannah State University. Faculty colleagues were asked to participate and most agreed to distribute and collect the surveys from students. Approximately 500 survey instruments were distributed and 270 usable responses were returned for a response rate of 54%. The survey responses were entered into a Microsoft Excel spreadsheet, and Excel was used to summarize the data.

## Analysis:

Our first question sought to determine the extent to which students were exposed to technology aided instruction in the classroom. The pie chart that follows illustrates the significance of student exposure--- with some

95.93 percent responding in the affirmative that at least one of their instructors uses PowerPoint or another lecture presentation technology.

**Question 1 - Do any of your instructors use PowerPoint or other presentations systems to assist them in the delivery of their lectures?**

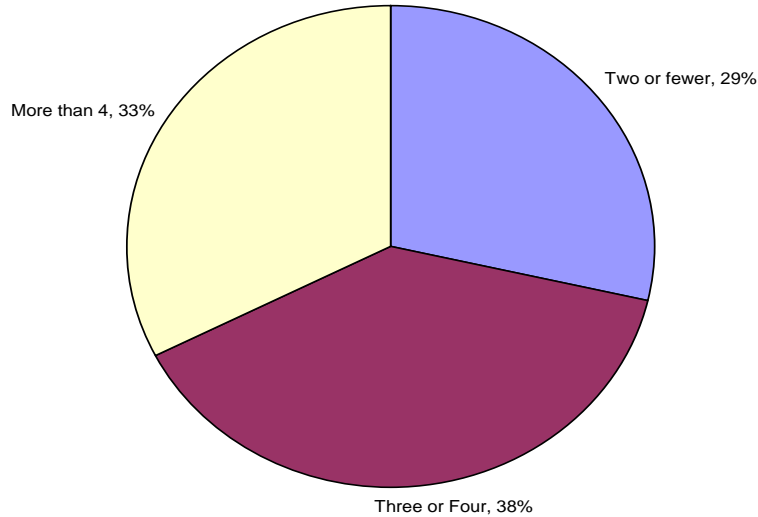


Recently, business schools have put forth a determined effort to “appropriately integrate technology into the classroom.” If it can be properly construed that presentation technologies constitute an appropriate use of technology in the business classroom, then these results indicate that the effort has met with great success on at least this campus.

The second question asked those who responded affirmatively to the question of exposure to indicate the number of instructors they have had over the last two semesters who do use instructional technology. The responses are summarized in the table and figure that follows.

<b>Number of Instructors Using Technology</b>	<b>Frequency</b>	<b>Percentages</b>
2 or less	75	28.74%
3 or 4	101	38.70%
More than 4	85	32.57%

**Question 2: If you answered yes to question 1, how many such instructors have you had over the last two semesters?**

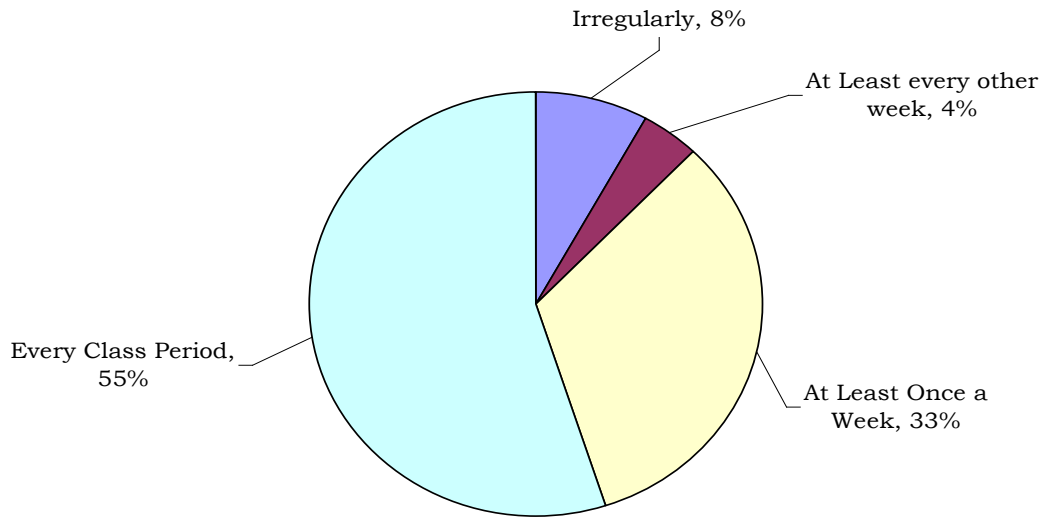


The major point of importance here is the extensive diffusion of the use of presentation technology in the classroom. Seventy four percent of the students have had three or more professors who used presentation technology in the classroom during the last two semesters.

Logically, one might wonder about the extent of usage of such technology. Thus, the third question posed to students asked students to report how often their instructors delivered their lectures using such technology. The responses to this question are in the following table and are depicted in the chart that follows.

<u>Response</u>	<u>Frequency of Use</u>	<u>Frequency</u>	<u>Percentages</u>
Irregularly		21	8.02%
At least every other week		11	4.20%
At least once a week		86	32.82%
Every class period		144	54.96%

**Question 3 - How often did your instructors use these presentation systems?**

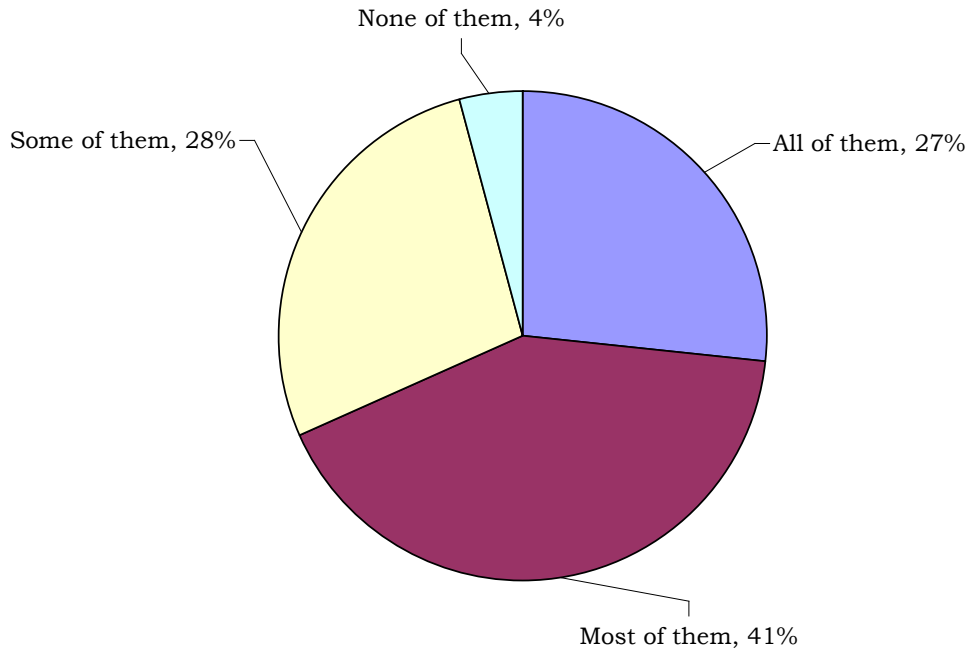


Given the long-standing notions of resistance to change that are legendary in academe, the diffusion level noted here is particularly noteworthy. The logical question is, "What could have brought this about?" If one were cynical, one might argue that many faculty members have either abrogated their professional responsibilities for conceiving and delivering presentations to enlighten their students. It is also possible that faculty members have succumbed to the perceived and real pressure to use technology in the classroom.

To explore whether the first of these possibilities had merit, we asked students to indicate the extent to which their instructors who use presentation systems use only the publisher provided slides that are synchronized with the textbook. The responses are reported in the following table and are depicted in the chart that follows.

<b>Extent of Reliance on Published Textbook Supplements</b>	<b>Frequency</b>	<b>Percentages</b>
All of them (none created their own)	69	26.74%
Most of them (some create their own)	107	41.47%
Some of them (most create their own)	71	27.52%
None of them (all create their own)	11	4.26%

**Question 4: How many of your instructors who use presentation systems use only the publisher provided slides that are synchronized with the textbook?**



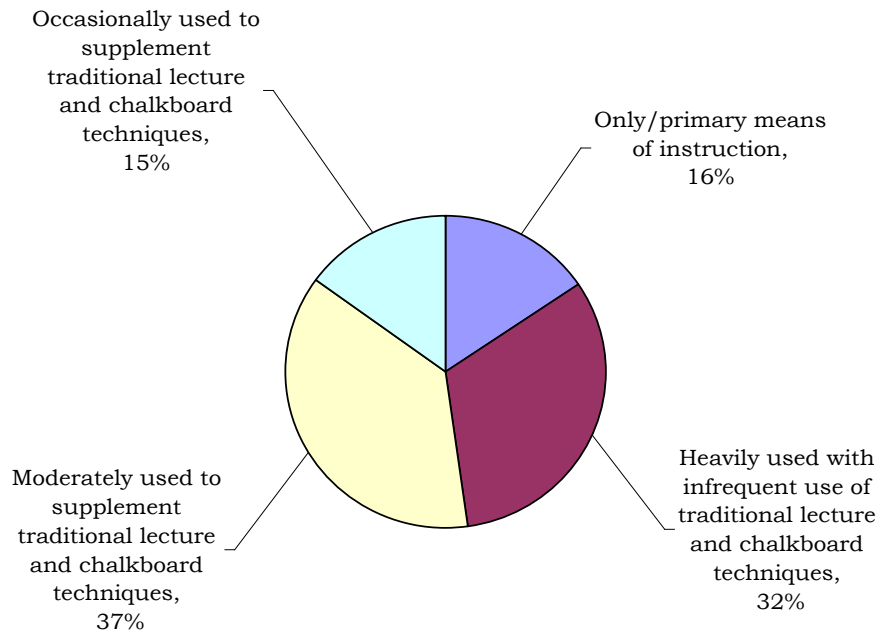
The students surveyed believed that two of three instructors (66%) apparently made little or no effort to alter, augment or otherwise customize the publisher provided lecture slides. Instead, these students reported that their instructors chose the path of least resistance, which was, to subordinate the structure and content of their lectures to the dictates of the proprietary freeware.

Further, it seems clear that more than minimal usage was present, suggesting that faculty were willing participants in this experiment. If faculty were merely responding to pressure to introduce technology in the classroom, one might suspect that its use would be only incidental and/or infrequent. The survey results reported here preclude any such notions. It seems that faculty were not using technology incidentally or occasionally. Rather the extent of the reported reliance on these instructional aides suggests a different set of motives might be at work.

Additional evidence on this issue is provided by an examination of the students' responses to our query aimed at identifying whether their instructors use presentation systems to either supplement or replace the traditional lecture and chalkboard method. The results are tabulated in the following table and depicted in the chart that follows.

<b>Conditions of Use</b>	<b>Frequencies</b>	<b>Percentages</b>
Only/primary means of instruction	41	15.65%
Heavily used with infrequent use of traditional lecture and chalkboard techniques	84	32.06%
Moderately used to supplement traditional lecture and chalkboard techniques	98	37.40%
Occasionally used to supplement traditional lecture and chalkboard techniques	39	14.89%

**Question 5: When slides are used, which is the most common regarding the instructor's use of the slides?**

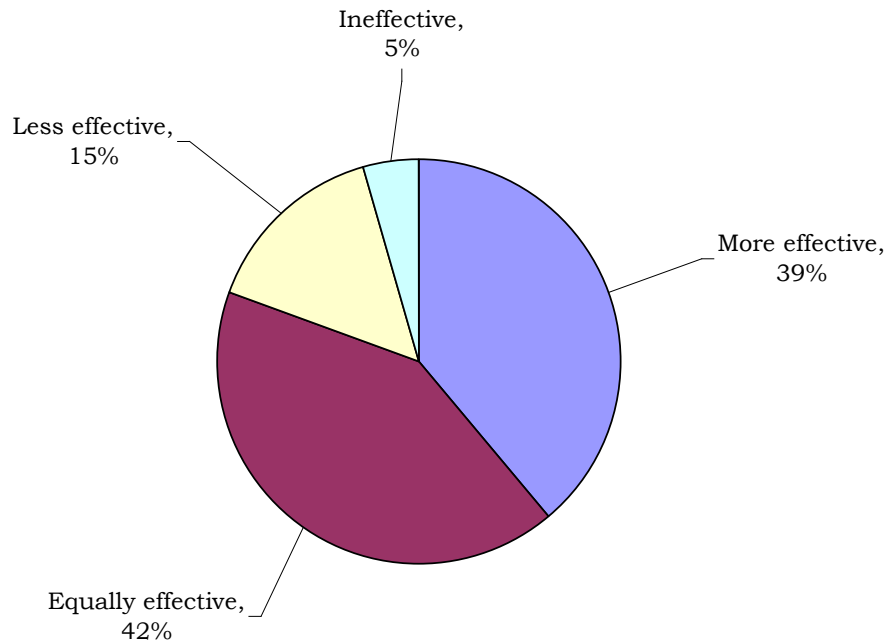


The inference that can easily be drawn from student responses to this question might not be flattering for business faculty at so called "teaching institutions". According to the data collected, in the opinion of students surveyed, 48% of faculty who use presentation technology use pre-prepared lecture slides as the "only" means of classroom instruction or use them with "infrequent" augmentation with traditional lecture and chalkboard techniques. The good news is that 52% of faculty, according to the opinion of students surveyed, make use of technology in conjunction with the traditional approach in a complimentary fashion.

When asked to rate the effectiveness of the presentations when compared to the traditional lecture/chalkboard techniques on the basis of their experience with instructors who use presentation systems, students reported as follows:

<b>The presentations systems are:</b>	<b>Frequency</b>	<b>Percentages</b>
More effective	102	38.78%
Equally effective	110	41.83%
Less effective	39	14.83%
Ineffective	12	4.56%

**Question 6: Given your experience with the instructors who use presentation systems, rate the effectiveness of the presentations when compared to the traditional lecture/chalkboard techniques. The presentations systems are:**

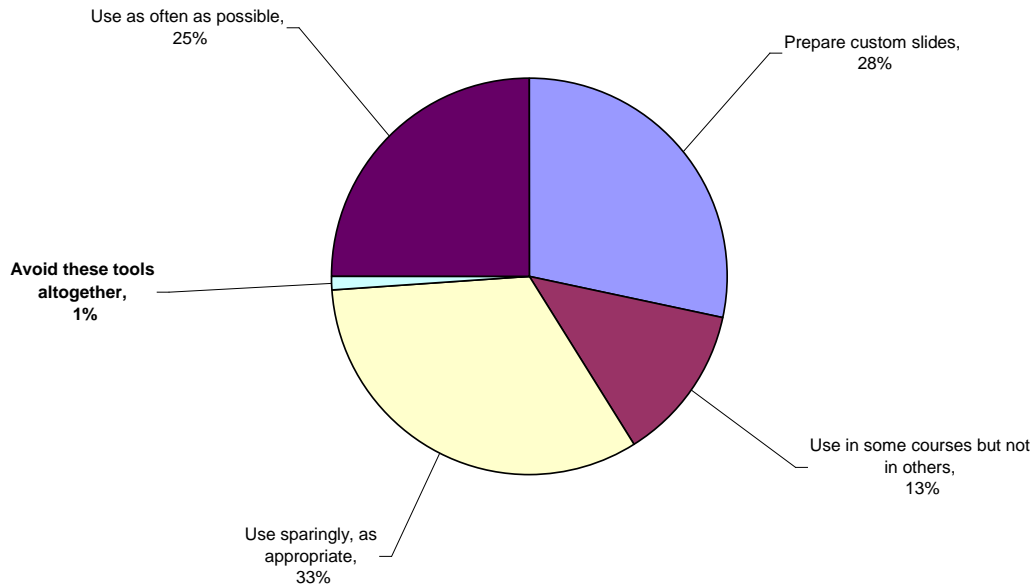


Depending upon one's expectations, one might view the response of students to this question as the dawn of progress or the onset of doom in the teaching learning process. The chart above reports that in the opinion of 81% of the students, the presentation technologies, as used, and in spite of their shortcomings, are at least as effective as the traditional lecture methods. In fact, 39% think the naked slide show is more effective than a learning environment which relies on the professor to serve as the leader and guide in the process of discovery. A rather direct implication is that faculty should just show the slides, keep their mouths shut and stay out of the way. Another (more ego salving) interpretation might well be that this is a demonstration of the prevalence of one particular learning style among students surveyed. Traditionally, students were thought to be auditory learners. However, there has been much literature of late that suggests that today's students are visual learners. The data above seems to be some support for such a contention.

With all the above good news for teaching faculty, students were then asked what should faculty do to improve the effectiveness of these presentation systems as lecture delivery aides? Student responses are reported in the following table and are illustrated in the chart.

<u>Suggestion</u>	<u>Frequency</u>	<u>Percentages</u>
Prepare custom slides	78	28.36%
Use in some courses but not in others	35	12.73%
Use sparingly, as appropriate	90	32.73%
Avoid these tools altogether	3	1.09%
Use as often as possible	69	25.09%

**Question 7: What can instructors do to improve the effectiveness of these presentation systems as lecture delivery aides?**



The student responses indicate that above all, presentation systems add value. Fully 99% of the responses indicated that they would like to see continued use of presentations systems in some way or another. Twenty five percent of the respondents called for an almost exclusive use of such - use them as often as possible. However, 74% of the students indicated a desire for more than a publisher prepared slide show. Thirty percent wanted more input from the faculty regarding the content and structure of the slides. Thirty three percent wanted significantly more individual instruction from faculty with less reliance on presentation technology.

Granted, the survey was targeted at a group which is far from being a “good sample” of university students, yet the strengths of the findings are rather startling. Startling not only because of:


- the extent of diffusion of presentation systems in the classroom
- but also because of the level of student comfort with and at times preference for these teaching aides.

The responses of the students were rather surprising to the authors of this study. The results can indicate that:

- technological advances are reducing what had historically been a critical and indispensable role of the professor
- or that the faculty teaching in the unit where the survey was conducted are hopelessly poor instructors who add little value to the traditional teaching and learning process which could not be provided by of-the-shelf commercially published instructional packages
- or that faculty have failed to do the proper groundwork in preparing to use such technologies in the classroom and are, at best, ill-trained and unprepared to use them.

Either scenario is very disturbing. Consequently, the issue merits further exploration. The authors intend to extend the population surveyed to include other units of the campus beyond the business school and ultimately



expand it to include other campuses in the region. Lastly, the authors believe that much insight will be gained with a parallel survey of faculty regarding they use of these technologies. 

### Appendix 1

#### STUDENT QUESTIONNAIRE

1. Do any of your instructors use PowerPoint or other presentation systems to assist in the delivery their lectures?  
 Yes  
 No
  
2. If yes, how many such instructors have you had over the last two semesters?  
 2 or less  
 3 or 4  
 More than 4
  
3. How often did your instructors use these presentations systems?  
 Irregularly  
 At least every other week  
 At least once a week  
 Every class period
  
4. How many of your instructors who use presentation systems use only the publisher provided slides that are synchronized with the textbook?  
 All of them, none create their own  
 Most of them, some create their own  
 Some of them, most create their own  
 None of them, all create their own
  
5. When sides are used, which of the following is most common regarding the instructor's use of the slides?  
 They are used as the only/primary means of instruction.  
 They are heavily used with infrequent use of traditional lecture and chalkboard techniques  
 They are moderately used to supplement traditional lecture and chalkboard techniques  
 They are occasionally used to supplement traditional lecture and chalkboard techniques
  
6. Given your experience with instructors who use presentation systems, rate the effectiveness of the presentations when compared to the traditional lecture/chalkboard technique. The presentation systems are:  
 More effective  
 Equally effective  
 Less effective  
 Ineffective
  
7. What can instructors do to improve the effectiveness of these presentation systems as lecture delivery aides?  
 Prepare custom slides  
 Use in some courses but not in others  
 Use sparingly, as appropriate  
 Avoid these tools all together  
 Use as often as possible

Endnotes:

<sup>i</sup> Research Finding on Technology's Impact in the Classroom: The Impact of Technology on Student Achievement. <http://www.apple.com/education/research/>

<sup>ii</sup> Views on Integrating Technology and Learning, [http://www.nwlincs.org/NWLINCSWEB/Northwest LINCS - views.htm](http://www.nwlincs.org/NWLINCSWEB/Northwest_LINCS_views.htm)

<sup>iii</sup> Are We Ready to Embrace the Power That Technology Has to Offer in Education? Commentary: Response to Henriques, by Joseph F. Zisk, <http://www.citejournal.org/vol2/iss1/science/article3.pdf>

<sup>iv</sup> Technology Integration in the Classroom: A Perspective from a Future Teacher, Stephen Jeffries, <http://pt3.nmsu.edu/educ621/steve4.html>

**Notes**