Reconsidering Graduate Programs for Students from Developing Countries

Larry E. Miller, Professor
Department of Human and Community Resource Development
204 Agricultural Administration Building, 2120 Fyffe Road
The Ohio State University
Columbus OH 43210-1067
Phone: (614) 292-0450
Fax: (614) 292-7007
Email: miller.103@osu.edu

Abstract
This paper examines graduate programs in agricultural and extension education for students from developing nations who are studying at U. S. institutions. Implications are drawn for developing graduate programs that prepare individuals for the most likely career path of the individual. Such programs may not be congruent the current graduate programs in U. S. universities particularly with the present financial and other pressures on departments and faculty. How can AIAEE assist in creating more relevant programs of study?
Introduction

How well are universities in developed nations, particularly the U.S., providing graduate education for students from developing nations? Some of the issues to be addressed include examining the appropriateness of the U.S. graduate preparation model for the student from a developing country, the match between degree program content and the career expectations of graduates, the appropriateness of the research methods and statistical analysis preparation, the selection of research topics, and the time-to-degree expectations. The content of the paper is driven by issues the discipline needs to address.

Purpose

The purpose of this paper will be to present viewpoints on these issues and challenge those institutions with graduate degree programs to consider the unique needs of the student from developing countries by addressing some pertinent questions. What will be the likely career path of graduates upon their return to their home country? How can we best prepare students for these likely career paths and still assure a “high quality” program? How can we best prepare flexible, well-rounded individuals who are ready to adapt to the unique demands of their universities or agencies in developing countries? How relevant for the students’ dissertation/thesis research are the research problems adapted from adviser’s programmatic research programs? Are the concepts and methods learned from the research applicable in assisting the graduate to undertake a programmatic research agenda of their own at their home institutions/agencies? To what extent is the pressure applied to U.S. professors to procure grants and contracts forming the basis of research problems investigated by students? Should advisers encourage students to pursue their own research problems or expect students to pursue problems related to the professor’s research program? Do different levels of quality exist for the programs for domestic versus international students? Do international students have the same opportunities as domestic students to benefit from the informal learning and professional socialization that ought to be occurring in developing teaching experience and expertise though mentoring and reflection, doing outreach, writing grant proposals, establishing networks, attending professional meetings, supervising interns, or gaining practical experience -- in the public schools, Extension county offices, or related agencies? To what extent does the research problems investigated contribute to the knowledge base for the country/region of student origin? To what extent should they? What are reasonable expectations for time-to-degree?

Theoretical Base

These issues and questions form the basis for attempting to stimulate professional discussion of how to best design relevant graduate programs of high quality. The “data source” is over 30 years of experience in directing graduate study and interacting with those that do. Particular concerns exist about the quality of the research studies and the nature of the research question as observed in professional conferences and journals, including this AIAEE conference. Experience as editor of two journals in the profession,
serving as a paper/article referee, and/or paper discussant at professional meetings has provided the author with insights into research that has and has not been published.

Conclusions and Implications

The AIAEE needs to address how relevant, appropriate and transferable are the skills and abilities taught in graduate programs to the situations in which graduating students will find themselves in developing countries. Universities/agencies where graduates may find employment after graduation often have a different focus than those of the US Land-grant model. For those graduates in universities, teaching is often the primary focus. Research, while expected, finds few resources available and limited financial support internal or external to the universities/agencies. Service, likewise, is often defined differently. Internal (department, college or university) service is expected but service as outreach to audiences external to the university/agency often has little emphasis.

One approach to improving graduate programs for international students from developing countries might be to assure a broadened set of courses in the graduate programs to help prepare graduates for future roles. Such a strategy may necessitate taking courses outside the home department, beyond the typical minors, and this is often in conflict with the way departments now receive funding for instruction because it is beneficial if students take courses from their home department. Therefore, departments try to keep their course sections full, enrollments high, and benefit from higher subsidies rather than advise students to take courses from other departments. Such internal funding strategies in universities do not encourage innovation in program planning to broaden the learning experiences of graduate students.

International students who wish to pursue advanced degrees in technical agriculture disciplines often find similar dilemmas. Their adviser may be involved in basic research, such as creating GMO’s, using a laboratory costing a million dollars and a daily operating budget of $5000. The adviser desires that all graduate students contribute to his/her programmatic research program. Graduate students from developing countries may find that the expertise learned in the laboratory during the completion of a dissertation has little applicability to the research program they can conduct in their home country where such costly laboratories or research programs are not feasible to develop or maintain. The student finds little support in suggesting that a research problem that is more nearly applicable to their home country would be suitable for a thesis/dissertation. Advisers argue that anything less than “cutting-edge-inquiry” is a “watered-down” degree program for the student. Is there a common ground that can accommodate the needs of the graduate student (Miller & Ng, 1994)? A similar analogy might also be drawn for some research in agricultural and Extension education.

Several universities have conducted internal follow-up (tracking) studies of graduates to examine their professional career paths following graduation. They have often found that many graduates are soon in administrative and supervisory roles. However, course work in administration, supervision and leadership are seldom a part of their degree programs. Would further investigations, across graduate institutions, accumulate evidence that might permit all in the profession to develop more appropriate degree programs?
Similarly, most graduates who enter higher education upon graduation will find themselves in teaching roles. How many of these graduates have had the experience of teaching in higher education during their degree programs? How many are given mentoring experiences to learn with “master teachers” at the university level so that they are exceptionally effective teachers when they return to their home countries? As newly employed instructors/professors, they are often laden with the heaviest teaching loads in a department. Often, the courses assigned to them to teach may be the ones no other professor desires to teach. Further, the enrollment in these courses may be very large. How many graduates have had preparation in “teaching difficult courses” or in “effectively teaching large enrollment courses?”

Graduate Teaching Associate (GTA) support has always been limited for the international graduate students who do not have Extension or experience in teaching agricultural education at the secondary level in the U.S. Some are fortunate enough to obtain Graduate Research Associateships (GRA). One can now hire a full-time research scientist cheaper than a GRA. Additionally, rising tuition waivers and health care costs are expected to elevate GTA/GRA costs another 15% for the next academic year at my institution. Eventually, this will mean that few GRA positions will be available to either domestic or international students.

The content of what is taught in agriculture colleges in developing countries is also changing. One report on Africa, for example, indicated that BS graduates should have characteristics including initiative, creativity, integrity, adaptability, flexibility, commitment, teamwork, good listeners, self-confidence, self-motivation, independence, effective communicators, the ability to make decisions and the ability to be socially and environmentally aware. To what extent are graduate programs preparing professionals capable of instilling these characteristics in their students?

The issues about how to prepare graduates to do research is not merely a paradigm debate (paradigm war), as some might purport. Quantitative and qualitative research both have contributions to make. What drives good research are important questions and not method! The most important question in assessing research may be “So what?” Preparing graduates capable of conducting more applied, pragmatic research than theoretical research may be important. Using Habermas’ Interest Constitution Theory (1972), researchers investigate interactions of (1) man-nature: positivism, empiricism, functionalists, (2) man-man: communicative interaction, practical understanding, interpretive science, hermeneutics, or (3) man-self: emancipatory; authority, power, freedom, radical/critical science \[sic\]. Agricultural and Extension educators conduct few studies to try to understand nature but are almost evangelistic about research in communicative interaction or the emancipation of people (Miller, 2003). How well are we preparing our graduates for inquiry in the latter two areas? Most of us, including this writer, were prepared in quantitative method and have little preparation in interpretive or critical science. This writer advocates, for current and future graduate students, a balanced preparation program in research with each graduate well-versed in quantitative method and familiarity with other ways of knowing; i.e., courses in interpretive or critical science. If breadth and depth cannot be achieved within each individual, then using departments as the unit of analysis is appropriate; i.e., assuring that a balance of research expertise exists within the faculty of a department. However, this may be particularly difficult to achieve by departments in developing
countries where the hiring decisions are driven by subject matter teaching needs more
than research expertise needs and even politics often comes into play -- not what you
know, but who you know.

Further, preparing graduates capable of interdisciplinary research is essential.
Practical, field-based problems do not nicely fit disciplines or university academic
departments. Successful researchers of the future will need to be able to navigate the
competitive waters of procuring funding where the agencies desire investigation of
complex problems requiring interdisciplinary, multiple-method lenses (Miller, 1991).

The extent to which the love of conducting and sharing research can be developed
in graduates will, to a large extent, define their future pursuit of research, under often-
difficult conditions, by our graduates from developing countries. If graduates see
research as a labor and despise doing it, then they are not likely to conduct research or
add to the knowledge base of the discipline. The experience of thirty years in this
profession has often led to frustrations with the faculty who teach research methods and
statistics and who seem to purposefully want to make their content appear confusing so
they can maintain the illusion that they have the corner on some body of knowledge that
is inaccessible to the rest of us, that only they can really understand the content, and that
there is some magical perspectives they possess that the students cannot grasp. Too
many students see the study of research methods (no matter the paradigm) as the most
onerous part of their degree program. Exit interviews with graduate students might
indicate that “research” was just something they “suffered through” in order to obtain
their degree and is highly despised. Research is creating new knowledge. Creating new
knowledge to improve the quality of individuals’ lives can be an exciting, invigorating
and satisfying dimension of one’s lifelong professional contribution. While this writer
has never had problems spelling “higher education” as “hire education,” i.e., there is a
vocational dimension to doctoral study; many rewards await those who can walk the
profession “down the road to knowing.” Let us purposefully make the conduct of
research fun and encourage students to love the creation of new knowledge. Research is
not done just to have papers to present at these meetings or to generate journal articles,
but for a deeper motive. At the end of their career, will they be able to say “I made a
difference?”

This writer suggests that institutions, that have graduate programs, have an ethical
responsibility to prepare individuals who are capable of succeeding in universities in
developing countries where the political, economic and social milieu may be greatly at
variance with the model in which they studied. Current graduate programs do not
necessarily fulfill this expectation. The writer calls for the profession to conduct further
research on the needs of these students and develop strategies to better prepare graduates.
The profession must prepare future scholars (Miller & Sandmann, 1998) and not just
researchers.

What is the average time-to-degree for a Ph D student in your program who enters
with an MS in the discipline? While degree expectations vary, this writer was shocked to
learn the data for his institution. Ethical questions may emerge about whether or not
students are being delayed so they can add to the publications of the adviser and/or are
students being delayed to generate credit hours.

Contributions to knowledge resulting from thesis/dissertations might best serve
the students if the studies were conducted about problems from their home country. For
example, if an adviser has a doctoral student from Malaysia, studying for a Ph D with support from Malaysia, would it not seem to be ethically appropriate for the problem identified for research have relevance for Malaysia, perhaps with data collected in Malaysia, and have practical implications for adding to knowledge or improving practice in Malaysia? When that student returns home to Malaysia, takes a job in a university, and begins a research program, the dissertation can be the beginning of making a professional reputation for the student and provide a basis for further funding or research.

Implications

The implications of an improved graduate education program are many. While the examples have explicitly been drawn from the U.S., colleagues in universities in other graduate institutions from Europe and other nations should also take heed. For example, the last time the writer visited the University of Reading, in England; all the students were from developing countries.

With improved programs of study, graduates could be better teachers. Graduate could be better researchers, asking more important questions, ready to address questions with new lenses, and ready to work with interdisciplinary teams. Graduates will be better able to be of service to their agency, or university department, college, university, profession, country and the world. They can be scholars and not just researchers, and they can be contributors to the professional knowledge base … they can “make a difference.”

References


