

INTEGRITY IN GRADUATE STUDY: A Graduate School Guide

Introduction

The question of integrity in scientific research is one which has received considerable attention not only in academic circles but also in the news media. A few notorious cases of fraud have recently made all of us in higher education especially sensitive to our vulnerability on this issue. These cases, largely in the sciences, have often come to light when attempts to replicate some of the work have failed. In the social sciences and to larger degree the humanities a second problem, that of plagiarism, assumes greater prominence. A third area is that of cheating, which in the case of qualifying examinations pertains only to graduate students. A fourth, often murky area in which the integrity of graduate study is open to criticism, involves abuses of confidentiality. And finally, a fifth area is that in which conflicts of interest arise in relationships between faculty members and students.

Although the ethical decisions involved in maintaining integrity in their work may seem to be very clear to some graduate students, they may not appear to be clear to others, and some, possibly very few, may not even be aware that there is a potential for problems with integrity in research. For these reasons and to help constituent units in the event that fraud, plagiarism, cheating, abuses of confidentiality, or conflict of interest should arise, the Graduate School has prepared these guidelines.

Fraud

Fraud usually involves the student's intentional and deliberate misuse of data in order to draw conclusions that may not be warranted by the evidence. Falsification of results generally takes one of two forms: (1) the sheer fabrication of data, or (2) the fraudulent omission or concealment of conflicting data for the purpose of misleading other scholars. An intermediate form difficult to detect, especially in quantitative analyses, occurs when students are sloppy about categorization. All researchers, irrespective of discipline, can agree that the sheer fabrication of data is fraudulent, and all scientists, as well as social scientists and humanists, can agree that the deliberate omission of conflicting data is also fraudulent. But, a few social scientists and many humanists might argue that one person's conflicting data is another person's irrelevant data. In general, in these latter disciplines, the best researchers are those who come to terms with any piece of evidence that other's may regard as conflicting. Strong support for a given hypothesis involves disposing of or dealing with alternative hypotheses.

The best insurance against fraud on graduate student research is, of course, the careful and close supervision of the faculty advisor as well as the examples of the members of the academic community. The student should communicate regularly and frequently with his or her major professor. He or she can do so in a variety of ways – by submitting laboratory notebooks for frequent review by faculty, by having faculty monitor the student's reading in the field, by regular updating of the faculty advisor of one's progress, or a combination of these or some other methods. Such communication will help the student develop intellectually and lessen the possibility of fraud, the academic community should handle the matter forthrightly but always with a clear regard to the rights of the graduate student so that the career of a student researcher who may be innocent is not

damaged. Similarly, if graduate student fraud is verified, it must be adjudicated in accordance with those procedures outlined the Student's Bill and rights and the Faculty Handbook.

Plagiarism

Unlike fraud, which is usually the deliberate creation of false data, plagiarism is the use of another's words, ideas, or creative productions which are then passed off as one's own without proper attribution (giving due credit to the original source). Flagrant cases of plagiarism, which like fraud fortunately occur seldom, may involve the extensive use of other's articles, books, or creative productions with perhaps only slight modifications. The penalties here are usually very severe for the student and would likely result in expulsion from Graduate School or, if a degree has already been earned, rescinding of that degree. Less extensive cases of plagiarism can either be intentional or unintentional (just plain carelessness or ignorance of the commonly accepted rules). In general, one must cite one's authorities in the text or more commonly, in the footnotes and use either direct quotations or skillful paraphrasing for all ideas that are not one's own. Since the basic information about our disciplines comes from outside ourselves through a variety of sources common to all who work in a discipline, it is of course unnecessary to footnote those facts and ideas which are, so to speak, in the common domain of that discipline. Otherwise, we would be footnoting everything we know. But, an intimate familiarity with the literature of the discipline, or a subdiscipline thereof, lets one know when the distinctive words or ideas of another researcher should be given proper attribution. The fairly common practice among natural scientists of citing the previous significant literature relating to the subjects of their articles or books serves as something of a safeguard against plagiarism that is frequently not present in some social sciences and most arts and humanities disciplines.

Every graduate student who works with graduate faculty should have a comprehensive knowledge of what constitutes plagiarism. Ignorance of the concept of plagiarism on the part of the student is no excuse for resorting to it as the graduate level, if indeed ignorance is an excuse at the undergraduate level. Graduate students, if in any doubt about the concept, should discuss plagiarism with the faculty members. And, students should expect faculty members and departments to demand that they know what constitutes plagiarism.

There are problems however, not always associated with traditional perceptions of plagiarism. One of those in the danger, when borrowing from the works of others, of quoting, paraphrasing or summarizing the material in such a way as to misrepresent what the author is trying to say. A second problem arises when a student is overly dependent on the work of another even if the other is cited meticulously. Still another problem is plagiarizing oneself by submitting the same data or findings in more than one article or by reviewing the same book in two different journals. And, finally, there is the problem of a graduate student's findings being used by his or her mentor without proper attribution to the student either in the article or book, indeed of not giving credit for joint or co-authorship in articles or books where a substantial amount of the work is done by the

student. The student should discuss any perceived problem of this nature with the faculty member involved, the chair of the department, or if need be, the Dean of the Graduate School.

In nearly all of these instances of plagiarism, or variations thereof, the best preventative is the example and consultation of the faculty advisor and the rest of the academic community who are sensitive to all of these nuances. Again, as with the cases of fraud, Indiana University should handle any suspicion of plagiarism with due regard to the student's rights, and any detection of plagiarism should be adjudicated in accordance with those procedures outlined in the Student's Bill of Rights and the Faculty Handbook.

Cheating

Cheating at the graduate level may not differ morally from the same action on the undergraduate level, but many find graduate cheating more reprehensible and the consequences understandably more severe. Academic dishonesty for one whose presence in graduate school declares he or she has opted for the intellectual life is a serious matter indeed. While cheating in the classroom is covered by regulations emanating from other parts of the University, cheating on qualifying or preliminary examinations is not. At the very least, such dishonesty once proven, should result in failure of the examination.

Abuses of Confidentiality

Abuse of confidentiality by the graduate students can take various forms. One example is that in which students have access to data or unpublished papers – or in the case of natural scientists, grant proposals – of other graduate students or faculty members of which they then use on their own research without permission, even though proper attribution may be made. By extension such an abuse of confidentiality would include the adaptation into one's own research of a thesis or dissertation that one has opportunity to read. Yet another example of the abuse of confidentiality is that, often in the arts, the humanities, and the social sciences – in which the graduate student gains archival or library materials about living or recently living subjects and uses them in his or her research without permission from the library or archive or, in some cases, from the individual. A biological and medical science student must all address himself or herself to the issue of research on live subjects.

In some ways, confidentiality is one of the forms of integrity that is relatively easy to abuse and relatively difficult to detect. Once again, as with fraud and plagiarism, the example of the graduate student's mentor and that of the rest of the academic community is the best preventative.

Conflicts of Interest

Genuine conflicts of interests between graduate students and faculty members can arise in a variety of ways. We have already alluded to the problems that can arise when the research of a graduate student is inadequately acknowledged by the faculty either by failure to footnote properly or to give co-authorship credit. But another set of professional interpersonal relationships must be handled with great care if the integrity of graduate study is to be preserved. As continuing formal

education becomes more common and academics begin to become involved in the world of business, the possibility of a business relationship between student and teacher becomes greater. All of us are familiar with the kind of conflict of interest that may arise through nepotism, that is when a person serves in an administrative or supervisory relationship to those who are related to him or her by blood or marriage. Most universities have rules which try to regulate professional relationships in such cases. Many faculty members are reluctant to have their own sons, daughters, or spouses take their courses for credit on the grounds that such students may be perceived by others to have an unfair advantage. A business relationship including a consulting one must evoke the same kind of caution.