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#### ABSTRACT

The study examined the role of the textbook, not as a Leaching tool but as an artifact in the professional culture of higher education faculty. The three areas of focus were visibility and review, selection criteria, and scholarly engagement and reward. The study was structured in terms of institutional or professional culture to determine if there are compositan aspects of the textbook that can be discussed in common terms yet be responsive to differences in concerns. Structured interviews, open-ended discussion, and questionnaire forms were used with 84 faculty members, 28 department neads (in 7 discipline areas), and 67 journal editors. Textbooks were definitely shown to be disciplinary vehicles with little deliberate interdisciplinary content. Many faculty members altered their textbook selection practices solely on the basis of price. Critical reviews of textbooks played virtually no role in the selection process. Selection was dominated by the complimentary copy. There was strong support for the scholarly worth of pre-publication reading and evaluation of textbooks for publishing house. Charts on the following topics are included: study group composition; content, reputational, pedagogical, and production value; decision triads; faculty perception of textbook price as a distinctly separate selection criteria; and research notions (textbooks and the scholarship of pedagogical authoring). Contains 6 references. (SM)

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#### A DISCIPLINE SENSITIVE MODEL OF TEXTBOOK SELECTION CRITERIA IN THE HIGHER EDUCATION FACULTY

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#### A DISCIPLINE SENSITIVE MODEL OF TEXTBOOK SELECTION CRITERIA IN THE HIGHER EDUCATION FACULTY

#### David L. Arnold

My remarks today are going to cover some of the results of an attempt to take an initial look at the role of the textbook, not as a teaching tool, but as an artifact in the professional culture of the higher education faculty. The project grew out of reading three articles in the January, 1986 issue of <a href="Teaching Profession">Teaching Profession</a> in Transition: Towards a New Social Fiction," "Teaching Within Institutional Value Structures" by Hans Mauksch, and Paul Baker's "The Helter-Skelter Relationship Between Teaching and Research: A Cluster of Problems and Small Wins."

These articles are particularly articulate discussions of the conflict between the cosmopolitan power of professionalization in research scholarship and what is often the localized, isolated world of teaching. Baker's article was especially provocative. He argues that the underlying difference in power is rooted in the norms of social structures beyond the universit, and that, as a result, the balance of power between teaching and research simply may not be subject to sudden change with in the academy. Instead, one must look for "small wins." He asks, "Can scholarship related to teaching be fostered in a similar fashion to research" (Baker, 1986, p.59).

That is a good question. Baker proposes several areas in which such "small wins" might be sought. To me, the most intriguing is the textbook. The



textbook stands with one foot in teaching and one foot in publishing. It is cosmopolitan. It is produced in national and international systems of publishing It is subject to disciplinary review and criticism. Baker says that looks like publishing, but, for some reason, textbooks don't get any respect around here. They are invisible and allegedly even harmful as an area of scholarly activity.

Baker calls for immediate institutional strategies to elevate the prestige of the textbook and its authorship. He suggests new and vigorous review mechanisms, formal recognition of good and bad textbooks, and reward structures that are supportive of authoring text books. My first reaction was that the idea makes a whole bunch of sense. Why not get busy on it.

But it turned out to be a bit more difficult than that. What I found when I started digging was that we really do not know very much about textbooks; particularly as an element of faculty activity. If we want to suggest new and vigorous review mechanisms, we need to know how the faculty finds out about textbooks and how they use reviews. We don't. If we want to formally recognize good and bad textbooks, we ought to know how the faculty evaluates textbooks. We don't. If we want to establish reward mechanisms, we ought to know what the faculty thinks about the merit of textbook authorship. We don't really know that either.

Those three areas; visibility and review, selection criteria, and scholarly engagement and reward, formed the core of the study. The study was deliberately structured in terms of institutional or professional culture; what Schein calls the sense of the appropriate. I wanted to find out if there are, in fact, cosmopolitan aspects of the textbook that can be discussed in common terms yet be responsive to differences in concerns.

The effort involved learning what questions to ask as much as it did finding the answers. For this reason, the methodology consisted of a combination of intensive, structured interviews; open-ended discussion; and questionnaire forms. The study group, shown in Chart 1, included three major role levels in the faculty and seven major disciplinary groups with four academic disciplines in each group. I might note that the scheduling problems for the interview sequences were, as statisticians say, definitely non-trivial. Journal editors were surveyed only by questionnaire.

To illustrate the type of findings the study produced, I am going to first look at the specific area of the criteria the line faculty use to evaluate and select textbooks. Then I will come back and briefly cover the other areas.

My initial review simply did not find any work which approached the question of faculty evaluation criteria for textbooks. I found a lot of articles reviewing textbooks, but that is different. What I did find though was that there are common, recurring themes in the discussion and review of textbooks. Upon examination, these issues can be grouped into a model of textbook valuation which would attempt to prioritize four major concerns: Concerns of Content Value, Concerns of Pedagogical Value, Concerns of Production Value, and Concerns of Reputational Value.

To see if this model could describe faculty practice and respond to disciplinary concerns, I did a several things during the interviews. I asked faculty members to rank the four areas from overall definitions. We discussed the four areas in general terms. And I used a Likert scale instrument which asked each respondent to rank the importance of 28 notional statements in regard to textbook selection. The statements, shown on Chart 2, were based on specific issues which appeared in the literature search. The statements were in scrambled



order on the work sheet, and a response scale of "critical importance," "considerable importance," "secondary importance," and "not important" was provided.

Chart 3 summarizes the two basic patterns which I found within the line faculty group for priority of textbook selection concerns. The results suggest the existence of a pair of distinctly different decision triads. The patterns separate those disciplines with clear roots in the natural sciences from those with roots in the humanities. The business disciplines break the pattern. I'll come back to this again later.

These patterns stood up consistently. The rankings from the questionnaire were subjected to Friedman's ANOVA and real differences in the medians were supported both for the overall results and within disciplines. An item analysis examining which statements scored above and below the median within each discipline was conducted. And the character of the narrative discussions was consistent with the more formal scored responses.

The data are certainly non-parametric and cannot be generalized, but the study group is fairly represented. I also am convinced the study is replicable; a different notion than generalizable and perhaps more important in organizational culture studies.

The most consistently powerful segment of the model is the content area. Textbooks are traditionally carriers of content. However, I encountered two distinctly separate approaches to content with disciplinary overtones. The first approach holds that content is evaluated in terms of the course. The second holds that content must be derivative of some corpus of the discipline, and that the text should be considered in terms beyond the immediate; needs of the syllabus.



The first approach was the most widely held. It is highly localized and offers little support to any search for cosmopolitan leverage. The second view is more cosmopolitan. In it, the textbook becomes a reference work. An engineering professor held that a textbook should "have more content than just the course," and be "an addition to a professional library." This concept appeared most strongly in the physical sciences and engineering faculties. It was a common interview experience to have faculty members in these disciplines take a textbook from a shelf and say, "I used this book as a student, I still use it, and my students still come in here and use it." (They were also likely say that the book was out of print.) This did not seem to reflect a static attitude but rather a belief that textbooks carry an essential factual core which must be mastered and retained.

Textbooks were definitely shown to be disciplinary vehicles. The notion of deliberate interdisciplinary content was a major factor only in the life sciences; a field characterized rapid growth and blurring of traditional boundaries. All six other disciplinary groups rejected this concern. And "Interdisciplinary" was clearly understood, as the notion "contrasting methodologies, interpretation, or positions" scored above the median in seven of seven groups.

The major pedagogical concerns centered around access and challenge. Reading level and quality of writing were constant issues. They were most powerful as negatives; acting as disqualifiers. A humanities professor stated "There is a sea-change in the audience; these are non-readers." I encountered virtually no discussion of selection by such methodology notions as "Does the book facilitate a Socratic approach?" or "Is the book easy to use with small group discussions."



Quality of workbooks, exercises, quizzes, and other instructional aids did not receive wide spread interest despite marketing emphasis on such peripherals. In business, engineering, and the physical sciences the specifics of exercises and case studies were they of concern. In these areas the quality of exercises overlaps with content. In the humanities and the social sciences such features were viewed as a "waste of time," deserving "no respect."

I encountered the interesting speculation in both humanities and life sciences areas that a professor's pedagogy might be derivative of the text rather than vice-versa. "Most faculty adopt a mood that is very similar to the mood of the text," commented a life sciences faculty member. He argued that textbooks generate a feedback loop that functions, particularly in complex subjects, to shape pedagogical behavior. This idea suggests research about faculty performance which resembles more conventional research about how pedagogical materials effect student outcomes.

Pedagogical concerns comprise the area in the model most sensitive course level. There was a sharp upward shift in every discipline in the concern with pedagogical elements for lower division textbooks except in the physical sciences where they occupy a high rank in both upper and lower courses. Faculty in the course areas occupying the core of the liberal arts colleges, i.e., humanities, physical sciences, and life sciences, were more likely to distinguish between upper and lower division concerns than were those from departments with roots in the professional traditions. That may suggest areas of inquiry into faculty development and differential staffing patterns as well as text design.

Aspects of reputation in textbooks are important to the underlying notion of cosmopolitan recognition I was looking for. The consistently low rank of



of such concerns and the nature of the discussion were both revealing. Only one notion attached to reputation achieved any significant support; the recommendation of colleagues. This was most often highly local. Only one faculty member in the entire project (a chemist) said that he routinely spoke to colleagues in other universities about textbooks.

Some individuals felt that the reputation of the author was quite important. A life sciences faculty member held out books authored by Nobel Laureates as setting the standard for the discipline. But others believed that publishers simply hook a name to the book to improve its market appeal. There was some pedagogical doubt too; many faculty members felt that "notable researchers" were not necessarily capable of producing an effective text. This is an explicit rejection of part of the research to teaching link. It is also a de facto recognition of a cosmopolitan skill of writing textbooks.

While faculty members acknowledged that there were often classic texts in a field, they suggest that the reputation accrues to the book but not to the author. In upper level courses some value was attached to the author's reputation, but it was not in terms of writing the book. A humanities professor, considering graduate level texts, said, "There are thinkers I want to expose the students to." This is more of a content idea than anything.

The study produced no clear evidence of disciplinary patterns in regard to specific reputational factors, but I am left with the uncomfortable notion expressed by one business professor who said he had "a gut feeling that it (reputation) plays more of a role than is reflected in faculty conversation."

The area of production value showed the clearest results. The differences between the two major groupings discussed above was stark. Issues of production played almost no role in the social sciences, education, and humanities groups.



Where they did, responses were normally in negative terms. The references were to "bells and whistles" used disguise a 1 ck of merit. (Supportive material with foreign language texts was an exception.)

For the engineering and sciences groups the situation was exactly the opposite. Production values contain "clearly important virtues" as an engineering professor described them. The shift in importance was most directly tied to illustrations and graphic data displays.

Overall workmanship was also consistently important in these disciplines. An engineering professor explained this by connecting the durability of a book to its value as an addition to a lifetime library. Considering a textbook as a resource beyond the limits of a quarter or cemester calls into play concern for its quality as a physical artifact as well as an intellectual one. But durability, quality illustrations, and effective graphics are often expensive virtues in today's market.

Price was identified as an issue on the selection criteria instrument. I also asked each faculty respondent, "Has the price of textbooks become a serious enough pressure to become a separate consideration?" The results are shown in Chart 4.

There were no clear disciplinary patterns, but it was apparent in the interviews that many faculty members have altered their textbook selection practices solely on the basis of price. The most commonly expressed resistance price level was \$50. Actual rejections of books which would have been otherwise chosen were cited in the \$50 to \$90 range.

The high price of textbooks is curtailing the use of multiple texts in a course. Faculty members in all disciplines told me that they had either stopped using multiple texts or were increasingly hesitant to use them. An education



professor most clearly articulated the discomfort with this situation when he said that this curtailment of diversity would ultimately "limit the freedom of both students and authors."

I found virtually no recognition of any corporate power within the faculty or discipline to influence the marketplace. In only cnf instance, an engineering discipline, did a collective strategy appear. A book buying list of a disciplinary association was used to obtain discounts of up to 50% compared to traditional bookstore channels. But it must be emphasized that there was no useful evidence of any sense on the part of the faculty that they might influence the price situation in the market or in the institution in any way. The only response seems to be to for the faculty to curtail their own range of action.

The findings regarding textbook selection criteria were among the most cut and dried in the study, but they most useful in the context of the more subjective areas examined. Before moving to any conclusions, I should briefly outline some of my findings in these other areas.

First, and unhappily for Baker's proposal for increased visibility of textbook reviews, critical reviews of textbooks play virtually no role in the selection process. Selection is absolutely dominated by the complimentary copy. Critical reviews were perceived as being of marginal utility at best. This weakness of critical reviews comes from a combination of factors including a demand for autonomous judgement in selection, the short half-life of many textbooks, and basic questions about the purpose of reviews.

I found the concept of authoring textbooks as a scholarly activity enjoys wide support among faculty and department heads, far more so than annecdotal literature would suggest. This support is based on a stong respect for the



type of cumulative, interpretive scholarship necessary to writing a textbook. I did talk with faculty and department heads who cannot accept writing textbooks as scholarly for epistemological reasons. But this view, to the extent of excluding textbooks from some canon of scholarship, was in the minority.

But the perceived utility of actually writing textbooks is a different situation. Both faculty and department heads were less likely to believe that authoring a textbook will be rewarded than they were to believe that it is worthwhile. Interestingly, department heads had a more favorable view than the faculty. There was evidence that department heads were more willing to actively support textbook authorship within their departments than the faculty realized.

There was strong evidence of disciplinary patterns in this area. The scholarship of textbooks was most likely to receive the highest respect in the sciences, engineering, and education groups. The utility of writing textbooks was most likely to be supported in the disciplines of engineering and education. The business groups ranked both the scholarship and utility as extremely low compared to other disciplines. I almost think that there may be a disciplinary pattern involved in the fact that the business faculty was so different in almost every area of the inquiry.

I found expressions of opposition to witing textbooks because they are "entrepreneurial." This view is powerful to those who hold it, but it also was an isolated, minority view. Both faculty and department heads recognized that financial concerns influence the textbook market and authors, but rejected the idea that this is particularly damaging. In fact, it was apparent in the interviews that financial reward for textbooks was perceived as being non-competitive compared to the reward derived from reputations built by



conventional research scholarship and refereed journal publication. Faculty members were more likely to reject writing a textbook because of its lack of financial reward than to pursue one in hope of financial gain.

I found that the forces which act to suppress textbook authorship are not epistemological but rather institutional and managerial. Fully 48% of the faculty turned out to have been or still are actively engaged in some aspect of textbook authorship. But the faculty, department heads, and journal editors increasingly doubt that one can engage in the long-term effort involved in writing a textbook and keeping it up-to-date in subsequent editions. This reluctance to engage in new projects, coupled with the potential for curtailment arising from price, bodes ill for continued diversity and vision in the textbook market place.

There was one serendipitious finding that I found highly provocative. This was a surprisingly strong support for the scholarly worth of pre-publication reading and evaluation of textbooks for publishing houses. Among its strongest supporters, it was held to be functionally analogous to acting as a reader or referee for a scholarly journal. It was often seen as a more effective way of haring input to the quality of textbooks than writing post-publication reviews. This suggests obvious disciplinary strategies to pursue Baker's agenda.

Perhaps the most disappointing finding was the almost total lack of actual or conceptualized collective strategies on the part of the faculty regarding textbooks, their production, their recognition, or their distribution at any level.

The study's ultimate objective was exploring the question of whether or not textbooks could be discussed terms of the "sense of the appropriate" within the institutional culture of the higher education faculty. In order to develop



cosmopolitan strategies in the scholarship of pedagogical authoring, it must be demonstrated that there are more than localized aspects to the role of the textbook.

The answer, in my mind, is an unqualified yes. One can construct models which respond in disciplinary and cosmopolitan terms. The very tentative one I have discussed shows that clear signs of this. More importantly, the faculty responds with lively and enthusiastic engagement when given the opening. Interviews routinely ran from one half to three hours in length. Faculty members and department heads who said they had never really thought about the issues became deeply involved in the discussions.

If Baker's call for attention to critical reviews is off the mark, there are still common threads which indicate directions in which collective action and research might proceed. The main question is whether or not such actions can begin in time to prevent the current inattention to the marketplace from further damaging the quality and diversity of the textbooks available in the market. Such damage simply forces the production of pedagogical materials more and more into the localized, isolated, and certainly non-scholarly "copy shop" mode.



# STUDY GROUP COMPOSITION

DISCIPLINE GROUP	DEPARTMENTS	FACULTY	DEPARTMENT HEADS	JOURNAL EDITORS	
BEHAVIORAL AND SOCIAL SCIENCES ANTHROPOLOGY, POLITICAL SCIENCE, PSYCHOLOGY, SOCIOLOGY	4	12	4	SENT	REPLIES
BUSINESS AND ECONOMICS ECONOMICS, FINANCE, MANAGEMENT, MARKETING AND TRANSPORTATION	4	12	4	19	7
EDUCATION  CURR. AND INSTRUCTION, EDUCATIONAL  COUNSELING, F'HYS ED., SPECIAL ED.	4	12	4	20	9
ENGINEERING AND APPLIED SCIENCES CIVIL ENGINEERING, ELECT. ENGINEERING, MATERIEL SCIENCES, MECHANICAL AND AEROSPACE ENGINEERING	4	12	4	20	12
HUMANITIES ENGLISH, HISTORY, PHILOSOPHY, ROMANCE LANGUAGES	4	12	4	20	11
LIFE SCIENCES BIO-CHEMISTRY, BOTANY, MICRO-BIOLOGY, ZOOLOGY	4	12	4	20	10
PHYSICAL SCIENCES CHEMISTRY, GEOGRAPHY, GEOLOGY, PHYSICS	4	12	4	20	8
TOTALS	28	84	28	138	67



#### **CONTENT VALUE**

Range or aspects of subject covered

Basic factual accuracy

Presence of deliberate interdisciplinary content

Treatment of ethical concerns inherent in subject

Portrayal of contrasting methods, positions, or interpretations

Methodology used by author

### REPUTATIONAL VALUE

Historical stature of text Reputation of publisher Information in published reviews

Scholarly reptuation of author

Recommendation of colleagues

Citations in other books or articles

Direct acquaintance with author

#### PEDAGOGICAL VALUE

Freedom from racial or ethnic bias

Reading level
Instructional design/format
Freedom from sex bias
Student interest or acceptance

Challenge to students
Quality of exercises, workbooks, quizzes, or other peripherals

#### PRODUCTION VALUE

Overall graphic design quality

Quality or appropriateness of illustrations

Physical Size

Quality or appropriateness of graphic displays

**Price** 

Quality of proofreading Overall workmanship



# DECISION TRIADS TWO MAJOR DISCIPLINARY PATTERNS

PATTERN 1: SOCIAL SCIENCES, EDUCATION, HUMANITIES.

HIGH RANGE MID RANGE LOW RANGE

CONTENT PEDAGOGY REPUTATION PRODUCTION

PATTERN 2: ENGINEERING, LIFE SCIENCES, PHYSICAL SCIENCES

HIGH RANGE MID RANGE LOW RANGE

CONTENT PEDAGOGY REPUTATION PRODUCTION



# FACULTY PERCEPTION OF TEXTBOOK PRICE AS A DISTINCTLY SEPARATE SELECTION CRITERIA

DISCIPLINE GROUP	YES	NO	NR	RESISTANCE \$\$
BEHAVIORAL AND SOCIAL SCIENCES	9	1	2	\$30-\$50
BUSINESS	3	7	2	\$40
EDUCATION	10	2	0	\$50
ENGINEERING AND APPLIED SCIENCES	7	5	0	\$50-\$90
HUMANITIES	4	7	1	
LIFE SCIENCES	7	4	1	\$40-\$90
PHYSICAL SCIENCES	7	3	2	140 -482
TOTALS	47	29	8	



## A TAXONOMY OF RESEARCH NOTIONS: TEXTBOOKS AND THE SCHOLARSHIP OF PEDAGOGICAL AUTHORING

1.0	LEARNING
	<b>CONCERNS</b>

# CONCERNS

2.0 FACULTY

# 3.0 STRUCTURAL CONCERNS

# 4.0 MANGEMENT CONCERNS

- A. Learning
- A. Authoring

B. Selection

- A. Content Analysis
- A. Publishing and Marketing

- B. Learning Outcomes
- C. Classroom Strategies
- C. Production Quality

B. Pedagogical

gn

B. Faculty
Development

- C. Student Useage
- D. Instructional Effects
- D. Disciplinary Needs
- C. Institutional Strategies

E. Scholarly
Practice and
Reputation

D. Disciplinary
Strategies



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