

Learning versus Teaching: A Reply to the Comments

In replying to some issues raised by the four commentators, we assume that learning is a proper goal for business schools. We have seen little evidence to suggest that ratings of graduates' satisfaction are related to learning (see the reviews of the research by Dubin and Taveggia [1968] and Miller [1978], and the long-term study by McCord [1978]).

Webster

Webster may be correct in his claim that many schools have been increasing their emphasis on research at the expense of teaching. Our conclusions apply only to schools that are already regarded as prestigious (some of which are listed in our Ta-

ble 1). Perhaps some schools not on this list have been emphasizing their relative weakness (research) at the expense of their relative strength (teaching).

We agree with Webster's listing of the limitations of our study. These are important limitations that might be resolved by further research. Besides doing further research on the current approaches, we urge researchers to examine outcomes more directly. In particular, they should conduct studies on the extent to which business schools produce useful research and transmit research findings to students and others.

Webster expressed skepticism about the impact of the mass media rankings on the prestigious MBA programs. He should visit the campus of an MBA program just as the latest poll results are released and witness the hysteria. Deans join actively in praising the polls (when they like the results) and denouncing them (when they do not like the results). Few deans take the position that the polls are irrelevant.

Barnett

Barnett raises an important question: should business schools' objectives change with their market (by which he means the students)? Consider the following: What if students decided that their objective was to maximize their current enjoyment subject to spending the least amount of effort to receive certification (the MBA degree)? Should schools change to meet these demands? Some faculty members believe that MBA programs have done just that; they have made changes in recent years to reduce the effort students must expend to obtain degrees and to ensure that the students enjoy themselves. Some certification

requirements have been reduced to the extent that it is rare for anyone who is admitted to an MBA program to be denied a degree. We cannot be sure that students graduated with MBA degrees have sufficient skills for such basic management tasks as structuring problems, analyzing problems, conducting meetings, writing management reports, or managing people.

One view of MBA programs is that students should have little responsibility for their learning. Under this assumption, students must be coerced by a grading system to do some distasteful tasks (study in courses) to become certified. This process might interfere with enjoyment.

The traditional view is that prestigious schools should focus on research because that is where their relative advantage lies. Interestingly, by focusing on research, prestigious schools have designed and implemented educational programs in which many students take responsibility for their learning. These students tend to be highly motivated, hard working, and effective at learning. We call these programs "PhD programs."

In contrast to the emphasis placed on learner responsibility in a number of PhD programs, we are aware of only one school in the US (the University of Chicago) that has made changes in the MBA program to increase learner responsibility. Some European business schools, such as the Solstrand program in Norway, have also emphasized learner responsibility.

We appreciate Barnett's kind words about courage. We identify with the protagonist in Ibsen's *Enemy of the People*. Surely the people will want to know that the waters are becoming contaminated! In

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any event, this is the kind of research that tenure was designed to protect. Business schools will take pride that such issues are being discussed openly.

Murphy

We agree with Murphy that research time might also be gained by spending less time on service. Many faculty meetings end without useful action steps. We are not sure that additional funding for research will solve the problem, however. Brush [1977] reports on a large-scale attempt by the US government to develop "second tier schools" as centers for excellence. Between 1965 and 1972, the government awarded \$230 million to 31 universities. Follow-up studies showed that these faculties grew in numbers, but there were no gains in publication rates of faculty members, test scores of graduate students, or placement of PhD graduates.

Locke and Kirkpatrick

Kirkpatrick and Locke [1992] made a major contribution by providing a procedure to measure the impact of research. Hopefully, their approach will be extended so that business schools will measure this objective periodically.

We do not agree with Locke and Kirkpatrick's current analysis based on "filling" the student satisfaction data. No effort had been made to select the schools that produced the happiest graduates. Therefore, we do not believe it is reasonable to assume that all the excluded schools have less satisfied graduates. (We suspect that faculty at most business schools would endorse our view.) Our hypothesis would be that graduate satisfaction at prestigious schools does not differ from that at less prestigious schools. (We

are surprised that administrators at business schools outside the select circle have not yet organized to conduct large-scale surveys of graduate satisfaction. We expect that many little known MBA programs have highly satisfied graduates.) Although their assumptions differ from ours, Locke and Kirkpatrick provide full disclosure of their procedure, so readers can decide for themselves or even conduct further analyses.

Locke and Kirkpatrick suggest that more attention be given to assessing the outputs of the business school. We agree. We suggest, however, that schools assess progress on two other objectives: (1) discovering findings that improve decision making, and (2) communicating these findings. The first is what we call the research goal, and the second relates to learning.

We need measures of the extent to which research discoveries from business schools lead to improved decision making. Although we are not aware of any business schools that have attempted to assess this, we believe that such measures could be obtained. For example, studies have been done that show that university research aids innovations in other areas, such as electronics and mechanical arts [Acs, Audretsch, and Feldman 1992].

Instead of attempting to measure learning, business schools measure "teacher performance." They do so despite decades of research showing that teacher performance measures are invalid measures of students' learning [Attiyeh and Lumsden 1972]. We believe that it is feasible to measure learning. Prestigious business schools might be particularly interested in assessing how their research affects learning

when it is as communicated through journal publications and textbooks.

Locke and Kirkpatrick say that the data that we examined are consistent with a variety of causal interpretations. While we agree, our concern was with the way in which causality affected decision making. Given a budget for teaching and research, should the balance be altered? We asked whether the data are consistent with the historically accepted assumption that prestige schools should focus primarily upon research. We believe that they are.

Franke

Franke controlled for whether business schools were public or private (as did Locke and Kirkpatrick) but without the assumption that all excluded schools have less satisfied graduates. He also examined the schools' locations.

Franke believes that research can improve course content and that better course content can lead to better learning. Empirical research has shown what none of us wants to believe . . . that course content has little relationship to teacher ratings [Marsh 1984; Abrami, Leventhal, and Perry 1982]. In other words, one can have satisfied students without content. But content (facts, techniques, and concepts) is crucial for learning. Without content there can be no learning. It is reassuring, then, that Abrami, Leventhal, and Perry's [1982] review found that content was related to learning.

If certification replaces learning as the goal, then perhaps the ideal program in the view of many students should have no content. This would enable certification at the lowest cost. This is not a satisfactory viewpoint for society, however. If a body

of content (techniques and principles) exists, is it proper to design a program for which the only explicit measure of a teacher's success is whether the students are satisfied? Would we be willing to certify civil engineers and brain surgeons because they went through a program that produced very satisfied students?

Speculation

We expect that the mass media polls are here to stay. One possible improvement to the current situation would be to conduct more polls and to develop more measurements. We should develop explicit measures of research contributions. Then we should assess how people learn about research findings. (Perhaps the most prestigious schools contribute more effectively to learning through books, expert systems, and other programs than they do through direct contact with students.) Decisions should be made by focusing primarily on these measures rather than on the satisfaction of the students. We expect that these recommendations would improve research and that this would aid learning. Measures of progress in these areas should be heavily promoted so that it is widely known what schools do the most valuable research and what schools produce the most capable graduates. A simple first step would be to expand the Kirkpatrick and Locke research assessment to include more schools and to repeat it consistently every two years.

One way to implement these changes would be to separate the functions of learning and certification. Certification could be done at the end of the program, perhaps through a two-day assessment-center test. Even better, it could be done

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whenever the student wanted it. Students who already knew everything could become certified at the beginning of the program, thus saving time for them and for the faculty.

Here are some questions. Should prestigious business schools focus primarily on their relative advantage (research) and design their institutions to produce more useful research, or should they compete with nonprestigious schools to produce the happiest students? Do the high prestige schools have any relative advantage in making people happy? Should business schools focus on growth, or should they stick to their knitting?

Conclusions

In our opinion, the existing evidence does not justify the recommendation that prestigious schools should redirect faculty resources from research to teaching. One could easily argue that more resources should go into meaningful research. We believe that a reduced emphasis on research would harm the quality of research and the quality of learning. An emphasis on teaching might lead to a reduced level of prestige for some schools and this, in turn, might be detrimental to the school's graduates.

The market will respond to a demand to provide student certification at low cost, and some schools will make it their goal to produce happy graduates. But we hope that this will not be a primary goal at prestigious business schools.

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