

A Curmudgeon's Complaint

Wilf Innerd

The student arrives a few minutes early. She is a little out of breath, as it has been quite a dash across town in heavy traffic from school. But she has made it for 4:30 and has a moment or two to collect her thoughts before going in to see her advisor. She has completed the requisite eight courses that are required before she starts on her major paper, including one course on research methods and one on educational statistics. She has an A- average and is quietly confident that she can do what is needed and proceed next June to graduate with an M.Ed. degree. She is the first member of her family to have earned any kind of university degree, and this additional qualification will be greeted with a lot of respect, even awe, by her relatives. All she ever wanted to be was a good primary teacher, and she is that, but the M.Ed. will be the icing on the cake.

The professor opens his door, ushers out his previous appointment and calls her in. After a few pleasantries, they get down to business, which is to decide on the topic for her major paper. She has an idea that she wants to present. For the last few months she has been trying out a new, or at least new to her, approach to the teaching of reading to her first grade class. She would like to confirm what she already knows, that the new approach is better than her previous approach, and wants to know how to go about confirming it. She is particularly interested in student attitudes toward the new approach, and in her research methods course has learned about an instrument that employs Garfield the Cat's smiley and sad faces in order to determine how students feel about their learning. She is very enthusiastic about the new approach and very eager to start on her project using the Garfield instrument and collecting the data she needs to prove her thesis, to substantiate what her observations have already told her to be true.

After a discussion of about 20 minutes, the student leaves with the permission of her advisor to go ahead with the project. Over the next few months, she employs the test, gathers the data, writes them up, draws some conclusions, prepares a final draft, defends it at an oral, makes some corrections and sends it off to the binder. Mission accomplished and in June of that year, she is awarded her degree in the charming mediaeval ceremony the university puts on and everybody is happy!

Or are they? It has been an interesting exercise and for the student, perhaps a valuable learning experience. Of especial value to her was the

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opportunity, supplied by the need to do a literature review, to read fairly widely in the professional literature on her topic. She did in fact read two books, dipped into three others, and read and took notes from 12 articles. These activities certainly increased her knowledge. The actual writing of the paper confirmed in her own mind what she already knew, that she was an adequate writer, although she found that she did struggle a little bit with the more formal academic language required of her, which seemed to take her a long way from the language of her first grade classroom. The research design was largely that suggested by her professor, although she was not entirely clear why she did some of the things that she did as part of the research. The statistics, simple parametric statistics as her advisor described them, she took on faith. Math had never been her strong suit, she was quite willing to admit, and although she got an A- in the statistics course, as well as an A in the research methods course, she did so by dint of much rote learning, supported by talks with her fellow students and the generous help of the statistics instructor, who was more than willing to offer as much assistance as necessary. But in the end she could not in all honesty claim to have mastered the subject matter. She could not claim to understand statistics, and in fact, would be on safer grounds in arguing for something of an understanding of research design. But she had set out to do what was required and had successfully negotiated all the pitfalls placed in her path by the university. So she was happy and really never gave a thought to the inadequacies of her preparation nor to the gaps in her knowledge. After all, unless she had the urge to go on to further advanced work, and she had no such urge, the inadequacies would never make their presence, or rather their absence, known.

The Faculty was happy, especially the Dean. Another student had successfully completed the program designed by the Graduate Committee of the Faculty, approved by the Faculty of Graduate Studies and endorsed by the Provincial Council of Graduate Studies. Enrolment and graduation targets had been met, grants would flow, requests for additional resources would be further bolstered, and all graduate-teaching faculty could sit back and reflect on a job well done.

The only person who wasn't happy was the advisor, the curmudgeon. He was dissatisfied with himself and with the system and with his part in the system. The student was almost the fiftieth student he had supervised in writing a major paper, and all the nagging uncertainties and concerns he had had with the previous candidates had come together with this one. He could list them quite easily.

First was the lack of a pre- and post-test procedure. This was not the case with all the previous papers he had supervised, but it was true with the

majority of them. The problem was that so often the students had already carried out the procedure that was to be investigated before they arrived at the fateful interview to discuss and decide what it was they were to do. The simple answer, of course, was to tell the students that it could not be done, that they would have to find another topic. There were two problems with that solution, however. The first was that very often the students were about to run out of the statutory time available for completion of the degree and that finding another topic on short notice was likely to be difficult. The second was that in many cases the students had already done a considerable amount of the work, the thinking and part of the literature review perhaps, sometimes with the advisor's knowledge, sometimes without. He had tried without much success to get his advisees to decide on their major-paper topic earlier than they typically did; he suggested around the half-way mark in their program, after four or five courses. Some took his advice; most did not. He could and perhaps should be hard-nosed about it, but he wasn't. After all, the absence of a pre-test was not necessarily a fatal flaw in the proposed research. There were ways around that particular problem.

Secondly, and to his mind, more serious, was the problem of lack of objectivity. All too often students came with their minds made up about their proposed research. For many it seemed to be just a case of going through the motions of proving an already established fact. This was certainly the case with this particular student. Part of the problem was the advisor himself, because he was most partial to the approach she was taking with the children in the classroom and so did not want to dissuade her from the course of action she was approaching. But the reality was that there was no third party involved, someone who was not committed to the particular methodology of teaching reading and who could watch out for flaws in the research procedure.

Thirdly, and to compound the previous problem, there was no control group built into the design. If the student had been proceeding to the degree by means of a thesis, the design would have required a control group if so indicated. However, there were limits to the number of students that the local school boards would sanction being involved in university student research activities and major paper research activities were below the threshold. This was not always the case, as sometimes students could recruit the teacher in the next classroom or one just down the hall, but it was certainly not the norm. An additional complication was obtaining ethics approval from both the board and the faculty, as well as the additional parental consents and guarantees that all pupils would have access to all treatments and materials. It was not that the advisor was against such safeguards; he was in fact entirely supportive of them. These were after all human participants. However, the effort required and the

difficulty likely to be encountered made control groups for major-paper research the exception rather than the rule.

Fourthly, there was the problem with the sample. Inevitably, as in this case, students use a convenience sample, that is to say their own students. So not only is there no control group, but also the students are intimately known to the researcher. As already noted, but for a different reason, any assumption of objectivity is, to say the least, doubtful. The researcher knows what she wants the research to show, and even if, as is often the case, she does not exactly learn what she wanted to learn (see the next point about instrumentation), the temptation to explain away the difficulties is often irresistible. Furthermore, the sample is invariably too small to produce significant results. At best, most major-paper studies may be perceived as pilot studies with results viewed as suggestive, never conclusive.

The fifth problem is the poor quality of the instrumentation used. M.Ed. students simply do not have the exposure to the many different kinds of instruments that are available. Furthermore, they do not have the skills necessary for them to make sensible judgements about which ones they should use from the array available. This is particularly the case when the participants are young children, but the same principle applies with older children as well. Recently more students are electing to do qualitative as opposed to quantitative research, a trend of which I thoroughly approve. However, as a colleague commented to me, this often simply means that the students cannot handle the statistics necessary in a quantitative study, and in fact leads them into an area where instrumentation, or its equivalent, either does not exist or has doubtful validity.

A sixth problem is that this student, like many if not most students, did not use a Null Hypothesis approach to their research. Most of them do so out of ignorance however, being unaware of the advantages, as well as the disadvantages of using such a method. Indeed, if students come with the idea firmly in mind of what it is they want to prove, using a Null Hypothesis does not make any sense to them. Using a Null Hypothesis would, however, reduce the number of misleading claims that are made in so many major papers.

The fact of the matter is that very little of the research done for major papers in education actually contribute to the sum of knowledge in the field, largely because of the technical problems described above. This is not always the case in other academic fields. I am most familiar with Psychology, where I have frequently served as an outside reader, and I believe that the majority of papers at the Master's level do make a contribution. Furthermore, few benefits actually accrue to the students through the exercise. They may have a better acquaintanceship with the relevant literature, and may have a better

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understanding of research techniques, thus enabling them to better understand and appreciate research that they may encounter in the future, but little else may be claimed for the activity, some of which may have been very intense and time consuming. It is perhaps time to consider whether these relatively minor benefits might not be achieved more easily and effectively some other way, perhaps by reinstituting field reports, which have the advantage at least of not claiming more than they can produce.

None of this should be read as an assault on the thousands of students who have successfully completed M.Ed. degrees in this province. They did what the university and the Council of Graduate Studies told them to and did it well. It is not their fault that the system is flawed, perhaps fatally so. Nor should it be seen as an attack on the dedicated instructors of statistics and research methods who, given the limitations imposed upon them, especially those of time, do a remarkable job. Nor, finally, is it an indictment of the advisors who help the students through the process, devoting countless hours and all their expertise to making the experience as educationally beneficial as possible. I am not blaming them, whoever they may be, because I am one of them. I am retired now and supervised over 50 major papers over a period of 35 years. If I point the finger, I point it at me. I have had these kinds of misgivings for a long time and, as a former Dean, I was in a position, more than most, to do something about them. That I did not would require a whole different paper to be written. What I do hope to do, even at this late stage of my career, is to raise some flags and ask some awkward questions, so that we can systematically improve the quality of the educational experience we provide to our M.Ed. students, to the ultimate benefit of the children and young people of this province.