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Engaging with the literature in postgraduate research

Although supervisors provide relevant guidance, many postgraduate students find it difficult to make sense of the roles and functions of the literature in the various phases of their research work. This article describes how the problem presented itself in a masters class, the typical route students followed to address the problem, the inadequacy of this route and, finally, linking this type of learning to the theory on transformative learning as developed by Mezirow and furthered by Berger. This culminated in a framework which could enhance transformative learning and the development of the research and dissertation.

Die ontsluiting van die literatuur in nagraadse navorsing

Hoewel studieleiers relevante leiding gee, worstel baie nagraadse studente om sin te maak uit die rolle en funksies van die literatuur in die verskillende fases van hul navorsing. Hierdie artikel beskryf hoe die probleem in 'n magisterklas manifesteer het, die tipiese roete wat studente gevolg het om die probleem aan te spreek, die ontoereikendheid van hierdie roete en, uiteindelik, hoe hierdie tipe leer inskakel by die teorie van transformerende leer soos ontwikkel deur Mezirow en verder gevoer deur Berger. Die uitkoms hiervan was 'n raamwerk ter ondersteuning van die bevordering van transformerende leer en die ontwikkeling van die navorsing en die verhandeling.

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"Dancing on the threshold of meaning" (Berger 2004: 336) is a fearful experience that also stirs excitement and anticipation for what is to come as soon as one has stepped over that threshold.[1] This experience is well known to those who have already progressed on the journey of postgraduate research and who know about the unfolding and emerging of new insights and understandings as they travel the road. When masters and doctoral students do not wish to openly state that they do "not understand how to do a literature review, start writing or perform other research tasks" (Manathunga 2005: 226), their supervisors need to facilitate the emergence of new insights so that transformative learning can take place. This situation presented itself to me recently.

In the faculty where I lecture, masters students may opt for one of two possible supervision delivery models: the one model has a one-to-one supervisor relationship only, while the other model has a one-to-one supervisor relationship with the added value of group supervision. The group supervision model includes regular contact sessions with presentations (by students, supervisors or outside experts) and discussions. During one of these discussions, in which I was involved as a supervisor and presenter, I became aware that the students found it difficult to distinguish between the role of the literature in the research proposal/first chapter and the literature review chapter. Although these students are provided with a template for the research proposal (Appendix 1), which clearly indicates the role of the literature in the proposal and their supervisors claim that they receive good guidance about the role of the literature in the literature review chapter, they still have significant problems in distinguishing between these two roles. In discussions on this matter with the supervisors involved in the group and other colleagues in the faculty, typical responses were: "Surely the students know this!" or "But the supervisors tell the students about this!" or "I definitely explain this to my student". It was thus apparent that, although academics were under the impression that these insights already existed in the students, this was not the case. This resonates with the finding of Manathunga (2005: 224) that "not all supervisors are alert to or able

to detect cues that their students are experiencing difficulties" and with Lovitts's view (2001: 21) that part of an academic's responsibility is to seek and develop talent in students.

In further contact sessions with this group of students, I carefully observed whether students and supervisors engaged with the literature in the subsequent chapters (research methodology; data presentation, discussion and interpretation; recommendations, and conclusions) and, if so, how they did it. It emerged that the thread of the literature that ought to run through the entire dissertation was not clear and that the fact that the thread was missing negatively influenced the academic quality of the students' work and their growth as academics. This situation is the foreshadowed research problem, indicating the research setting and the specific case which was investigated in the research (Hammersley & Atkinson 2007: 28), typical of ethnographic research.

The purpose of the research reported in this article was to find a way to facilitate students' engagement with the literature, thus improving their understanding of its varying roles and functions in the different phases of research and dissertation writing, and their academic skills in integrating the literature from the beginning, up to and including the last chapter of the dissertation. If I could determine how to assist students with this, it would benefit not only this group of students, but also subsequent intakes of students who opt for the group supervision delivery mode, as well as all participating academics, with a ripple effect to their other and future masters and doctoral students and colleagues. This interpretation of the role of the literature in research could be used as a teaching and learning tool in the practice of postgraduate research supervision, specifically in empirical research in the human and social sciences.

The parameters, design and methods of the research are described in the next section, followed by a presentation of how the data were gathered. This is subsequently linked to a theoretical framework, namely transformative learning (Mezirow 1996, Taylor 2007), which leads to the recommendation of a framework that would enhance students' development in transcending the edges of transformative learning, enabling them to cross the thresholds into new insights.

1. Research parameters, design and methods

When planning the research, I approached it from two angles. On the one hand, I put myself in these students' shoes and followed the route they would typically follow in order to improve their own understanding of this matter. Assuming that they were not fully aware of their lack of insight into this particular matter, thus not actually knowing what they were seeking or what questions they needed to ask to find appropriate answers, I asked them how they would go about finding information on using the literature. On the other hand, I scrutinised the literature to find an appropriate theoretical framework relevant to student learning in this particular context.

The first angle of approach referred to above indicated that I had to work inductively; therefore qualitative research was the best option. Within the range of qualitative research designs on offer, ethnography fitted this context well, as I wanted to study actions and accounts in everyday contexts relevant to a specific social phenomenon, gather data in an unstructured way while focusing on one case only, and then analyse the data through the interpretation of meanings and functions of human actions and the results of these (Flick 2009: 233; Hammersley & Atkinson 2007: 3).

As mentioned earlier, the particular group of students became the case I investigated. Ethnography also typically includes sampling that refers to the selection not only of the specific case, but also of the participants within the case (Hammersley & Atkinson 2007: 35). This type of selection did not happen for this research, as the group of seven students was sufficiently small to allow for meaningful data collection in the ethnographic design, taking cognisance of the sampling dimensions of time, people and context (Hammersley & Atkinson 2007: 35-40).

These "students' shoes" comprised the setting of the sample case and displayed the following attributes:

• The students' research knowledge and experience

   All the students had successfully completed a BEd Honours degree programme that included a theoretical module on research methodology, with a credit weighting of 10% of the programme (12 credits of a total of 120 credits). They did some very basic

research assignments in the other modules of the programme. This implies that they had had some exposure to introductory theoretical and practical knowledge and experience in research.

- The students' specialisations

    All the students were conducting research in the discipline of education.

- The students' research approaches for their MEd research

    One of the students worked with a mixed method design while the remainder worked only in the qualitative research paradigm. None of the students used an exclusively quantitative design, action research or grounded theory design.

- The typical route followed by the students to improve their understanding of the roles and functions of the literature

    During the interactions with this group at the contact sessions, it became clear that students and their supervisors regularly and, in some instances, extensively consulted books on research methodology in the human and social sciences, in general, and in education, in particular. Supervisors and, to a much lesser extent, students also consulted books on how to write dissertations. When I asked how they consulted these books, they indicated that they scrutinised the tables of content and the indexes to find the location of topics on which they sought information. I gathered this background information in an informal, but focused manner as part of the discussions in class at contact sessions.

The "students' shoes" therefore pointed me into the preferred direction for my data-gathering phase.

2. Gathering, discussion and preliminary interpretation of data

As indicated earlier, the first angle of my research involved following the route the students said they would typically follow to improve their own understanding of the role of the literature. The first source of my data was therefore the books identified by the students and supervisors.

2.1 Gathering data from relevant books

I accessed the information in the books (all of which were more recent than 2000) identified by the students and supervisors by using the tables of content and indexes in the books, this being the route students claimed they followed to find the relevant information. The outcomes of this data-gathering activity are reflected in Appendix 2, and summarised in Table 1.

Table 1: Summary of literature matters covered in consulted books

	Reference to literature review		Reference to other functions/roles of the literature	
	In table of contents	In index	In table of contents	In index
Research methodology books (total 20)	Full chapter - 9 Less than full chapter - 3 No reference - 8	Yes - 16 No reference - 4	Yes - 9 No reference - 11	Yes - 12 No reference - 8
Books on dissertation/ thesis writing (total 8)	Full chapter - 3 Less than full chapter - 1 No reference - 4	Yes - 3 No reference - 5 (2 books have no indexes)	Yes - 5 No reference - 3	Yes - 6 No reference - 2 (2 books have no indexes)

Table 1 reflects that the literature review appears as either a full chapter or part of a chapter in the tables of content in 16 of the 28 books that were consulted, while 12 of the books do not have any reference to the literature review in their tables of content. The book indexes reflect a slightly different notion: 19 include reference to the literature review and nine do not. It is interesting to note that two of the books have no index. This analysis indicates that, if students and supervisors consult a sufficiently wide range of books on research methodology and thesis/dissertation writing, they will ultimately find guidance on the literature review via either the tables of content or the indexes or both. It could be premised that books on research methodology do not have as their primary purpose the structure of the research report, but rather focus on the methodology as such,

which seems to be a good reason for not including anything on the literature review.

Regarding aspects relevant to the literature other than the literature review, Table 1 shows that 14 of the 28 books that were consulted include in their tables of content aspects of the literature other than the literature review, while 14 books do not. In the indexes, 18 of the consulted books include aspects of the literature other than the literature review, while 10 books do not. Again, this points to the fact that if students and supervisors consult a sufficiently wide range of books on research methodology and thesis/dissertation writing, they will ultimately find guidance on aspects of the literature other than the literature review via either the tables of content or the indexes.

The next dimension that presented itself was the need to scrutinise the relevant sections in those books that do cover aspects of the literature other than the literature review. This involved 12 books on research methodology and six on dissertation/thesis writing.

On closer scrutiny it was found that four of these 18 books do not cover anything additional to the literature review, although they seemed to do so from the entry in the index. Eight of the remaining 14 books refer only very briefly to aspects of the literature other than the literature review; these cover how to search for literature (five books), identifying a gap in the literature (two books), and the literature as a source for problems (one book). One of the remaining six books indicates briefly two roles of the literature, namely as being relevant to the research question and as relating to the research design. The final remaining five books that were consulted (four on research methodology and one on dissertation/thesis writing) all highlight one or more of the various purposes, uses, roles or functions of the literature in the dissertation/thesis. This implies that only six of the 28 books that were initially consulted give some kind of guidance to the masters student and supervisor on the role of the literature other than the literature review in postgraduate research. This guidance, however, turned out not to be extensive and, in most instances, to lack sufficient depth.

All four books on research methodology provide lists of the functions or uses of the literature; in three books the list is supplemented by a brief description of each aspect, varying in length from

a paragraph to a page (the other book provides only a list). The combined lists cover the use of the literature when writing the research proposal (which leads to the first chapter), writing the literature review, identifying appropriate research methodologies, and comparing and contrasting the findings. Each of these items on the combined lists includes subsections. The lists show that, when consulting literature for research proposal writing, it assists in identifying the research topic, framing the problem (significance – gaps in body of knowledge, justification) and formulating the research questions. When consulting literature for the literature review, it enables the researcher to identify relevant earlier research, gaps in the existing body of knowledge, appropriate theories, and relevant concepts.

Only one of the consulted books provides in-depth guidance by discussing the use of the literature in the dissertation chapter(s) on literature, the chapter on theory, the chapter on research methodology as well as the chapter on analysis, discussion and interpretation of findings. This book also discusses the stages of exploiting the literature, namely to summarise, synthesise, analyse and authorise. It provides good guidance on engagement with the literature, especially in comparison to all the other books that were consulted.

At this stage of the data gathering, it also became clear that the data would have been immensely enriched if both categories of data sources investigated thus far were enlarged significantly by consulting many more such sources and if another data source category, namely sources on supervision of postgraduate research students, were added to the investigation. The absence of these sources in the data gathering is a limitation in the current research; these sources will be added in the next round of refining this research.

At this point of my investigation I realised that it would be very useful to share the insights I developed from my 'book data' with the MEd group (students and supervisors) and gather their views on it. This sharing took place in a focus group discussion.

Regarding the matter of access to the sample case, I was a supervisor of one of the students in the group that comprised the case for this research and, therefore, I had natural access to the group and was accepted without question.

2.2 Focus group discussion

The use of focus group discussion is accepted as a data-gathering strategy in ethnographic research (Hammersley & Atkinson 2007: 96-120). In this particular phase of my research I was aiming at enriching the data I already gathered from the books by the inputs and comments from the students and supervisors. To ensure that the focus group discussion was integrated into the pre-arranged schedule of the group of students and supervisors, I volunteered to do a presentation on the literature at one of the group sessions; this further aligned my access strategy with the nature of ethnographic research (Hammersley & Atkinson 2007: 41).

The focus group discussion happened after I made my presentation on the literature in research, as a follow-up on the presentation. I made notes of the comments, questions and other responses from the participants. Note-taking during the MEd group meetings is regarded as natural to such an academic setting and thus did not impact at all on the nature of participation and spontaneity of the participants.

Immediately following the group contact session I analysed the inputs from the participants, with the view of adding new insights to what I already gained from the books I analysed. I used coding and categorising during this analysis to identify the themes that emerged during the discussion. When merging the data gathered from the books with the insights I gained from the discussion, the following roles for the literature in masters and doctoral research, dissertations and theses were identified:

- Familiarisation with the field of intended research (pre-proposal writing);
- Identifying gaps in the body of knowledge → identifying a research problem that has the potential to make a contribution (proposal and Chapter 1);
- Contextualising the research problem (proposal and Chapter 1);
- Identifying appropriate research methodology (proposal, Chapter 1 and chapter on research methodology);
- Presenting a conceptual framework and theoretical underpinnings (proposal, Chapter 1 and chapter(s) on literature review);

- Sketching the landscape of the research topic (proposal and Chapter 1);
- Discussing the chosen research methodology in depth (chapter on research methodology);
- Developing the data-collection instrument(s) (chapter on research methodology), and
- Grounding the empirical results in the literature that has already been presented (chapter(s) on discussion and analysis of research findings, recommendations).

Another additional insight was that in the literature review, the literature speaks; in the data presentation and analysis, the data speak, and in the discussion, interpretation and recommendations, the researcher speaks.

During the group discussion it was also acknowledged that working with the literature is not a linear process, but rather an iterative as well as a network process. Despite this acknowledgement, everybody in the group agreed that masters students cannot fully comprehend the non-linearity of the process until the conclusion of the process, and some not even then. This gave rise to the questions as to why this was so and how students and supervisors could deal with it, taking us to the second angle of my research which involved scrutinising the literature to find an appropriate theoretical framework relevant to student learning in this particular context.

3.   Theoretical framework

After a considerable search, I identified Mezirow's theory on transformative learning (Mezirow 1991, 1996 & 2000) as a potential source for providing at least a partial answer to my question. Table 2 captures the essence of the original theory.

Table 2: Mezirow's (1978a & 1978b) ten phases of transformative learning

Phase 1	Experiencing a disorienting dilemma
Phase 2	Conducting a self-examination with feelings of guilt or shame
Phase 3	Conducting a critical assessment of epistemic, sociocultural, or psychic assumptions

Phase 4	Recognising that one's discontent and the process of transformation are shared and that others have negotiated a similar change
Phase 5	Exploring options for new roles, relationships and actions
Phase 6	Planning a course of action
Phase 7	Acquiring knowledge and skills to implement one's plan
Phase 8	Provisional trying of new roles
Phase 9	Building competence and self-confidence in new roles and relationships
Phase 10	Reintegrating the newly developed perspectives into one's life on the basis of conditions dictated by these perspectives

Adapted from Kitchenham 2008: 105

This theory was revised over time and Figure 1 provides a diagram depicting the 1985 version of Mezirow's revised transformative learning theory.

A further step in enhancing the application of Mezirow's theory of transformative learning to this research is provided by Berger (2004). She identifies thresholds of transformation, building on Perry's (1968) work on transformative edges. She refers to the start of the transformative journey as being at the place where an old perspective is given up, "to actually lose a sense of the former world before the new world is fully articulated" (Berger 2004: 338). She characterises the edges of understanding (or thresholds of transformation) as widely varying and often at opposite poles of a continuum. These include "participants' sense of bewilderment and sudden inability to answer questions" (Berger 2004: 342); that participants are often (but not always) aware of the edges, sometimes rambling in circles, sometimes apologising, and that participants are often surprised that they have not been aware of a new perspective earlier, that the 'affective tone of conversations at the edge varies widely' (including feeling frightened, being aware of unpleasantness, feeling excited and energised, appreciative of the opportunity, being reluctantly dragged to this point) (Berger 2004: 343). "This pattern of embracing the edge ... or retreating from it to some kind of certainty" (Berger 2004: 343) occurs repeatedly. She also found that her participants did not find the edges of their understanding painful as Perry (1968) did in his research.

Berger (2004: 344) found that the above-mentioned points to a "continuum of discomfort", which leads to the role of the supervisor in

assisting the student to get over this discomfort, therefore to negotiate the particular edge of transformative learning. She states that the transformative teacher (supervisor) has three major responsibilities towards students, namely to help students find and recognise the edge, to be good company at the edge, and to assist in building firm ground in a new place (Berger 2008: 346).

Berger's (2004) thresholds of transformative learning and Perry's (1968) transformative edges are fully identifiable in the journey of the masters student towards increased insight into the role of the literature in the complete research process and the writing of the dissertation. The first edge is likely to appear when the student is confronted with the dilemma of not comprehending how the use of the literature in Chapter 1 differs from its use in the chapter on literature review. The old perspective must be given up and the former world lost; only then can the new world be identified and formulated (Berger 2004: 338). The characteristics of the edge (as described earlier) are all discernable in this instance: bewilderment, rambling, apologising; surprise and reluctance; embracing, and retreating. The necessity for assistance from the supervisor to get the student over this discomfort and to negotiate the edge of transformative learning, crossing over the threshold into the newly found perspective, is evident in this instance.

I now put forward a framework that suggests the expected edges students are likely to encounter when they engage with the literature. This framework (Table 3) is based on the set of roles of the literature that developed from the consulted books and the group discussion.

Table 3: Expected edges of transformative learning when engaging with the literature in research and dissertation development

Pre-proposal	Proposal and Chapter 1	Chapter(s) on literature review	Chapter on research metho-dology	Chapter(s) on discussion (analysis, inter-pretation) of research findings	Chapter on summary and recommen-dations
Familiar-isation with field of intended research	Identify gaps in body of knowledge	Present previous research in area and point out gaps and significance again	Identify suitable research metho-dologies from previous studies	Ground empirical results in presented literature	Ground recommen-dations in literature
	Identify and contextualise research problem				Link summary and recommen-dations to research problem
	Sketch landscape of research problem, including significance		Link research metho-dology with subproblems	Link findings to research subproblems	Link summary and recommen-dations to subproblems and findings
	Define key concepts	Present conceptual framework and theoretical underpinning			
	Identify appropriate research metho-dology and discuss briefly		Discuss chosen research methodology in depth		
		Bear in mind that data-collection instrument(s) must be grounded in the literature	Develop data-collection instrument(s) that are grounded in the literature		

Edges of transformative learning can be expected to appear when moving both horizontally and vertically across the Table. An example of the horizontal movement can be seen in the research subproblems: when the student consults the literature on research methodology, the student's transformed perspective (thus moving from an edge over a threshold and into a new perspective) will become evident as s/he moves from formulating the subproblems to linking these with the research methodology, subsequently linking these with the findings and finally with the summary and recommendations.

Berger's transformative teacher (supervisor) responsibilities towards students should come into play at every one of these edges, namely to help students find and recognise the edge, to be good company at the edge, and to assist in building firm ground in a new place (Berger 2004: 346).

4.   Conclusion

It was argued earlier that the difficulties postgraduate research students have in discerning the various roles of the literature in their research and dissertations could be linked to edges of transformative learning. It was further claimed that the supervisor has the responsibility to facilitate the student's journey when negotiating such edges and to accompany him/her over the threshold into new, emerging perspectives. Based on these arguments, it is suggested that supervisors develop an attitude of alertness so that they are aware when their students become uncomfortable, acknowledging the presence of a potential edge of knowledge. Supervisors need to develop strategies to support and guide students from such an edge over the threshold and into a new perspective that enhances transformed learning.

The framework presented above could be applied as a tool to support masters and doctoral students and supervisors in the human and social sciences in order to enhance transformative learning, as it provides signposts that identify potential edges and thresholds, thus sensitising both parties to prepare for possible interventions. This would go a long way towards facilitating these students' engagement with the literature, thus improving their understanding of its various roles and functions in the different phases of research and dissertation writing.

It is recommended that further research be undertaken to develop strategies to assist supervisors in fulfilling Berger's three responsibilities, namely to determine the deeper nature of the suggested edges in the model; to identify potential additional edges in this context, and to establish the nature of students' and supervisors' journeys when negotiating the edges. Through all of the above, dancing on the threshold of meaning could become a less frenzied and much more elegant and joyful activity.

Bibliography

Alasuutari P, L Bickman & J Brannen
 2009. *The SAGE handbook of social research methods*. Los Angeles: Sage.

Ary D, L C Jacobs, C Sorensen & A Razavieh
 2006. *Introduction to research in education*. Belmont: Wadsworth.

Bak N
 2004. *Completing your thesis: a practical guide.* Pretoria: Van Schaik.

Berger J G
 2004. Dancing on the threshold of meaning: recognising and understanding the growing edge. *Journal of Transformative Education* 2(4): 336-51.

Chambliss D F & R K Schutt
 2010. *Making sense of the social world: methods of investigation.* Los Angeles, CA: Pine Forge.

Cohen L, L Manion & K Morrison
 2007. *Research methods in education.* London: Routledge.

Creswell J W
 2009. *Research design: qualitative, quantitative, and mixed methods approaches.* Los Angeles, CA: Sage.

Delamont S, P Atkinson & O Parry
 2004. *Supervising the doctorate: a guide to success.* London: Society for Research into Higher Education, Open University Press.

Denzin N K & Y S Lincoln (eds)
 2003. *Strategies of qualitative inquiry.* Thousand Oaks, CA: Sage.

 2008. *Collecting and interpreting qualitative materials.* Los Angeles, CA: Sage.

De Vos A S, H Strydom, C B Fouche & C S L Delport
 2004. *Research at grassroots: for the social sciences and human service professions.* Pretoria: Van Schaik.

Flick U
 2009. *An introduction to qualitative research.* Los Angeles, CA: Sage.

Gibson W J & A Brown
 2009. *Working with qualitative data*. Los Angeles, CA: Sage.

Gray D E
 2009. *Doing research in the real world.* Los Angeles, CA: Sage.

Hammersley M & P Atkinson
 2007. *Ethnography: principles in practice*. London: Routledge.

Henning E, W van Rensburg & B Smit B
 2004. *Finding your way in qualitative research.* Pretoria: Van Schaik.

Kamler B & P Thomson
 2006. *Helping doctoral students write: pedagogies for supervision.* London: Routledge.

Kitchenham A
 2008. The evolution of John Mezirow's transformative learning theory. *Journal of Transformative Education* 6(2): 104-23.

Lategan L O K & L Lues
 2008. *Doing research.* Bloemfontein, CUT: Telskor BK.

Leedy P D & J E Ormrod
2005. *Practical research: planning and design.* Upper Saddle River, NJ: Pearson.

Lichtman M
2010. *Qualitative research in education: a user's guide.* Los Angeles, CA: Sage.

Lovitts B E
2001. *Leaving the ivory tower: the causes and consequences of departure from doctoral studies.* Lanham, MA: Rowman & Littlefield.

Manathunga C
2005. Early warning signs in postgraduate research education: a different approach to ensuring timely completions. *Teaching in Higher Education* 10(2): 219-33.

McMillan J H & S Schumacher
2010. *Research in education: a conceptual introduction.* New York: Longman.

Mezirow J
1991. *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.

1996. Contemporary paradigms of learning. *Adult Education Quarterly* 46(3): 158-72.

2000. Learning to think like an adult. Mezirow & Associates (eds) 2000: 3-33.

Mezirow J & Associates (eds)
2000. *Learning as transformation*. San Francisco, CA: Jossey-Bass.

Mouton J
2001. *How to succeed in your master's and doctoral studies: a South African guide and resource book.* Pretoria: Van Schaik.

Perry W G
1968. *Forms of intellectual and social development in the college years.* Cambridge, MA: Harvard University Bureau of Study Counsel.

Punch K F
2009. *Introduction to research methods in education.* Los Angeles, CA: Sage.

Rudestam K E & R R Newton
2001. *Surviving your dissertation: a comprehensive guide to content and process.* Thousand Oaks, CA: Sage Publications.

Struwig F W & G B Stead
2001. *Planning, designing and reporting research.* Cape Town: Pearson.

Swann J & J Pratt
2003. *Educational research in practice: making sense of methodology.* London: Continuum.

Taylor E W
2007. An update of transformative learning theory: a critical review of the empirical research (1999-2005). *International Journal of Lifelong Education* 26(2): 173-91.

Thomas G
2009. *How to do your research project: a guide for students in education and applied social sciences.* Los Angeles, CA: Sage.

Toft D, D Mancina &
E L McMurray
  2006. *Becoming a master student*.
  Boston, MA: Houghton Mifflin.

Trafford V & S Leshem
  2008. *Stepping stones to achieving your
  doctorate: focusing on your viva from
  the start*. Maidenhead, Berkshire:
  Open University Press.

Welman J C & S J Kruger
  2001. *Research methodology for the
  business and administrative sciences*.
  Oxford: Oxford University Press.

Appendix 1: Suggested final research proposal template: masters and doctoral students

Background

- The purpose in this section is to explain the origin of your chosen title to the reader.
- Describe the context of the problem and why it was identified as a problem. You need to refer to some literature sources to back up your statements.
- This section logically flows into the problem statement in the next section.

Statement of the problem

- State the problem (this is a statement, not a question). The problem statement must be clear and unambiguous; it must be researchable. Demarcate/delimit/focus your research problem (it must not be too wide). Be cautious of the other extreme: the problem must not be so strongly focused that it becomes trivial (too small).
- Indicate why the problem is significant (in other words, worthwhile researching); why the outcome of the research (the solution to the problem) could be deemed important.
- Indicate the education subfield that will be your point of departure from which to investigate the problem (for example, educational management, curriculum studies, educational psychology, and so forth).

Research question and subquestions

- The research question flows logically from your research problem. This is what you really want to know.
- The research subquestions break the research question up into smaller parts; once you have answers to all the subquestions, you will have the answer to the main question.
- At the end of your research, you should be able to formulate answers to each of these questions. This is the test you can apply for yourself as to whether you have concluded the research successfully.

Research aim and objectives

- State the overall aim (purpose) of the research. This is the research question reformulated as a statement.
- State the objectives of the research. These are not additional aims or purposes, but rather the subsections of the aim. Think of the objectives as being the steps you need to take in order to reach the aim.
- The objectives are the research subquestions reformulated as statements.

Literature review

- You would need to study and refer to relevant literature sources (approximately 10 to 15 different sources would suffice). Select sources that are not older than seven years, except if they are salient works in the field. If you refer to such salient works, you need to justify their use. Use either the APA or Chicago or abbreviated Harvard reference technique consistently. There is literature that describes how to use these techniques (hard copy and on websites).
- When reading, you need to identify what research has already been done in this field and mention it in this section. This could include relevant models, programmes, procedures, policies and theories. You need to indicate their relevance to your research.
- You also need to identify what research is indicated as still needed (these are gaps in the existing body of knowledge and you would have selected your research topic from one of these).
- You also need to clarify the basic concepts you will use in the research; these will include concepts you used in the title and other relevant, essential concepts.
- The literature you use must justify and motivate your proposed research.
- The presentation of your argument must be orderly, flowing naturally from one idea to the next. Do not make disjointed or out-of-context statements; this disrupts the logic of your presentation.

Research design and methodology

- Indicate whether you intend doing qualitative or quantitative research (or another relevant categorisation).

- For quantitative research, indicate a set of hypotheses, the type of research (survey, correlation, causal-comparative, experimental, and so forth), the population (universe), sample, method of sample selection, data-collection instrument(s) and procedures, intended data-analysis strategies, motivation for choosing each of these, limitations of the design, and measures of validity and reliability.

- For qualitative research, indicate a postulate (if relevant), site or social network, researcher role, sampling strategies, data-collection strategies, data-analysis strategies, motivation for choosing each of these, limitations of the design, and measures of trustworthiness.

- For mixed methods research, combine the requirements for qualitative and quantitative research appropriate to the mixed design you selected.

- For action research, see separate template.

- You need to consult and refer to 5 to 6 recent sources on research methodology in this section (see section above on reference technique).

Ethical considerations

- Indicate very briefly what measures you will put in place to accommodate ethical considerations. These should cover the Faculty and institution's procedures, the Department of Education requirements (if relevant) and the ethics demands of your research design.

- Bear in mind that you will be required to obtain ethical clearance for your research prior to commencing with data collection – your supervisor/promoter will assist you with this once you are registered and your final research proposal has been accepted.

Proposed division of chapters

Indicate the envisaged chapters of your dissertation/thesis, each one with a heading, as you expect the work to unfold. You could also include the conceptualisation of your research.

Reference list

- You need to consult 15 to 20 sources and refer to them in the text of your proposal.
- Include sources in this list only if you have referred to them in your text.
- Make sure that you have included all the sources you have referred to in your text.

General

- Length: This depends entirely on the nature of your proposal, but a general guideline is approximately 3.500 to 5.000 words (15 to 20 typed A4 pages in 1.5 spacing, 12 font, Arial/Times New Roman).
- Pay special attention to your grammar and syntax.

Appendix 2. Reference to literature in the consulted books

Data source category 1: Books on research methodology				
Source reference	Reference to literature review		Reference to other functions/roles of the literature	
	In table of contents	In index	In table of contents	In index
Alasuutari, Bickman & Brannen 2009	-	Yes, one page only	-	-
Ary, Jacobs, Sorensen & Razavieh 2006	Full chapter	Yes	Literature as a source of problems	Literature as a source of references
Chambliss & Schutt 2010	-	-	-	-
Cohen, Manion & Morison 2007	-	-	-	-
Creswell 2009	Full chapter	Yes	Deficiencies in the literature	Deficiencies, ethical issues, organising, priority for selection, literature maps
Denzin & Lincoln 2003	-	-	-	-
Denzin & Lincoln 2008	-	-	-	-
De Vos, Strydom, Fouche & Delport 2004	Full chapter; additional subsection of another chapter	Yes	General functions of the literature	Literature sources, literature study
Flick 2009	Yes	Yes	Methodology, epistemology	Yes; full chapter on wide range of roles and functions of literature

Data source category 1: Books on research methodology				
Source reference	Reference to literature review		Reference to other functions/roles of the literature	
	In table of contents	In index	In table of contents	In index
Gibson & Brown 2009	No	Yes	Literature searches, concept development, data sources, alternative analyses, theoretical sampling, validating theory	Yes – as in table of contents
Gray 2009	Yes	Yes	Searching the literature, managing info, synthesising research results, use in qualitative research	Wide range
Henning, Van Rensburg & Smit 2004	Yes; subsection of a chapter	Yes	No	Literature research
Leedy & Ormrod 2005	Yes; full chapter	Yes	No	No
Lichtman 2010	Yes; full chapter	Yes	No	No
McMillan & Schumacher 2010	Yes; full chapter	Yes	No	Yes
Punch 2009	Yes; full chapter		Role of literature in research question, literature search	Yes; various
Struwig & Stead 2001	No	Yes	Literature for research proposal	Literature overview, study
Swann & Pratt 2003	No	Yes; 3 pages	No	Literature search, 3 pages

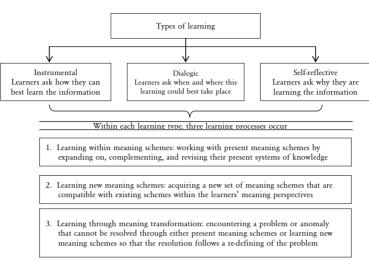| Data source category 1: Books on research methodology				
Source reference	Reference to literature review		Reference to other functions/roles of the literature	
	In table of contents	In index	In table of contents	In index
Thomas 2009	Full chapter	Yes	Yes	Gap in, 1 page
Welman & Kruger 2001	Full chapter	Yes	All related to the literature review	All related to the literature review
Data source category 2: Books on dissertation / thesis writing				
Source reference	Reference to literature review		Reference to other functions/roles of the literature	
	In table of contents	In index	In table of contents	In index
Bak 2004	Yes; sub-section of chapter	No index	Yes; literature search	No index
Delamont, Atkinson & Parry 2004	Yes; full chapter	Yes	No	Yes; literature on writing
Kamler & Thomson 2006	No	Yes	Yes; working with literatures	Anxiety over literature; purpose of work with literature
Lategan & Lues 2005	No	No index	No	No index
Mouton 2001	Yes; full chapter; Chapter on resources for literature review	Yes	No	Yes; literature searching
Rudestam & Newton 2001	Yes; full chapter	No	Yes; literature search	Yes; literature search
Toft, Mancina & McMurray 2006	No	No	Chapter on reading	Yes; reading
Trafford & Leshem 2008	No	No	Chapter on literature	Yes; literature

Figure 1: Diagrammatic representation of Mezirow's revised transformative learning theory (1985)

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                        ┌─────────────────────────┐
                        │    Types of learning    │
                        └─────────────────────────┘
             ┌───────────────────┼───────────────────┐
             ▼                   ▼                   ▼
┌──────────────────────┐ ┌──────────────────────┐ ┌──────────────────────┐
│     Instrumental     │ │      Dialogic        │ │   Self-reflective    │
│ Learners ask how they│ │ Learners ask when and│ │ Learners ask why they│
│ can best learn the   │ │ where this learning  │ │ are learning the     │
│ information          │ │ could best take place│ │ information          │
└──────────────────────┘ └──────────────────────┘ └──────────────────────┘
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Within each learning type, three learning processes occur

1. Learning within meaning schemes: working with present meaning schemes by expanding on, complementing, and revising their present systems of knowledge

2. Learning new meaning schemes: acquiring a new set of meaning schemes that are compatible with existing schemes within the learners' meaning perspectives

3. Learning through meaning transformation: encountering a problem or anomaly that cannot be resolved through either present meaning schemes or learning new meaning schemes so that the resolution follows a re-defining of the problem

(Kitchenham 2008: 111)