Chapter 10: Getting Over the Finishing Line

Iona Burnell Reilly and Gerry Czerniawski

Introduction

Having carefully drafted and constructed the various chapters and sections of your thesis, you may now be thinking about making finishing touches in readiness for submission. Within this chapter we will cover the abstract, introduction, what to check when proof-reading, various ways of presenting findings, using headings and sub-headings, the metaphorical 'golden thread' that links the thesis together in a cohesive manner, and ensures that the end product possesses the 'doctoralness' that is needed for work at this level.

The advice given by your supervisor(s) is of utmost importance when you are preparing your thesis for examination. From this chapter you will benefit from our own experiences as doctoral examiners, those of other researchers, and how theses from previous educational research projects have been effectively written up and submitted.

Objectives:

At the end of this chapter you should:

- Be fully aware of why the 'golden thread' of your thesis is so important to your examiners.
- Be able to improve signposting the clarity and coherence of your thesis.
- Present a thesis that helps to reduce the amount of potential questions examiners ask in your viva.

Managing your examiners' first impressions of the thesis

Once you have submitted your thesis, you may have two or three examiners (depending on institutional arrangements). One may have been chosen, not because of their expertise in your particular field but possibly because of expertise with a particular methodology or theoretical and conceptual framework. Knowing this immediately helps you to understand the importance in **not** assuming that examiners always have prior knowledge of your field, and what that means for the clarity of your writing. The rigour and quality of work that is required at level 8 (the level associated with doctoral level writing) is the same for all doctoral programmes. As outlined in chapter one, the wordcount for the professional doctorate thesis may differ to the traditional PhD thesis, and the professional doctorate may contain an element of professional practice, not found in all PhDs.

The examiners have chosen to examine your thesis. They have been approached by your supervisors, have looked at your topic and made a decision to accept. This means that prior to them reading your thesis they are, initially, 'on your side', have an interest in your research, and, under the right circumstances, want you to pass. The examiner may read

your thesis on a train, a plane, a beach, at night, at the weekend and they won't necessarily read it all at once or in the order that it has been presented. They may, for example, look at the introduction and conclusion first, the abstract, the references, the contents page, or the findings, and not necessarily in order. The examiners will make checks for scholarliness and scholarly conventions. For example, you need to ensure you have included relevant references to books and journals and that these are current and up to date. If references are not up to date, and accurate, you may start to lose the trust of the examiner in relation to the quality and doctoralness of your thesis. This could mean for example, the extent to which they feel there is sufficient evidence to show that the thesis contributes new knowledge to the field, is limited. Examiners are looking for proof that you deserve your doctorate so keep them interested and make sure they don't lose faith in your scholarly authority.

Your university will have criteria against which your thesis will be examined. As well as these, the examiners will award your doctorate in recognition of the following points: 1) your doctorate, once awarded, conveys international recognition that you are a national expert in your field. 2) you have the potential to start examining others' doctoral theses (EdD or PhD) even though in some cases you may not be a substantive expert in that field; 3) you are contributing **new and original** knowledge to the discipline and subject area through your research and findings.

Golding et al. (2014) conducted an analysis of 30 articles including examiner reports and recommendations, rankings of thesis quality by examiners, and qualitative data from examiners participating in their research. They derived several general conclusions about what examiners do during the process of examining a thesis. Some of these include:

- expect a thesis to pass
- judge a thesis by the end of the first or second chapter
- read a thesis as an academic reader and as a normal reader
- be irritated and distracted by presentation errors
- favour a coherent thesis
- favour a thesis that engages with the literature
- favour a thesis with a convincing approach
- favour a thesis that engages with the findings
- require a thesis to be publishable

(Golding, Sharmini & Lazarovitch, 2014: 566-567)

Although Golding, et al. suggest, in their first bullet point above, that examiners 'expect a thesis to pass', we would say, as examiners, that we would *want* your thesis to pass. We would also suggest, in addition to the above, that the thesis should contribute to the existing body of literature on the topic, as well as critically interrogate the findings of your research.

Golding, et al. also found, through their research, that examiners will read the thesis both as an expert/academic from the discipline/subject area, and as a normal reader. Remember,

they too have been through the doctoral process and many examiners will have published widely within the field that the thesis is situated. What is meant by 'normal reader' is simply somebody who is reading an extended text and expects that text to be well laid out, cohesive, coherent, and presented in a clear and logical way. Just like any reader of any text, for example, a newspaper, a novel, a research paper, etc., you may also have to make very clear certain aspects of your educational practice that the examiner may not be familiar with. Afterall, something that is obvious to you about your daily work practices within, for example, your educational institution such as the school where you conducted fieldwork, may not necessarily be obvious to the examiner when they are reading your thesis, especially if they do not share that background.

Your doctoral thesis does not have to be perfect, but it does have to be perfectly presented. You can acknowledge in the conclusion, setting out what you learned, and how you might have done it differently, the implications of that are that it is not flawless, and that is OK. Don't try to pretend it is a work of perfection. The examiners have also gone through the doctoral process and they will know that research rarely goes to plan. Research is never problem-free, and they will expect you to acknowledge this. Think of the process as an apprenticeship and that you are worthy of your training. Thomson and Walker point out that 'in Australia, as in much of Europe, it is only recently that doctoral studies have begun to be widely referred to as 'research *training'* (2010: 299). However, while the idea of a doctoral student being in training may be a reassuring one for many, you are still expected to demonstrate the levels of rigour, originality and 'mastery' associated with doctoralness. Thomson and Walker also argue that 'to succeed, students will have to show they have mastered the norms of what it is to do good research in their field' (2010: 299).

Referencing with Accuracy

It is important to ensure that your in-text references, and the reference and/or bibliography list, are presented accurately and consistently. To ensure this, you can use a reference manager and/or a citation generator which allows you to organize and store all your references in one centralized location. Examples of these are *Zotero, Mendeley, EndNote, MyBib and Scribbr.* Some universities subscribe to referencing software for their students and staff to use. Library data bases also have the ability to store your references. (See Win Pang's section on Electronic Databases for more information about libraries).

Some referencing managers are free to download. You will need to try them out and decide what works best for you. *Zotero* is quite sophisticated in that it helps you to collect, organise, cite and share your sources. *MyBib* is much simpler to use and enables you to build an accurate list of references for you to copy straight into your thesis. All of them allow you to set the referencing style; for example, if you are using APA7, you would set your referencing manager so that all citations appear in the APA7 style.

If you are not very tech savvy, the idea of using such software might be daunting. Start with *MyBib* as it is very straightforward, will save you time, and avoid plagiarism. Manually adding references does not ensure accuracy or consistency, mistakes can be made, and if

your examiners notice, you may lose their trust. In addition, it is your responsibility to ensure that you are presenting scholars' work accurately and properly, as well as acknowledging their ideas, theories, key arguments, data and anything else that doesn't belong to you. Misrepresenting information, typos and inaccuracies do not look good for you, and may lead your examiners to question the credibility and reliability of your work.

The golden thread

The 'golden thread' is the central argument of the thesis. It pulls through the whole thesis and creates cohesion and synergy - the title, abstract, contents page, introduction, methodology, literature review, findings and conclusion - all nicely linked back to each other. That golden thread should be explicit at every stage; present not just in the introduction and conclusion, but when you set up a new heading, subheading within each and every chapter.

Over the course of your EdD programme, you will have become familiar with the literature that is relevant to your topic and with who the 'big names' are within the various fields that you engage with in your thesis. Following the conventions of referencing is expected but avoid, for example, repetitive 'Jones said this, Smith said that'; examiners are interested in the field of research, the debates, the contestations, and the theories and concepts that underpin your research. These are all part of your golden thread and should be consistently present throughout the thesis. Remember - Golding, et al. state that:

> A thesis is crafted into a coherent whole by threading an argument through it for the examiners to follow – connecting the research question with an answer, connecting various subsidiary conclusions and connecting these conclusions with the supporting data, evidence and reasons, and with the background literature (2014: 569).

This coherence is particularly important for examiners who do not, for whatever reason, possibly due to work/family commitments, read the thesis in one sitting. If they read chapter one on Sunday, and don't get a chance to return to the thesis until Thursday, a lack of coherence will make the examiner's job so much harder.

To be boxed

Reflective exercise: *search for question marks in the thesis. Get rid of unwanted and/or rhetorical questions; there is no need for these. The only questions you need are the research questions, and any questions that you are asking in interviews, questionnaires, etc.*

First impressions count

'Even though examiners expect a pass, first impressions can change their mind', according to Golding, et al. (2014: 568). They go on to explain that within the first two chapters of the thesis, and by skimming the abstract, contents page, introduction and conclusion, a

preliminary judgement is made about the quality of the thesis. Carter (2008) cited in Golding, et al. (ibid) query whether you are going to present the examiners with a 'treat' or an 'endurance test'. Perfect presentation, with everything in the right place, proof-read, no spelling, grammar, punctuation errors, consistent font and type, and the appropriate referencing style - according to the university where you are studying, are all conducive with the 'treat'. As we have previously pointed out, and as asserted by Golding, et al. (2014), 'They read with academic expectations and the expectations of a normal reader. Like any reader, thesis examiners get annoyed and distracted by presentation errors, and they want to read a work that is a coherent whole' (p. 563). Therefore, it is crucial that the examiner's first impression is a very good one.

We previously stated that your doctoral thesis does not have to be perfect, but it does have to be perfectly presented. Murray (2011) in her book *How to Write a Thesis* discusses the notion of 'good enough' as 'reaching an adequate standard for submission' (p.269). What you should be preparing for at this stage is damage limitation at the viva. In other words, hoping to rule out all of the additional questions that the examiners might have wanted to ask had you not managed to answer them in the actual thesis.

To be boxed

Reflective exercise: *Send the abstract and introduction to a few of your critical friends. Asking critical friends to read your abstract and introduction will also ensure that both are accessible to lay readers.*

Whether or not they work in education, anybody who has an interest in education should be able to read your abstract and understand it. The same point is true for the introduction (see below) to your thesis. You also want the examiner to believe that your thesis is going to make a valuable contribution to the field, so make the introduction compelling, clear and easily understood. Take time to look at many introduction chapters to other doctoral theses in education to see how successful candidates have written these very important chapters.

Finn (2005) provides some useful insight from an examiner's perspective:

> Their first viewing of the thesis will be the title on the front cover, and their initial inspection of the thesis will take in the title page, the table of contents, the line spacing, font size, paragraph lengths, number of figures and tables, referencing style and, of course, the length of the thesis (p. 118).

Finn also points out that '…it is your responsibility to write, structure and present the written thesis in a way that convincingly demonstrates research at doctoral level' (Finn, 2005: 118). The following reflective questions might prove to be useful as you revise your thesis.

To be boxed

Reflective Questions:

- *Have you provided clarity: around your narrative, ideas, contributions and relationship to research questions?*

- *Do you justify your choices (in the literature and methodology), research journey, and what has/has not worked?*
- *Have you checked for coherence: do all of the component parts link together to produce a clear flow from title to introduction to conclusion?*
- *Does the thesis contain critical interpretation and reflection?*
- *Does the thesis provide supporting evidence that supports your assertions, and grounds your analysis and conclusion?*
- *Do you provide originality and a contribution to the practice of education?*

An abstract is not abstract

The abstract is usually the first thing that examiners read. It should be a distilled version of your thesis. It is short (max one page), usually not exceeding 500 words. It outlines the research problem, aims, research question(s) and articulates the contribution of your research to the field. It also identifies the main methods, the sample and what the most significant result is. Murray (2011) discusses 'Brown's eight questions' (Brown, 1994) as '… questions [that] can be used at a later stage to structure the abstract, or summary … this approach can be used not only to reveal the central argument, but also to *discover* it' (Murray, 2011: 217-218):

1. Who are the intended readers?
2. What did you do? (50 words)
3. Why did you do it? (50 words)
4. What happened? (50 words)
5. What do the results mean in theory? (50 words)
6. What do the results mean in practice? (50 words)
7. What is the key benefit for readers? (50 words)
8. What remains unresolved?

If you are still unsure, or uncomfortable with your abstract, use the above prompts to sum up your research and try to present it to a friend or colleague verbally in two or three minutes. Talking through your abstract with someone else can help clarify your own thoughts in relation to the nature and purpose of the study and thus sharpen your abstract.

To be boxed

Reflective exercise: *Read ten or so abstracts from others' theses to get a feel for what an abstract is and what makes it different to the introduction, summary and conclusion. Try to choose the abstracts from the subject discipline of education, as this keeps them relevant, but you may also find that thesis abstracts from the wider social sciences are useful exemplars.*

Most universities now have online repositories where students upload their theses. The British Library is also a very useful resource and repository of theses produced in the UK (The British Library: The National Library of the UK - The British Library (bl.uk))

The introduction

A well-used approach to writing an introduction to the thesis is to lay out the sequence of the chapters, providing a summarised version of each. While this is one element of an introduction, you must also be sure to include what you have done, how you have done it, and why. Beginning with a grand opening paragraph that identifies the topic, the debates in which it is situated, and the contribution this thesis will make to those debates, is a good start. Remember that the introduction should not only gain the examiner's interest, but it should also demonstrate and sell them yours.

As with your abstract, get a critical friend or two to read this very important chapter. Even if your friends are not from an educational background, the introduction should be clearly understood in terms of what you are doing, how you are doing it, and why you are doing it. Be clear and succinct about what the issue is, what is being said about it, and how you deal with it in the thesis. Include: what the research is about; what you found out; a brief summary of the theoretical/conceptual framework; what the significance of the findings are, and what these findings mean; what the implications of the research are for policy, existing research, and practice within your area of education. Make sure the aims and research questions (if appropriate), hypothesis (if appropriate) are clearly presented in this opening chapter.

Don't be Anglo-centric. The temptation for many doctoral students is to think inside your own geographical and/or cultural bubble, particularly with EdD research as these theses are often about an educational issue at a local level, for example, a school or college locally situated. The danger is that you write about your area forgetting that there is a whole world out there and one which you are contributing new knowledge to. Drawing on some of the literature and debates from the international context will not only demonstrate global educational awareness, but also acknowledge that your chosen field is very likely to be an international one, even though your thesis might be looking at one local aspect of that field.

To be boxed

Reflective question: *if somebody from another country accessed and read your thesis, have you provided enough context for them to understand the issue that you are researching?*

Methodology

Kate Hoskins has provided a very clear and comprehensive guide to research design and methodological approaches in chapter 7, and we are not going to duplicate any of that here. When preparing your thesis for submission, however, there are some final checks you can make and one is to ensure that your methodology is in harmony and has synergy with the literature review, the theoretical and conceptual framework, research questions, the findings, and the conclusion.

There are many facets to this chapter including that it must explain to the examiners how you analysed the data. Remember that you can help the examiners understand your methodology by making good use of your appendices. All appendices are different; some may contain, for example, graphs, charts, interview schedules, transcript sections, and questionnaires. You can make the examiner's life easier by clearly signposting this information in the chapter.

Remember too that your methodology chapter is not is an essay on methodology. Rather, it is a chapter about you, explaining to your examiners and readers, why you have constructed the methodology for your thesis in the way that you have. Examiners are not interested in you showcasing long explanations about the meanings of 'ontology' and 'epistemology'. What they are interested in is how you apply issues of ontology and epistemology correctly and how those concepts have impacted on the methodological choices you made. Ontology and epistemology should therefore be used sparingly as concepts within the context of your research, the journey you are making, and the choices undertaken for your educational research.

In recent years, researcher positionality within doctoral theses in education has become more important, with many examiners expecting to see the extent that the doctoral student is aware of the role their positionality can play in the design and outcomes of the thesis. Showing how you have reflected reflexively and critically on your positionality as a researcher will therefore be an important part of the final writing of the thesis. This issue of researcher positionality is increasingly one that examiners enquire about during doctoral vivas in education.

Gerry Czerniawski and Michelle Thomason have provided a very useful, interesting and comprehensive chapter on researcher positionality, see chapter 6. This will help you to reflect on, for example, how your positionality might have determined what literature you have included (and excluded) in your own literature review chapter/s.

To be boxed

Reflective exercise: *Acknowledge how your thesis has developed and grown, including any changes you may have made along the way. Also, check that your research questions are consistent as they may change over time.*

Presenting your findings

There are various ways to present your findings and we would always advise doctoral students to look at the different ways published doctoral theses in education present findings. You must be clear in the thesis about what it is you are doing. For example, are you going to present your findings in a discrete chapter/s and then follow this with a separate 'Discussion' chapter? Alternatively, are you going to present findings but discuss them as you go in relation to your literature review within the same chapter or chapters. These two variations are just two of a variety of ways in which findings chapters can be presented and therefore it is so helpful to look at similar chapters in other completed doctoral theses.

When presenting your findings, consider these points:

- Be wary of making generalisations unless they are integral to the epistemological strand of the research.
- Express your own academic authority. Do not hide behind the writings of others by using lots of quotations, this is your research, you have conducted it, no one else; you must own it and be able to argue for it. For example if you decide to use a quote from one of your participants, ensure that you 'top and tail' this with commentary from you (rather than letting the quote 'speak for itself').
- Your findings should relate back to the theoretical/conceptual framework deployed in the thesis.

To be boxed

***Reflective exercise**: A very useful resource to draw on is The University of Manchester's Academic Phrasebank (http://www.phrasebank.manchester.ac.uk/referring-to-sources/) which provides a bank of introductory phrases with which to present, not only your findings, but also other parts of the thesis such as reporting methods, discussing findings and writing conclusions.*

In the following example, the writer chose to present the findings in a chapter called *Research Findings, an interpretation of the data.* While this would be considered a discrete chapter, dedicated to laying out the findings, it also includes links to theories, the literature, and the theoretical framework chapters. This is one example of the various ways to present your findings. In this extract of an EdD thesis, the writer has intertwined interpreted interview data (presented in italics) with the 'cycle of failure' theory as presented in the literature and referenced from Askham, (2008: 92):

> Tammi told me: *'I felt as I said, before I felt dumb'.* For Kasim, his perceived failures were openly expressed to him: *'I've always been called thick and stupid when it came to education. A teacher called me a spastic as well when I was at school. So, I never really thought of myself as having any intelligence when it came to academics'.* With these perceptions of themselves in relation to education, it is no surprise that they developed into adults who felt that higher education was not the place for them, and was out of reach. Just as Baxter and Britton (1999) noted that education is a 'key site for the construction of identity' (p. 179), my participants had already constructed themselves as educational failures from their experiences of school. Askham discusses the 'cycle of failure' (2008: 92) which places limitations on learning; Askham describes the learner's state of mind: 'I had a poor experience at school, so whatever else I might have achieved in life, my self esteem as a learner is low; so when I return to education I do not expect to perform well' (ibid). Askham's theory resonates in Kasim's words when he said '*I've overcome a lot of things; the only thing I never overcame was education'.*

In this extract we can see the way the author has included findings with links to theories and literature. Your best approach to presenting your findings will be agreed between you and

your supervisor. It might be that intertwining findings with links to theories and literature is appropriate, as above, or you may decide on laying out just the findings alone.

To be boxed

Critically Appraising Research

Critiquing tools are used by researchers to critically appraise research papers. It is possible that an examiner might use one to critically appraise your research. They are also useful to refer to, when designing a research project, as they will help to achieve cohesion, congruence, and that all important golden thread we mentioned earlier.

There are a number of qualitative critical appraisal tools out there and a quick Google search will reveal them. They usually consist of a checklist or series of questions. The example we have focused on here is the critical appraisal tool for qualitative data, provided by the Joanna Briggs Institute (JBI). The JBI (2020) state that the 'purpose of this appraisal is to assess the methodological quality of a study and to determine the extent to which a study has addressed the possibility of bias in its design, conduct and analysis' (p.2). The JBI critical appraisal tool poses a set of 10 questions for the appraiser to address; each one focusses on an aspect of the research methodology and design:

1. Is there congruity between the stated philosophical perspective and the research methodology?
2. Is there congruity between the research methodology and the research question or objectives?
3. Is there congruity between the research methodology and the methods used to collect data?
4. Is there congruity between the research methodology and the representation and analysis of data?
5. Is there congruity between the research methodology and the interpretation of results?
6. Is there a statement locating the researcher culturally or theoretically?
7. Is the influence of the researcher on the research, and vice- versa, addressed?

8. Are participants, and their voices, adequately represented?
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

Joanna Briggs Institute. (2020) CHECKLIST FOR QUALITATIVE RESEARCH.

You will find the complete JBI article on their website https://jbi.global/critical-appraisal-tools. The article provides very useful and well written explanations to each of the 10 questions.

Critical writing

Many doctoral students struggle with what it means to write critically. The temptation, in early draft chapters, is to present literature, often in report form, without engaging critically with it. This tendency may occur because of a lack of confidence in writing, a fear to engage, or taking a back seat and not 'getting involved' in the argument; students at doctoral level do need to step out of their comfort zone for doctoral level writing. You may already have experience of writing critically from your previous undergraduate/postgraduate courses. At doctoral level this skill needs to be sharply developed to include well-informed judgements, criticisms and evaluations of the literature you have presented in your thesis.

In addition to the guidance provided by Leena Helavaara Robertson in chapter 4: writing the literature review, we have included some additional tips here that will help you to sharpen your writing.

The University of Manchester's Academic Phrasebank states that:

> As an academic writer, you are expected to be critical of the sources that you use. This essentially means questioning what you read and not necessarily agreeing with it just because the information has been published. Being critical can also mean looking for reasons why we should not just accept something as being correct or true. This can require you to identify problems with a writer's arguments or methods, or perhaps to refer to other people's criticisms of these. Constructive criticism goes beyond this by suggesting ways in which a piece of research or writing could be improved (The University of Manchester: Academic Phrasebank).

At doctoral level, everything is debatable. Wellington, Bathmaker, Hunt, McCulloch and Sikes (2009) comment on being critical as 'questioning the work and ideas of others, and students are often advised to be critical … anyone's work may be challenged and exposed to criticism' (p.83). However, they also warn against pejorative approaches to criticism, such as

being ‘judgmental’, ‘scathing’, and ‘nit-picking’, as this will come across as being ‘hostile, rude or confrontational’ (Wellington, et al., 2009: 83), not at all advisable or acceptable in academia. The authors provide a useful interpretation of what it is to achieve criticality in your thesis:

> ‘being critical involves the exercise of careful, deliberate and well-informed judgement. It is important to be sure that your critique is based on what is in the literature, and does not represent a misinterpretation or an ignorance of the literature’ (2009: 84).

To ensure that you can evidence sufficient critical engagement with the literature you will need to be very familiar with the literature and gain a deep understanding of the arguments that others are presenting. Interpret these arguments accurately. Present them with confidence, use your own voice and avoid purely descriptively writing what they have said. While it is tempting to remain impartial and avoid ‘getting involved’, you will not achieve the level of criticality needed for your doctorate without positioning yourself within the argument. The University of Leicester advise that the most characteristic features of critical writing are:

- A clear and confident refusal to accept the conclusions of other writers without evaluating the arguments and evidence that they provide.
- A balanced presentation of reasons why the conclusions of other writers may be accepted or may need to be treated with caution.
- A clear presentation of your own evidence and argument, leading to your conclusion.
- A recognition of the limitations in your own evidence, argument and conclusion. (University of Leicester, Centre for Academic Achievement)

To be boxed

Reflective question: *check your citations, can any come out without making a difference to the thesis? If so then they should not have been there in the first place.*

Headings and sub-headings

Providing well-crafted headings and sub-headings can create effective sign-posting for the reader. These headings are an indication of the content of that section or chapter and can contribute to the visibility of that golden thread mentioned earlier. Finn (2005) provides some techniques to assist the reader, such as ‘forecasting’, ‘summarising’, ‘signalling’ and ‘signposting’. Finn explains that ‘these techniques help the reader (including the examiners) to comprehend the coherence and storyline of the thesis’ (p.125).

Let’s look at each of these techniques with examples from a previously written thesis:

Forecasting

According to Finn, 'forecasting involves letting the reader know in advance what will (or will not) happen in the text' (2005: 125). This can take place in the first one or two sentences. Some writers call it 'setting the scene', and this may even include laying out the sequence of the section.

Here is an example of forecasting from an extract of an EdD thesis:

> The term 'working class' is going to be used frequently within this thesis, even though the main focus of the thesis is on mature students as an under-represented group in higher education. Mature students tend also to be working class, and all of my participants define their backgrounds as working class, therefore it would be helpful to include a section where the term 'working class' can be discussed and defined.

The writer has let the reader know what to expect by providing a forecast in this paragraph, and a justification as to why this is going to happen.

Summarising

Finn notes that 'summarising' is a related technique to forecasting (2005: 126). The difference is that this usually takes place at the end of the section. Summarising is a useful technique for tapering the section to an end, and also for keeping the main points fresh in the reader's mind.

Here is an example of summarising from an extract of an EdD thesis.:

> This section focuses on the theoretical perspective used within the thesis. The chosen theorist is Pierre Bourdieu (1930-2002). Bourdieu's theories of habitus and cultural capital enable us to conceptualise and understand why some people participate in higher education and some do not. Focussing on the working class as the marginalised social group in HE, Bourdieu demonstrated how education perpetuates inequality and lack of opportunity. I examine the theories in the context of my own research, and explore my participants' experiences of HE using Bourdieu's theoretical framework.

This summary represents a theoretical section of the thesis and was used as part of the introduction to that section.

Signalling

Signalling, argues Finn, 'involves the selection of words to display the various logical links in the research plan and to direct the readers' interpretation of your writing' (2005: 126). Finn provides various examples of these words in his book. One particular example, and one that is useful to create a contrast between two ideas is the word *however.* When the reader reads *however* they will know that a contradiction, comparison or contrast will follow. Here is an example from an extract of an EdD thesis in which the signal *however* is used to contradict two ideas:

> I use the theoretical framework of Bourdieu's theories of habitus and cultural capital to explore the concept of class and educational success and failure, and

why, according to Bourdieu, some classes succeed in education and some do not. *However*, my research findings do not support an uncritical application of Bourdieu's theory; rather that one's habitus can change to accommodate new practices.

Finn stresses the importance of these words as 'devices with which to convey more fully the meaning and interaction of sequences of logic in your text' (ibid). In this example, the writer has highlighted that the research findings do not completely support the idea of an unchanging habitus.

Signposting

Lastly, signposting, according to Finn, 'is similar to signalling; however, while signalling is embedded in the text, signposting usually operates at a higher level' (2005: 127). Signposting can be achieved through the use of headings and sub-headings, and also statements such as this example from an extract of an EdD thesis:

The concept of mass HE will be thoroughly explored further on in this chapter.

Although 'mass HE' had been mentioned, in order to let the reader know that it will be returned to, a signpost is provided. A footnote with a brief definition could have been provided instead but, the concept of 'mass HE' is a very significant one, and a lengthy and elaborate explanation of what it meant was needed.

To be boxed

Reflective questions: *Go back and look at all of your headings and sub-headings. Ask yourself these questions:*

- *Do the headings and sub-headings do what they are supposed to?*
- *How much text have you provided underneath each heading?*
- *Does the text following the heading do justice to what the heading promises?*
- *Check your introduction and concluding sentences of each section and/or sub-heading for consistency and clarity; is the story consistent?*

The Conclusion is not just a summary

This chapter is your opportunity to pull your thesis together. That cohesion and synergy that is present in the title, abstract, introduction, literature review, research questions and/or hypothesis, methodology, and analysed findings – is all brought together in this 'grand finale'. To achieve this cohesion and synergy, you should return to the research questions you cited in the introduction chapter and demonstrate that you have done what you set out to do providing the answers to your research questions. Although you must not introduce any new ideas in the conclusion, you should make clear what your professional, practical and theoretical contribution to knowledge is. Wellington et al. offer some useful tips about the conclusion:

> The overall argument developed in the thesis may also be elaborated in the conclusion to make sure it is completely clear to the reader. It can be useful to explain briefly what you have learned about the research process during your doctoral project, and if there are any outstanding issues that arise from your findings you might want to point to further research that would be useful for other researchers to take up (2009: 171).

What you must **not do** in the conclusion is just summarise all the main points and tell the reader all about what they have already read. This, alone, would not be an acceptable conclusion for doctoral level writing. Although a summary can be part of the conclusion, this final chapter is more than that. Dunleavy offers some sound advice for writing this final chapter:

> The end of the thesis needs to have a clear character. It cannot just be a 'tell em what you've told em' section that only repeats points already made. It must first of all reprise each of the same themes or theory ideas used to construct the first chapter (and any other lead-in chapter). But this time the discussion of each theme should be grounded securely in the experience of the middle chapters. The focus should be on establishing clearly what has been shown by your research, and how it is relevant to your central thesis question and the themes set out at the start (2003: 207).

As well as discussing, in the conclusion, what you would do if you were taking your research forward and/or had the opportunity for further research, you should also include sections on what the limitations are of the study that you have carried out; how you have developed as a professional and practitioner; and how your research may have an effect on yours and others' working practices within education. It also adds something to this chapter if you can suggest how this work could be taken forward by you or other researchers reading this thesis.

To be boxed

Reflective question: *does each chapter or section finish with a short conclusion? These short conclusions can be your best friends when writing your first draft of your final concluding chapter. Copy each of the mini conclusions from each individual chapter, copy and paste them into what will be the conclusion. Doing this can act as a really useful starting point for your first draft of that conclusion chapter. But remember – this is just the starting point of that conclusion chapter.*

Case Study: a previous EdD student's experience

Dr Sally Underwood, Senior Lecturer in Nursing and Midwifery (retired), completed her EdD at the University of Sheffield. Here she provides a reflection on whether familiarising yourself with the work of your examiners is important for you. Although it is not the case that students are expected to reference their examiners, it could be that your examiner was chosen because they are an expert in that field or with a particular methodology or theoretical and conceptual framework. In which case, referencing them might be

appropriate. If you do decide to reference your examiner(s), make sure that your reference, and interpretation, are correct. You don't want to annoy the examiner(s) by having them read a misrepresentation of their work in your thesis.

Sally: I was involved with choosing my two external examiners for my viva, which was normal procedure for the University. Both were well known nursing researchers who were familiar with grounded theory and both had written extensively in their particular field. Some of their research topic areas had raised interesting points which I noted as part of my initial background reading and the ongoing reading as my themes emerged. I had therefore referenced them within a couple of the discussion threads in my final dissertation and felt that they would be ideal to be my external examiners and was thrilled when they agreed.

As part of preparation for submission for the viva it is prudent to conduct a refreshed literature search. A colleague advised me to particularly look for recent literature from my external examiners. Apparently, as a professional courtesy, external examiners' own research should be referred to within the work of anyone who is defending their thesis at viva. I am not sure whether this is true or how wide-spread across the professions this is, but I didn't want to risk it and took my colleague's advice to supplement a section of my discussion by referring to a few new pieces of interesting work from my external examiners. This section actually formed part of the discussion at viva.

My colleague had also advised that I re-read the external examiner's work to ensure familiarity prior to the actual viva, as external examiners are likely to focus on areas they were especially familiar with and interested in. One of my examiners stringently questioned me on the comparisons and differences between both our findings for one particular section of my research. I was extremely glad that I had been prepared.

I had been warned that some external examiners are more rigorous in their role of questioner than others and that you have to be fully prepared to 'defend' your work at a viva. It is important to remember that, even if gruelling and exhausting, the examiners really want you to do well and to pass you. The viva is designed to challenge you and my experience was being asked deliberately controversial questions which made me think that they disliked my answers and therefore my work. However, afterwards they praised me and I realised what my colleague had been trying to tell me about a 'boxing match'. You know your work intimately and my advice would be to enjoy the sparring.

Summary of the chapter

We hope that the information provided in this chapter will enable you to sharpen and polish your thesis as you think about preparing to submit the thesis for examination. We started the chapter with some insight into what the examiners will do when they receive your thesis. This is based on our own and other examiners' experiences of examining doctoral theses for vivas. First impressions of the thesis are important but there are other details that examiners will look for and we hope that this chapter has helped you understand what

those details might be. In concluding this chapter we have provided you with some points of reflection to help you get over that finish line.

The main points for you to take away are:

- The 'golden thread', what this is and why it is important for the examiners;
- The abstract and introduction, and why these should be clearly understood by expert and lay readers;
- The methodology and why it should be in harmony and have synergy with all the thesis chapters;
- Presenting your findings, in which we discuss the different ways of achieving this;
- What it means to write critically;
- The importance of well-crafted headings and sub-headings in creating effective sign-posting for the reader;
- Tips on how to produce an effective conclusion.

Further Reading

Townsend, K., Saunders, M.N.K., Loudoun, R. and Morrison, E.A. (2020) *How to keep your Doctorate on Track.* Glos, UK: Edward Elgar Publishing.

The path of a doctoral student can feel challenging and isolating. This guide provides doctoral students with key ideas and support to kick-start a doctoral journey, inspire progress and complete their thesis or dissertation.

Murray, R. (2011) *How to Write a Thesis.* Berkshire, UK: Open University Press.

Although this text is not specifically about producing a thesis for a doctorate in education, it is extremely useful and relevant. The book contains lots of tips, supportive information and examples. In addition, Murray provides strategies for coping with large amounts of text and data. Useful for any student at the thesis writing stage.

Thomson P and Kamler B (2016) Detox your writing – strategies for doctoral researchers. London, UK: Routledge.

Both authors are widely published professors of education and have produced a variety of publications supporting doctoral students and their supervisors. This particular text offers comprehensive guidance for structuring and writing the thesis.

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