

POWERPOINT AND OTHER PUBLISHER-PROVIDED SUPPLEMENTAL MATERIALS: “OH LORD. WHAT HAVE WE DONE?”

Pamela A. Kennett-Hensel, University of New Orleans

Julie Z. Sneath, University of South Alabama

Milton M. Pressley, University of New Orleans

ABSTRACT

Whether the demand for publisher-provided supplemental materials is real or perceived, textbook publishers provide supplemental materials with nearly all of their marketing textbooks. In order to explore marketing faculty perceptions of the importance of publisher-provided supplemental materials, a self-administered questionnaire was mailed to a random sample of 600 marketing faculty at four-year colleges and universities in the United States. Results from 252 completed surveys underscore the importance and usefulness of supplemental materials with very few differences emerging across academic rank, teaching loads, and number of course preparations. With particular attention paid to PowerPoint presentation software due to its popularity and impact in educational delivery, the study concludes that supplemental materials are important in the textbook adoption decision and somewhat useful in teaching endeavors, as self-reported by faculty respondents.

INTRODUCTION

Virtually all marketing textbooks are accompanied by supplemental materials. A textbook publisher may provide an instructor's manual, test bank, transparencies, and/or PowerPoint lecture slides when a faculty member adopts a textbook. Increasingly, publishers have also begun to offer technologically-advanced materials such as websites for instructors and students, interactive learning texts, and simulation CDs. While the costs associated with developing a textbook and ancillary materials may exceed \$1 million, publishers commonly offer supplements to facilitate instruction and provide integrated learning opportunities that enhance students' educational experiences (Association of American Publishers 2006).

The availability of equipment in classrooms, technology-driven degree programs, and emphasis on technology by accrediting bodies (<http://www.aacsb.edu>) and administrators (Kemelgor, Johnson, and Srinivasan 2000; McCorkle, Alexander, and Reardon 2001) have driven some of the demand for and availability of technology-based textbook supplements. Increased competition and dwindling markets have further enhanced their importance in educational delivery since technology is considered a source of competitive advantage for institutions of higher learning (Tapscott 1998). Indeed, according to business school deans, multimedia classrooms are second only to student recruitment in perceived importance (Kemelgor, Johnson, and Srinivasan 2000).

Whether the demand for these supplemental materials is either real or perceived, textbook publishers provide

supplemental materials with nearly all of their marketing textbooks. Confidential interviews conducted with sales representatives for major textbook publishers indicate that rarely does an instructor *not* ask for supplemental materials when he or she adopts a textbook. According to one representative, “in the larger/intro courses, professor and student supplements can make or break an adoption.” This sentiment is shared by a representative with another publishing house who stated that “it's important to invest in the support package because you can't win many large competitive adoptions without the full package.” Interviews further showed that the most commonly requested publisher-provided supplemental materials are PowerPoint slides, test banks, and instructor's manuals.

The Marketing Academic's Perspective

It has been suggested that supplemental materials are “tools that enable good teachers to create better learning and teaching” (Hunt, Eagle, and Kitchen 2004, p. 79). However, research suggests various opinions concerning the importance and usage of publisher-provided supplemental materials (Sneath, Pressley, and Kennett 2005). For example, some faculty may consult the instructor's manual when teaching a case-based course, while instructors teaching an introductory marketing course may only use the test bank. Others may use publisher-provided PowerPoint slides or direct students to use the publisher's study guide or Website. Anecdotal evidence suggests that some faculty view supplemental materials as a “must” and rely heavily upon them, while others are adamantly op-

posed to their use and complain that they have caused some faculty to become lazy when it comes to lecture preparation. Yet, surprisingly, faculty perceptions of colleagues who utilize supplemental materials have never been investigated.

PowerPoint in the Classroom

One of the most popular publisher-provided supplemental materials is PowerPoint presentation software. Installed on 250 million computers worldwide (Earnest 2003), it is estimated that 30 million PowerPoint slide-shows are presented each day (Parker 2001). Compared to other presentation methods (e.g., overhead transparencies), research suggests that students prefer PowerPoint (Cassady 1998; Perry and Perry 1998; Susskind and Gurien 1999; West 1997; Bartsch and Cobern 2003; Simpson et al. 2003; Frey and Birnbaum 2002). However, questions have been raised concerning the effects of PowerPoint usage on learning and information retention (Stoloff 1995; Susskind and Gurien 1999; West 1997; Bartlett, Cheng, and Strough 2000; Benbunan-Fich et al. 2001; Filak and Short 2005), as well as its impact on students' propensity to take notes (McCorkle, Alexander, and Reardon 2001).

Faculty who utilize PowerPoint slides in classroom presentations often have not received formal training in its use – indeed, many are self-trained (Earnest 2003; Sabery 2002). Even so, PowerPoint is considered by academics as necessary “to conduct their professional work” (Johnsrud and Harada 2005, p. III). While it is the most commonly-used technology in the classroom setting, the use of PowerPoint does not ensure teaching effectiveness. Research conducted by Young (2004) showed that many faculty members were unskilled in the use of technology, with students indicating that many instructors would be more effective if they lectured using the chalkboard instead of PowerPoint slides. Lack of skill in the use of presentation software extends beyond the ivory tower: in some corporate settings the “ineffective use” of presentation software “as a communication tool” (p. 3) has led to restrictions and/or bans in its use (Jaffe 2000; Kellner 2001; Parker 2001). One of PowerPoint's developers, embarrassed by the misapplication and overuse of the software, has been quoted as saying (Parker 2001, p. 9), “Oh, Lord. What have we done?”

Purpose of the Study

Given the differing points of view regarding publisher-provided supplemental materials, the current study will explore marketing faculty opinions of the importance of publisher-provided supplemental materials when making the decision to adopt textbooks. The research will also assess perceived usefulness of these materials. In addition, responses will be examined for differences across

academic rank, teaching loads, and number of course preparations with statistically significant differences highlighted and discussed. Due to its popularity and impact on educational delivery, particular attention will be paid to PowerPoint presentation software and the extent to which faculty use the software and customize publishers' slides. Finally, the study will examine marketing educators' impressions of colleagues who use publisher-provided PowerPoint software.

METHODOLOGY

A six-page, self-administered questionnaire was designed to explore the outlined issues. The questionnaire was mailed to a randomly selected sample of 600 marketing faculty at four year colleges and universities in the United States. Specifically, a systematic random sample was constructed using the *2000–2001 Prentice-Hall Guide to Marketing Faculty* (Hasselback 2000) as the sampling frame. A random starting point within the sampling frame was chosen and then a systematic sample was constructed by including every eleventh person in the sample until 600 individuals were included. The skip pattern of eleven was also randomly selected.

Given that response rates for mail surveys are traditionally low, commonly suggested steps to increase response rates were implemented into the methodology (cf., Pressley and Tullar 1977; Dillman 1978; Fox, Crask, and Kim 1988). A pre-notification postcard was sent to the sample to inform potential participants of the survey that was to come and the importance of their participation. Approximately ten days later the survey, which included a cover letter and nominal monetary incentive, was mailed to the pre-notified respondents. The cover letter was personally signed by the researcher, and the envelope and pre-addressed return envelope were both affixed with postage stamps. A follow-up letter with an additional questionnaire and self-addressed, stamped return envelope was sent to those who did not respond. Overall, 252 usable surveys were returned resulting in a response rate of 42 percent.

Respondents represent all walks of life within marketing academia. Forty-six percent are Full Professors, 31.6 percent Associate Professors, 16.4 percent Assistant Professors, and two percent Instructors. On average, the respondents have spent 19.39 years teaching at four year colleges or universities with a range from 3 to 47 years. When asked about their teaching loads within an academic year, 12.2 percent reported a teaching load of eight or more courses, 33.5 percent teach 5–7 courses, 49 percent teach 2–4 courses, and only 5.3 percent teach less than two courses. When it comes to course preps within an academic year, only 2 percent prepare eight or more different courses, 8.2 percent prep for 5–7 courses, 62.7 percent prep 2–4 courses, and 27 percent do so for fewer than two courses.

RESULTS

Importance of Supplemental Materials in Textbook Adoption Decisions

Respondents were asked a series of questions designed to gauge the role of supplemental materials in the consumer decision process that is employed when adopting a textbook. Specifically, the following question was asked of respondents: *In general, when choosing a textbook for a course, how important are publisher-provided supplemental materials to your textbook adoption decision?* On a 7-point scale with 1 = very important and 7 = not at all important, the mean response was 2.7 indicating that supplemental materials are indeed important. Similarly, respondents were asked to express their level of agreement with the following statement: *I would adopt a textbook that did not have any supplemental materials.* On a 7-point scale where 1 = strongly agree and 7 = strongly disagree, the mean response was 4.5 indicating that while supplemental materials were important to many, some educators would still adopt a textbook that did not provide supplemental materials.

In addition to being queried about the overall importance of supplemental materials in the textbook adoption decision, respondents were also asked to indicate the importance of nine commonly offered supplemental materials in this same adoption decision. As seen in Table 1, test banks, with a mean of 3.2 (where 1 = very important and 7 = very unimportant), were rated as the most important supplemental material when it comes to the textbook adoption decision. PowerPoint slides (mean = 3.3), instructor's manual (mean = 3.5) and videos (mean = 3.6) followed closely behind test banks in importance. The two

least important supplemental materials were the student study guide (mean = 5.1) and overhead transparencies (mean = 4.9).

To further understand the role of these supplemental materials, a stepwise regression analysis was conducted in which the importance of nine individual supplemental materials (rated on a 7-point scale, where 1 = very important and 7 = not at all important) was used to predict the overall importance of supplemental materials. Three supplemental materials (PowerPoint slides, Instructor's manual, and Instructor's website) were found to be significant determinants ($p \leq .05$) of the overall importance of supplemental materials, resulting in the following regression equation with an adjusted R-squared of .227:

$$\text{Overall Importance} = .387 + .299 (\text{PowerPoint Importance}) + .178 (\text{Instructor's Manual Importance}) + .169 (\text{Instructor's Website Importance}).$$

Interestingly, six supplemental materials (test bank, videos, course-specific software, student website, overhead transparencies, and student study guide) did not significantly contribute to overall importance of supplemental materials in textbook adoption.

When examining the overall importance of supplements, no differences were found when it came to academic rank and the number of course preps. The only significant difference ($p \leq .05$) uncovered was when it came to teaching loads. As seen in Table 2, those who had higher teaching loads were less likely to adopt a textbook that did not offer supplemental materials.

When examining the importance of individual supplemental materials using these same classification variables, only academic rank resulted in one significant difference with respect to the importance of videos ($p \leq .05$). Table 3 presents the analysis of variance results for

TABLE 1
IMPORTANCE OF INDIVIDUAL SUPPLEMENTAL MATERIALS*

Supplemental Material	Mean	Standard Deviation
Test Bank	3.2	2.29
PowerPoint Slides	3.3	2.14
Instructor's Manual	3.5	2.06
Videos	3.6	1.97
Course-Specific Software	4.4	1.88
Instructor's Website	4.4	1.91
Student Website	4.5	1.87
Overhead Transparencies	4.9	2.09
Student Study Guide	5.1	1.89

* 1 = very important and 7 = very unimportant

TABLE 2
ADOPTION LIKELIHOOD BY TEACHING LOAD*
ANALYSIS OF VARIANCE

Yearly Teaching Load	Mean
<2 courses	3.2
2–4 courses	4.3
5–7 courses	5.2
8 or more courses	5.1

* *I would adopt a textbook that did not have any supplemental materials.* 1 = strongly agree and 2 = strongly disagree.

** p = .022; Post hoc LSD tests reveal significant differences between those who teach less than 2 courses and those who teach 5–7 courses and 8 + courses; also between those who teach 2–4 courses and those who teach 5–7 courses.

the importance of individual supplemental materials by academic rank. Videos were rated as very important by instructors (mean = 1.2) compared to all other ranks who reported videos as only slightly important (with means of 3.2, 3.6, and 3.7, respectively, for Assistant, Associate, and Full Professors).

Usefulness of Supplemental Materials

Respondents were asked a series of questions to capture faculty perceptions of the usefulness of supplemental materials. Using a 7-point scale with 1 = not at all useful and 7 = very useful, study participants were asked the following question: *Overall, how would you assess the usefulness of supplemental materials that are provided by the textbook publishers?* With a mean response of 4.9, data suggest that, in general, supplemental materials are perceived as being moderately useful.

This concept of usefulness was further explored by asking respondents to rate the usefulness of nine commonly offered supplemental materials. As seen in Table 4, test banks were rated as the most useful with a mean of 4.6 with 1 = not all useful and 7 = very useful. The instructor’s manual and PowerPoint slides were tied for second place with means of 4.4. The two least useful supplemental materials were the student study guide (mean = 3.6) and overhead transparencies (mean = 3.5).

To further understand the overall usefulness of supplemental materials, stepwise regression analysis was run with overall usefulness as the dependent variable and the usefulness of nine individual supplements as independent variables (where 1 = not at all useful and 7 = useful). The following regression equation with an adjusted R-squared of .468 emerged:

$$\text{Overall Usefulness} = 2.086 + .359 (\text{PowerPoint Usefulness}) + .182 (\text{Instructor's Manual Usefulness}) + .179 (\text{Student Study Guide}).$$

The remaining six supplemental materials (i.e., test bank, videos, course-specific software, website for instructors, website for students, and transparencies) did not impact faculty perceptions of the overall usefulness of supplemental materials.

When examining overall usefulness and usefulness of specific supplemental materials by respondent classification variables, only one significant difference emerged. As seen in Table 5, when usefulness was examined by academic rank, significant differences ($p \leq .05$) emerged with respect to the usefulness of the instructor’s manual. Instructors rated the instructor’s manual as less useful (mean = 2.8, where 1 = not at all useful and 7 = very useful) than Assistant, Associate, and Full Professors (respective means = 4.0, 4.8, and 4.2).

PowerPoint Usage and Perceptions

In an attempt to further explore the use of PowerPoint by marketing academics, a series of questions were asked to gauge *how much* and *how* respondents are using PowerPoint. In addition, faculty perceptions of colleagues who use PowerPoint were assessed. First, respondents were asked the following: *During the last three years, have you used PowerPoint lecture slides in any of your courses?* Eighty-two percent ($n = 197$) answered “yes,” and 18 percent ($n = 43$) answered “no.” Those individuals who responded “yes” were probed further to gain more insight into their use of PowerPoint presentation software. *Considering these courses, what percentage of classroom time, on average, involves the use of PowerPoint lecture*

TABLE 3
IMPORTANCE OF INDIVIDUAL SUPPLEMENTAL MATERIALS BY ACADEMIC RANK*
ANALYSIS OF VARIANCE

Supplemental Material	Instructors' Mean	Assistant Professors' Mean	Associate Professors' Mean	Full Professors' Mean	Sig.
Instructor's Manual	4.2	3.3	3.4	3.6	.270
Test Bank	2.6	3.0	3.3	3.1	.870
PowerPoint Slides	3.0	3.0	3.4	3.4	.895
Videos	1.2	3.3	3.6	3.8	.055**
Course-Specific Software	5.2	3.8	4.4	4.6	.182
Instructor's Website	4.4	3.8	4.6	4.5	.201
Student Website	4.8	4.0	4.8	4.6	.297
Transparencies	5.2	5.5	5.1	4.6	.194
Student Study Guide	4.6	5.2	5.1	5.2	.910

* 1 = very important and 7 = very unimportant.

** Significant at $p \leq .05$; post hoc LSD test reveals that the mean for instructor is significantly different from the other three academic ranks.

TABLE 4
USEFULNESS OF INDIVIDUAL SUPPLEMENTAL MATERIALS*

Supplemental Material	Mean	Standard Deviation
Test Bank	4.6	2.05
Instructor's Manual	4.4	1.98
PowerPoint Slides	4.4	2.00
Videos	4.1	1.94
Instructor's Website	3.9	2.01
Course-Specific Software	3.7	2.06
Student Website	3.7	1.94
Student Study Guide	3.6	1.96
Overhead Transparencies	3.5	2.24

* 1 = not at all useful and 7 = very useful.

slides? As illustrated in Table 6, the largest number of respondents indicated that they spend approximately 50 to 74 percent of classroom time utilizing PowerPoint slides. This is followed closely by those indicating 75 to 99 percent.

To better understand *how* marketing academics are using PowerPoint, faculty customization of publisher-provided supplements was also examined. *In general, which of the following statements best describes your use of PowerPoint lecture slides?* As shown in Table 7, most

respondents rely on a combination of their own and the publisher-provided PowerPoint slides. Interestingly, the least represented category is comprised of those individuals who do no customization whatsoever and use the slides exactly "as is" from the publisher.

Given the technological advances in PowerPoint presentations, respondents were queried as to the importance of various features that are becoming commonplace in publisher-provided PowerPoint. The mean importance scores of these various features, along with the corre-

**TABLE 5
USEFULNESS OF INDIVIDUAL SUPPLEMENTAL MATERIALS BY ACADEMIC RANK*
ANALYSIS OF VARIANCE**

Supplemental Material	Instructors' Mean	Assistant Professors' Mean	Associate Professors' Mean	Full Professors' Mean	Sig.
Instructor's Manual	2.8	4.1	4.8	4.2	.024**
Test Bank	4.8	4.4	4.4	4.9	.205
PowerPoint Slides	5.3	4.3	4.7	4.3	.731
Videos	4.4	3.5	4.2	3.9	.105
Course-Specific Software	3.7	4.1	3.5	3.5	.681
Instructor's Website	4.0	4.1	3.8	3.9	.975
Student Website	4.3	3.4	3.7	3.8	.777
Transparencies	4.0	3.0	3.4	3.6	.529
Student Study Guide	5.0	3.3	3.6	3.5	.237

* 1 = not at all useful and 7 = very useful.

** Significant at $p \leq .05$; post hoc LSD test reveals that the mean for instructor is significantly different from the other three academic ranks.

**TABLE 6
CLASSROOM USAGE OF POWERPOINT**

Percent of Classroom Time Involving the Use of PowerPoint Slides	Frequency	Percent
100% of the time	13	6.2
75% – 99% of the time	50	23.8
50% – 74% of the time	62	29.5
25% – 49% of the time	37	17.6
Less than 25% of the time	48	22.9
		100.0

**TABLE 7
DEGREE OF POWERPOINT CUSTOMIZATION**

	Frequency	Percent
<i>I use PowerPoint lecture slides provided by the publisher without any customization on my part.</i>	21	10.2
<i>My PowerPoint lectures are comprised of my own slides along with lecture slides provided by the publisher.</i>	123	60.0
<i>I design my own PowerPoint lecture slides and do not use any publisher-provided lecture slides.</i>	61	29.8
		100.0

sponding standard deviations are reported in Table 8 (1 = very important and 7 = very unimportant). Experiential exercises, print ads, and TV commercials are all viewed as somewhat important. Of somewhat less importance were print ads with an enlarger feature. Least important were discussion questions.

Only one significant difference ($p \leq .052$) emerged when examining all aspects of PowerPoint usage by academic rank, teaching load, and number of course preparations. The analysis of variance focused on academic rank is presented in Table 9. When examining the importance of including TV commercials in publisher-provided PowerPoint presentations, differences emerged by academic ranks. Full Professors rated TV commercials as less important (mean = 3.3 with 1 = very important and 7 = not at all important) compared to Instructors (mean = 1.6), Assistant Professors (mean = 2.6), and Associate Professors (mean = 2.7).

Finally, to probe faculty perceptions of publisher-provided PowerPoint slides and those who use them for

their courses, the following question, employing a projection technique, was asked: *We would like you to take a moment and think of your colleagues who use publisher-provided PowerPoint lecture slides. Consider the following list of adjectives and indicate how descriptive each word is of these colleagues.* A list of eighteen adjectives drawn from Anderson's Likableness of Personality Trait scale (1968) were then presented and respondents indicated how descriptive each adjective was using a 7-point scale with 1 = very descriptive and 7 = not at all descriptive. Results indicate that faculty members have favorable impressions of colleagues who use publisher-provided PowerPoint slides. The words "practical," "productive," "confident," and "resourceful" were identified as being "very descriptive" of these individuals. Conversely, the words "incompetent," "hesitant," "inefficient," and "incapable" were identified as being "not at all descriptive" of those who use publisher-provided PowerPoint materials (see Table 10).

TABLE 8
IMPORTANCE OF POWERPOINT FEATURES*

PowerPoint Feature	Mean	Standard Deviation
Experiential Exercises	2.9	1.92
Print Ads	2.9	1.86
TV Commercials	3.0	2.00
Print Ads with Enlarger Feature	3.1	1.98
Discussion Questions	3.6	2.01

* 1 = very important and 7 = very unimportant.

TABLE 9
IMPORTANCE OF POWERPOINT FEATURES BY ACADEMIC RANK*
ANALYSIS OF VARIANCE

Supplemental Material	Instructors' Mean	Assistant Professors' Mean	Associate Professors' Mean	Full Professors' Mean	Sig.
TV Commercials	1.6	2.6	2.7	3.3	.052**
Print Ads	1.8	2.7	2.6	3.1	.118
Print Ads with Enlarger Feature	2.4	2.8	3.1	3.3	.559
Experiential Exercises	1.4	2.5	2.9	3.0	.111
Discussion Questions	3.0	3.5	3.5	3.7	.875

* 1 = very important and 7 = very unimportant.

** Significant at $p \leq .05$; post hoc LSD test reveals that the mean for full-professor is significantly different from the other three academic ranks.

TABLE 10
RESPONDENTS' PERCEPTIONS OF COLLEAGUES WHO USE
PUBLISHER-PROVIDED POWERPOINT SLIDES

	Very Descriptive						Not at All Descriptive	Mean
Progressive	1	2	3	4	5	6	7	3.8
Incapable	1	2	3	4	5	6	7	5.1
Productive	1	2	3	4	5	6	7	3.6
Inefficient	1	2	3	4	5	6	7	5.2
Creative	1	2	3	4	5	6	7	4.3
Unintelligent	1	2	3	4	5	6	7	5.6
Conscientious	1	2	3	4	5	6	7	3.8
Resourceful	1	2	3	4	5	6	7	3.7
Incompetent	1	2	3	4	5	6	7	5.4
Imatiative	1	2	3	4	5	6	7	4.1
Practical	1	2	3	4	5	6	7	3.1
Self-Sufficient	1	2	3	4	5	6	7	4.0
Inexperienced	1	2	3	4	5	6	7	4.9
Confident	1	2	3	4	5	6	7	3.7
Lazy	1	2	3	4	5	6	7	5.0
Open-Minded	1	2	3	4	5	6	7	3.8
Hesitant	1	2	3	4	5	6	7	5.2
Unsophisticated	1	2	3	4	5	6	7	5.1

DISCUSSION AND IMPLICATIONS

Supplemental Materials

The results of this study support the notion that marketing faculty utilizes publisher-provided supplemental materials. Findings indicate that supplemental materials are important to, but not necessarily determinants of, the textbook adoption decision. Furthermore, certain materials carry more importance than others when examining textbook choice. Interestingly, those supplements rated as most important in the decision appear to be *faculty-focused*: test bank, PowerPoint slides, and the instructor's manual were identified as the most important supplements to the textbook adoption decision by study participants. With the exception of instructor's website and overhead transparencies, supplemental materials that were less important in the adoption decision were primarily *student-focused* (i.e., course-specific software, student website, and student study guide).

Faculty rank and number of course preps did not contribute to perceived overall importance of publisher-provided supplemental materials. However, findings sug-

gest that the decision to adopt/not adopt a textbook that does not offer supplemental materials varied by teaching load. While untested in the current study, respondents' perceptions of colleagues who use publisher-provided PowerPoint slides suggest that a plausible explanation may be that publisher-provided supplemental materials are viewed as tools used help to increase efficiency and effectiveness. When examining the importance of individual supplemental materials in the textbook adoption decision, only one significant difference emerged across faculty rank. Instructors viewed videos as more important than their counterparts, suggesting that instructors may use slightly different decision criteria than professors when selecting a textbook for adoption.

In general, publisher-provided supplemental materials are identified as being useful to faculty. Data indicate that perceptions of overall usefulness of these materials are influenced by perceived efficacy of the publisher's PowerPoint slides, instructor's manual, and student study guide. However, the instructor's website does not appear to be a factor in perceived overall usefulness of supplemental materials. It is also shown that PowerPoint slides and the instructor's manual are important to the textbook

adoption decision, while student study guides do not influence textbook selection. When examining the data based on respondent classification variables, it was found that instructors view the instructor's manual as less useful than the tenure-track faculty, again suggesting that instructors have different perceptions of publisher-provided materials than their tenured and/or tenure-track colleagues.

PowerPoint Slides

PowerPoint presentation slides appear to be as "popular" as previously thought. Not only do most respondents use PowerPoint (82%), they use it quite a bit. Almost 60 percent of the marketing faculty surveyed indicates that half, or more, of the time spent in a classroom involves the use of PowerPoint slides. Further, the vast majority (60%) of PowerPoint users indicate that they utilize a combination of publisher-provided PowerPoint slides and slides of their own designs.

Given the heavy usage of PowerPoint in the classroom, several important implications arise from the study. First, marketing educators need to be cognizant of the fact that PowerPoint is a tool that can enhance or detract from the learning experience. So much of the criticism that is focused on PowerPoint centers on the fact that it is ineffectively used and turns what were previously active learners into passive learners. Whether it is through formal training provided by the university or college, or through self-education, attention needs to be directed toward effective use of PowerPoint rather than assume it is being used appropriately. This same burden falls on publishers. Given that nearly three-fourths (70.2%) of the study's respondents are using publisher-provided PowerPoint in some form, publishers must also be aware of successful PowerPoint applications as they assemble supplemental materials for their textbooks. They might also include tutorials with the software or on instructors' websites.

The need for more effective – and interactive – PowerPoint is further underscored by findings indicating that *all* PowerPoint features (e.g., experiential exercises, print ads, television commercials) are deemed "important" by marketing faculty. Clearly, features such as these provide the opportunity to draw the student into the lecture. In addition, these features offer current examples of how textbook concepts are being applied in the marketplace. However, timeliness and relevance of interactive features are critical for learning to occur. Static hyperlinks to ambiguous examples or websites that no longer exist do not facilitate communication or learning. Publishers and faculty should both consider this in the design and use of PowerPoint features, perhaps incorporating such dynamic and contemporary resources/hyperlinks as iFilm.com or YouTube.com to stimulate discussion and increase student learning.

Finally, classroom design should facilitate the use of PowerPoint as a classroom tool. As buildings are designed or retrofitted, the need for certain technologies in the classroom should be addressed. Increasingly, this includes access to the Internet and the availability of sound. Although it is unknown if faculty who currently do not use PowerPoint do not use it by choice (i.e., due to personal preference), or do not use it due to lack of resources, the prevalence of its use suggests that university classrooms should be designed with layouts and equipment that support the use of technology.

Although PowerPoint usage and perceptions did not vary across academic rank, teaching load, and number of course preparations, one exception did emerge. Instructors viewed the inclusion of television commercials in PowerPoint lecture slides as more important than those holding other academic ranks. This finding, coupled with perceived differences as to the importance of publisher-provided videos and usefulness of the instructor's manual, suggests that needs of instructors, as compared to tenure track faculty, appear to differ.

When asked to complete a personality profile of colleagues that use publisher-provided PowerPoint slides, a relatively favorable profile emerges. PowerPoint users, for instance, were viewed as somewhat progressive, practical, and open-minded and were not seen as lazy, unsophisticated, incompetent, or unintelligent, as anecdotal evidence might previously have suggested. Interestingly, the only slightly negative perception that emerged is that PowerPoint users are not seen as creative. This once again may speak to the need for training. PowerPoint, whether publisher-provided or custom-designed, offers the user the opportunity to be creative, even though the user may not know how to leverage this opportunity.

FUTURE RESEARCH

Findings suggest an important direction for research is to uncover the underlying reasons *why* supplemental materials are and are not being used by marketing faculty. While the current study captures the basic attitudes and opinions toward certain supplemental materials, they serve only as a starting point for uncovering marketing academics' supplemental material preferences. For example, if these supplements are not useful, is something else preferred? Would the supplements be more useful if changes were made? If so, what changes? Regardless, it is important for textbook publishers to maintain a marketing orientation and focus on their customer base – the faculty on behalf of students.

When assessing the adoption of technology-based supplements, the considerations become more complex and numerous. For instance, the availability of classroom equipment is a huge consideration. While availability seems to have improved for most, given the apparent extent of its use, some faculty members are still teaching

in classrooms that are not equipped with state-of-the-art computer hardware. Does peer-pressure speed up the rate of adoption of some of these supplements, or are there training or classroom technology issues that impact their use?

Although PowerPoint is shown to be a preferred supplemental material and one that influences textbook adoption and perceptions, is the technology overused? More importantly, are faculty doing what is best for the learning process? Since the present study did not attempt to gauge effectiveness of its use, student perceptions, preferences and learning need to be solicited and considered in the decision to use/not use the presentation software in the classroom. Do marketing students truly prefer PowerPoint lecture presentations? The assumption among marketing faculty (and faculty in other areas of higher education) seems to be that "Yes, they do." However, that assumption should be confirmed since other methods of delivery may be more effective, and thus preferred. A

final consideration for educators might be the integration of student training as to the effective use of PowerPoint into the curriculum. If these future business leaders are going to need PowerPoint skills in their careers, then the burden falls on the educators to help them hone these skills.

While this study provides evidence as to the importance of supplemental materials, in general, and also specific types of materials, not all factors in the textbook adoption decision have been examined. Future researchers are encouraged to examine the overall textbook adoption decision, not just the role of supplemental materials. Who and what else influences this decision? For instance, does price to end-user play a role? Does the publisher influence the decision? What impact do department chairs and other colleagues play? Lastly, future research may wish to examine the relative importance of these other influences when compared to supplemental materials.

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