What do Examiners Look for in Dissertations and Theses?

Donald Joyce

Unitec New Zealand Auckland, NZ djoyce@unitec.ac.nz

The Master of Computing (MComp) programme at Unitec involves a 60 credit dissertation or 120 credit thesis (out of a total of 240 credits). Examiners are asked to provide "an overall evaluation of the substance and quality" of the dissertation or thesis (including "design, methodology, literature review, theoretical rigour, argument, interpretation and practical application") and comment on "particular strengths or weaknesses in presentation and reporting". In this paper the author reviews his experience of the examination process in practice (for MComp and for masterates and doctorates at other institutions) and how that relates to the official criteria and guidelines.

Keywords

Dissertation, thesis, examiner, criteria, guidelines

1. INTRODUCTION

The Master of Computing (MComp) programme has been running since February 2000 and has attracted more than 200 students. The assessment of their dissertation/thesis work is a significant undertaking.

At the time of writing, 18 MComp students have successfully completed dissertations (60 credits) or theses (120 credits) and 45 students are at various earlier stages: writing proposals, gathering and/or analysing data, working on first, second, third... drafts, awaiting the examiners' reports. Each dissertation or thesis is initially assessed by two examiners, at least one external and at most one internal. A third examiner may be brought in if the first two examiners' recommendations cannot be reconciled. So far we have called on 14 external examiners (two as third examiners) and seven internal examiners. There are also five Doctor of Computing (DComp) students undertaking coursework as preparation for their 240 credit theses.

This paper begins by examining the criteria that Unitec and RMIT University provide to examiners of masters and doctoral dissertations/theses. It then reviews the author's experiences as an examiner applying these criteria.

2. CRITERIA

Examiners of MComp dissertations or theses are asked (Unitec, n.d.) to provide the following:

- "an overall evaluation of the substance and quality
- comments on particular strengths and weaknesses in presentation and reporting
- an indication of particular strengths and weaknesses of such features as design, methodology, literature review, theoretical rigour, argument, interpretation and practical application significance."

They are told that "the candidate should demonstrate achievement in all of the following criteria:

- critical review of literature related to the topic
- critical appraisal of methodology employed to address research questions/problems
- capability in applying appropriate research techniques
 - capability in data analysis and interpretation
- capability in drawing conclusions supported by data
- capability in making recommendations supported by the implications of the research
 - sound analytical or original thinking
- application of scholarly conventions for research reporting

quality of exposition and organization of material".

The examiners' guidelines used by RMIT University (2003) state that a masters candidate is "required to demonstrate competence in

- reviewing the literature relevant to the thesis
- designing an investigation, and gathering and analyzing information
- presenting information in a manner consistent with publication in the relevant discipline
- critical appraisal of his/her own work relative to that of others
- the ability to carry out supervised research in the field"

A doctoral candidate at RMIT is "required to demonstrate, in addition to those qualities required of a masters student:

- a significant and original contribution to knowledge of fact and/or theory
 - independent and critical thought
- the capacity to work independently of supervision."

The common elements in the United and RMIT criteria for masters students are literature review, design, methodology, analysis and presentation. The criteria for DComp students are closely modeled on those for RMIT doctoral candidates.

3. EXPERIENCE

Last century the author examined one masters thesis and four doctoral theses in the field of numerical analysis. In the past three years he has examined six MComp theses and one RMIT doctoral thesis, all in the field of computing and information technology. The recent experiences have been very different from the earlier ones, partly because of the subject matter but also because of the greater emphasis that is now placed on methodology.

Doctoral theses are usually graded pass or fail and the author has been in agreement with the other examiners in passing all five doctoral theses that he has examined. The MComp situation is different because a four point grading scale is used:

■ A for a "candidate who demonstrates excellent achievement"

- B for a "candidate who demonstrates very high achievement"
- C for a "candidate who demonstrates satisfactory achievement"
- D for a "candidate who does not demonstrate achievement".

The grades awarded to date have been seven As, seven Bs, four Cs and four Ds. Only in nine cases (out of 22) were the examiners' initial recommendations the same. Two of the four Cs were achieved after resubmission and two of the four students with Ds have resubmitted and await their results. The other two students with Ds (who have completed the requirements of the Postgraduate Diploma in Computing and foundjobs) are pondering their options.

Some examiners have expressed frustration at having to use such a limited set of grades. So Unitec is about to introduce grade modifiers (+ and -) for the A, B and C grades and also introduce an E grade for candidates who have done really badly and "normally will not be permitted to resubmit their work for re-examination" (candidates with D grades are allowed to resubmit once and can then receive only a C- grade or another D).

So far the author's initial grade recommendations for MComp dissertations have differed from those of the external examiners in five cases out of six. In three cases the author was more generous than the external examiner and in the other two he was less generous. In such cases the dean usually "seeks to negotiate a consensus" and has been successful in all six cases involving the author. As indicated earlier, a third examiner has been required in two other situations where the initial examiners' recommendations were too far apart. In both cases the external examiners were unhappy about the methodology and the students were required to resubmit.

4. CONCLUSION

Tertiary institutions offering postgraduate qualifications often make use of external examiners (Phillips and Pugh, 2000) and provide detailed guidelines covering the process and the criteria to be applied. Where more than one examiner is involved in examining a particular student, further guidelines (or regulations) are needed to deal with situations where examiners differ in their grade recommendations. The

author's experience of examining 12 students and observing the examination process for another 12 students has demonstrated that examiners can arrive at quite different views of the quality of student's work, even when supplied with detailed criteria.

REFERENCES

Phillips, E.M. and Pugh, D.S. (2000) "How to get a PhD". Maidenhead: Open University.

RMIT University (2003) "Guidelines to Examiners of Theses". Accessed April 21, 2004, http://mams.rmit.edu.au/dcp6e6weni0d.pdf

Unitec (n.d.) "Information for Examiners". Auckland:

Unitec New Zealand.