Guidelines on theses in
English language pedagogy and applied linguistics

Somogyi-Tóth Katalin - Reményi Andrea

Your thesis, a final major effort in your studies proving your professional maturity, is an academic paper based on research designed, implemented, conducted and analysed by *you*. It is therefore *a practically oriented* piece of work, which gives proof of your ability to connect your theoretical studies to solve practical problems. You are expected to produce a text that shows reflection, with a focus on relating your findings to your own professionals needs.

Make sure you cover all the prerequisites and conditions by the time you hand in the thesis, including the prescribed amount of courses in language pedagogy and/or applied linguistics. You are not allowed to hand in and defend a thesis on those disciplines without having studied them during your studies.

1 GENERAL GUIDELINES

1.1 Choosing your topic

Several, and very different, topics may be of interest to you. Make a checklist of them. Remember, you will have to sacrifice considerable time to work on your topic – or, in other words, you will have to 'live' with it for a few months. Which topic is the one that is worth the effort? Also, which is the one that, when worked into a thesis, will be more than just a book on a shelf? For example, if you have some teaching experience, think of a problem that has bothered you most when teaching. If you spend a few months on solving that problem, you will most certainly find a solution to it, at least for yourself – thus, it will serve as a useful tool in your future teaching. Or, if you have some experience in translation, your occasional notes can be developed into a dictionary that you and your colleagues may find useful. All in all: find a relevant problem.

Another aspect that narrows down the range of suitable topics is the availability of supervisors at the department. As early as possible contact someone offering support in the field, find out if s/he is available in the chosen semester(s), and meet him/her to negotiate the topic. When that is settled, also expect your supervisor's help in narrowing down the problem to a sizeable focus fitting the available time and the length of the thesis.

Here is a (certainly not exclusive) list of suggested topics, collected for your consideration:

- Learning in the foreign language classroom: the relationship between the use of the mother tongue and learner development
- Learner characteristics: listening skills development for dyslexic children
- Teacher characteristics: integrative strategies for Gypsy children by three teachers in village schools
- Learner performance, language testing: a comparison of testing methods
- Materials design and analysis: developing and teaching an insurance English course for adults
- Curricula, syllabi, lesson plans: comparing the success of different lesson plan use strategies by novice and experienced teachers
- The psychology of language learning and teaching: language learning beliefs of learners in a secondary school and their relationship to motivation and success in learning English
- Classroom research: group dynamics and success in group work, based on a conversation analysis in (a) secondary classroom(s)
- Sociolinguistics: ethnographic research on language learning in a segregated primary school
- Language teaching policy: career paths of PPCU English major alumni

- Pragmatics: how do English native speakers vs. English as a foreign language speakers relate to pragmatic vs. to grammatical errors
- Discourse analysis: the development of written academic prose by PPCU English majors
- Lexicography: the development of a bilingual media dictionary (the dictionary itself is to be included in the appendix)
- Corpus linguistics: vocabulary development in the writing of PPCU English majors
- Translation studies: how to rate texts when using a translation software
- any other topic approved of by the supervisor

1.2 Working with a supervisor

Your supervisor is to guide you through this major project of yours. But s/he is not the person to write the thesis for you, nor is s/he to make major decisions. You can expect help from him/her in the following ways:
- help with narrowing down the focus
- help with the literature (but you must also find relevant literature on your own)
- help in the research design
- help with the analysis
- help in the write-up process mostly on structural and content issues. Style and accuracy are your responsibility, do not expect the supervisor to provide correction on those.

You will have to meet your supervisor at least three times (to be confirmed on a form). Make sure to give him/her enough time to react to your requests or return your texts – keeping the deadline is your responsibility!

The deadline for thesis submission is April 15 or November 15.

After receiving the reviewer's review, you will have to defend your thesis at the final examination on that basis.

2 THE RESEARCH

The thesis includes not only your analysis and write-up, but also your own research. Thus, it is not enough to present the results of the literature from a certain viewpoint, or to analyse already available data collected by somebody else (though you may compare your own data to results found by others). Here is a very brief introduction to how to start designing your research – expect to have to work more on it once you have started.

A distinction is commonly made between two broad research types: qualitative and quantitative research.

Quantitative studies take an outsider's perspective and involve a sufficient number of participants so that the findings could be generalisable beyond the research sample. The research adopts a highly structured, objectivist, mechanistic approach, involves forming a research hypothesis which is then subjected to testing and statistical measurement procedures. The objectivity, reliability and validity of the results obtained are vital.

Qualitative research typically involves a small number of research contexts and informants, studies an individual case or a limited number of cases more closely with the purpose of understanding the phenomenon from the perspective of the participants. Its aim is to offer descriptions, interpretations and clarifications of actual social situations rather than provide statistical analysis. Such studies also require systematic data collection and analysis on the basis of a researchable question/issue, but do not attempt to make claims about generalising the findings of the research to large populations. Instead, these studies focus on the processes as well as the outcomes of the research (extensive explanations and details are provided on the contexts and participants) and the data are used to develop interesting and helpful professional insights and implications.

Both approaches have their strengths and weaknesses. Your choice of method will depend on the type of information you need. However, staff at PPCU think it would be unrealistic for us to expect our students to carry out large-scale quantitative research in the limited time available.

For the sake of illustration, let us introduce a few research types. *Classroom Observation Research* involves 'looking outward', observing other teachers in action and coding the information. 'Coding' entails

identifying, counting and showing frequency of certain events in a lesson. The same principles apply as for other kinds of research.

Action research is an approach, rather than a method or a technique, primarily using methods of qualitative research. It looks inward, focuses on practical issues, is conducted in naturalistic settings over a period of time, and is most often done by trying out various ways of teaching a certain point and seeing how they work. Putting findings into practice is an integral part of the research process. This approach can yield more interesting results and can be a better indicator of your thought processes but can only be recommended to people with a period of extended teaching practice. If you are currently employed as a teacher, this is probably a viable choice.

Whichever method you use, you should address questions of real practical and theoretical interest. There should be a balance between theory and practice: descriptions of practice should be related to underlying theoretical principles, and theoretical concepts should be clarified by reference to their practical applications. Systematic data collection, analysis and interpretation are required, based on a researchable question/issue. Reflection based on intuition should be avoided. Data collection methods can, and should be, triangulated to increase the reliability and validity of the research. *Triangulation* means gathering data from a number of different sources, with a number of different research tools. It involves looking at a situation from a few different points of view. It is a way of comparing different data (e.g. qualitative and quantitative) and different methods (e.g. questionnaires and case studies).

Various research tools can be applied, preferably a combination of some of the following, in no particular order:

- Classroom observation (direct or recorded, with lesson transcripts provided)
- A teaching journal
- Questionnaires (see guidelines below)
- Interviews
- Analysis of textbooks
- A case study
- A spoken interaction analysis
- A numerical analysis
- An analysis of methods, experiments
- Field notes, diary
- Tests

Remember that your research must involve the practical aspect: if, for example, you write your own course materials, or compare others', you must try them out in real classroom contexts and then analyse the results; or, if your research contains the development of a set of tests, you are expected to try it out and present and analyse the results as well.

Whenever you collect data from other people (your 'respondents' or 'informants', that is, people giving you a favour by providing you with data when they would have better things to do), you must keep certain ethical issues in mind. First of all, you must respect their rights and privacies, including their right to reject participation, and obtain their informed consent if they decide to support you with their participation. Read the guidelines of the British Association for Applied Linguistics here: www.baal.org.uk/dox/goodpractice_stud.pdf , and design and conduct your research accordingly.

3 THE MANUSCRIPT

The main body of your thesis must be between 13,000 and 17,000 words in length (starting with the Introduction and excluding the Appendices and References sections, notes and tables). Each chapter must start on a new page. (Do not forget to print the copies to be bound with adequate margins.)

1.5 spacing must be used for the main text (single-spacing for quotations longer than three lines). When writing paragraphs, remember your previous studies on paragraph writing: start with a topic sentence, supported by the rest of the paragraph; do not forget about cohesive markers to connect paragraphs. Thus, avoid lengthy paragraphs as well as one-sentence ones. Each major part of your thesis should finish with a summary of that part, and should project the following step.

3.1 Structure
Statement on originality (no plagiarism; signed and attached)

Title page

This should be brief, clear, and informative, both in English and in Hungarian. When wording the title, the main title often informs about the main topic, while the subtitle provides the actual, narrower focus of the paper. Thus the subtitle is often given only at the very end of the write-up.

Abstract

This is a brief, at-a-glance summary of your thesis. It should contain no more than 200 words and should state clearly what the thesis is about, summarising your main points, providing the reader with a brief review of the research study, including any conclusions you have drawn. The abstract page should follow the title page and should not be paginated. It should be in block form: in other words, do not indent paragraphs.

Table of contents

This page functions as an index as well as an introduction for the reader, so it should be clear, correct and consistent. One way of achieving this is by progressively indenting the titles of the sections (1; 1.1; 1.1.1 etc, just like in this text). Please do not go beyond four digits. Page numbering starts with the Introduction and ends with the final section of the text, including the References and the appendices.

1 Introduction[**]

This section will introduce the topic, will outline the structure of the thesis and will also be used to give any essential background information. One of the aims of the introduction is to capture the interest of the reader. A possible way of achieving this is to describe how you became interested in the topic.

This is where you identify the research area, state aims and objectives, identify the problem to be explored, and formulate the exact *research question(s).* The more specific your questions are, the easier it is to narrow down your subject and get deeper into your particular topic by using the right key words. Research questions can come from everyday experience with learning and teaching, from your readings, from reading other research, etc. and should be feasible and important. The paragraph including the research question, on the other hand, is the focal point of your thesis (resembling the thesis statement being the central point of an argumentative essay), subsequently answered by the thesis itself (and summarised in the conclusion). Therefore it may be useful to return to it while working on you research, and re-formulate it for the final version during write-up. You may emphasise the research question by printing it in *italics.*

2 Review of the literature

This is where most of the sources are cited and where you review previous research studies that have contributed to the field. You must demonstrate your familiarity with the most important literature in the field, using at least 15 serious sources, analysing them on at least 15 pages. A substantial part of your references should come from fairly recent publications. Only books and articles which relate directly to the topic should be selected, and they should be discussed only in relation to your own work. Everything you refer to must be relevant to your research, arranged in a logical order, going from general to specific, making links and adding your own thoughts on the subject. Compare several publications and discuss the relative significance of the works in the context of current theory and practice in a *coherent* manner. Avoid uncritical reviews where you simply give a list of your readings or a summary of whole books. Avoid judgemental statements. Conclude this section by a summary of your findings and say how these findings advised you in your research.

3 Research design

This section describes why and how the problem was investigated and why particular methods and techniques were employed. It includes a detailed description and rationale of the research setting, the

---

[*] Choose according to the programme you are to graduate in.
[**] Number chapters (1, 2, 3, ...) and subchapters (1.1, 1.1.1, 1.1.2, 1.2, 1.2.1, 1.2.2, etc.) for easier supervisor and reviewer reference.

participants, the data collection procedures, research tools and the role of the researcher. It provides a discussion why you chose them, and shows that you now have a deeper understanding of the issues.

You should conduct ongoing observations over a sufficient period of time so as to build trust with respondents. You should focus on issues or behaviours that not only reveal an in-depth understanding of the situation studied but also suggest how it connects to current theories.

Data collection strategies include triangulation. Triangulation involves the use of multiple methods and sources such as participant observation, lesson transcripts, informal and formal interviewing, collection of relevant and available documents, etc. We suggest you proceed in the following order:

Participants (a careful and detailed description of the research sample and context)

Procedure/Tools of data collection (describe the research design and tools)

Methods of analysis (describe them and give a rationale why you chose them)

4 Results

In this chapter describe your findings in a relevantly structured way. Provide detailed results of each step of your research, but do not supply general conclusions yet.

If your thesis is to contain essential illustrations (including diagrams, tables, charts, etc.), these should be clearly drawn or printed in black ink, labelled Figure 1 Figure 2, etc. Any accompanying photographs, charts or pictures should be in black and white and should be informative. Avoid using illustrations for decorative purposes.

5 Discussion

An analysis of the results is essential for a successful thesis, where you revisit the research question(s), perform a critical analysis of your study's results and discuss the outcomes. You may wish to go back and reference the literary review, demonstrating how your own study relates to the foundations outlined there. The results should be explained clearly but should not be overinterpreted or overgeneralised.

Even if you cannot provide solutions to the problem, you are expected to demonstrate a deeper understanding of the issue. Any deficiencies in the research design must be mentioned here, alternative explanations and suggestions about more suitable approaches should be given. Recommendations can also be made for future research in the field.

In research built up on several data sources or methods, researchers sometimes merge the 'Results' and the 'Discussion' chapters, for easier cross-reference.

6 Conclusion

In the conclusion, the author summarises the main findings of the research and states plainly the answer(s) to the research question(s). This section should not be a repetition of what you have already said. Instead, it should highlight your main conclusions and show how the results are of direct relevance to you in your further development as a language professional.

References

This is a (first-) author-based alphabetical list of the books and articles which have been cited or referred to. List *all and only* the literature referred to in the text. Make it complete, consistent, clear and correct: all statements, opinions, conclusions etc. taken from another writer's work should be acknowledged, whether the work is directly quoted, paraphrased or summarised. The References section has three main functions:

- it indicates the extent of your background reading
- it allows you to acknowledge your sources
- it demonstrates your familiarity with academic norms.

The language pedagogy and applied linguistics literature is fairly consistent in its format: the APA citation and referencing system is used. The main idea in that system is that, on the one hand, in-text referencing is brief: giving the author's name, the publication date and page number of the referred text, e.g. Medgyes (1997:24) (thus, reference footnotes are avoided). End-text referencing, on the other hand, lists all and only the sources referred to in-text, in the following fashion:

Books	Kumaravadivelu, B. (2003). *Beyond methods*. New Haven: Yale University Press.
	Medgyes P. (1997). *A nyelvtanár*. Budapest: Corvina.
Articles in edited volumes	Willis, D. - J. Willis (2001). "Task-based language learning." In Carter, R. - D. Nunan (eds.), *The Cambridge guide to teaching English to speakers of other languages*. Cambridge: Cambridge University Press, 173-179.
Articles in journals	Celce-Murcia, M. - Z. Dörnyei - S. Thurrell (1997). "Direct approaches in L2 instruction: A turning point in communicative language teaching?" *TESOL Quarterly*, 31/1: 141-52.
	Nikolov M. – Ottó I. (2006): A nyelvi előkészítő évfolyam: Az első tanév eredményei angol és német nyelvből. *Iskolakultúra* 2006/5: 49-67.

For more information on citing and referencing, consult the following sources:

- *Readings in Methodology (PPCU)* articles, and Oxford or Cambridge University Press publications.
- A concise overview on quoting, citation and referencing APA-style is at http://www.aut.ac.nz/resources/library/referencing.pdf or http://langped.elte.hu/APAguidelines.htm
- A full overview on the APA system is at http://www.apastyle.org

N.B.: Always acknowledge your sources. *Plagiarism is a certain fail.*

Appendices

Copies of research instruments (questionnaires, handouts, lesson transcripts, tests, permission request letters, etc.) that have been used should be included here.

Consider whether to present your data (tables, figures, transcripts, lists) in the main body of the text or the appendix: include only those in the Results or Discussion chapters which are examined there in detail (so that the reader need not repeatedly turn the page).

3.2 Style and language

A thesis is an academic manuscript of a partly descriptive, partly argumentative nature, therefore it must follow the requirements of academic prose. You may find it useful to review your notes and previous work on academic English (e.g. essay writing).

Avoid informal English: colloquial, over-familiar language or conversational gap-fillers (e.g. 'To be honest….', 'Obviously, it is difficult…', 'Last but not least, I would like to…'). The use of *he* and *his*, *she* and *her* is only acceptable when a definite person is referred to; when used as a generic pronoun, please use 'he or she' or 's/he', 'his or hers'; 'they' or 'them'; or plural nouns, e.g. 'students', 'teachers', etc.

Do not state the obvious. (e.g. 'Blackboards are made of wood.' or 'Learners can learn English when motivated.'), and do not make naive judgements (e.g. 'The OHP is suitable for many teaching purposes'). Avoid biased or pejorative language, rather, suggest objectivity with your style as well.

Spelling may be either British or American English, but be consistent. Abbreviations should be used sparingly. Always spell out what the abbreviation means the first time it is used.

Do not forget to spell-check your manuscript, both the word-processor's spell-checker and manual double-checking

Proofreading is essential. Examiners can and will reject a thesis if the quantity of typographical, language or word processing errors indicate careless proof-reading. Always print out a draft quality copy, proofread it carefully, correct it and then print out the high quality copy.

3.3 Final checklist before submission

title page (both in English and Hungarian)	
statement on originality (signed and attached)	
contents page (clear and correct)	
page and chapter numbers (starting at Introduction)	
research question within Introduction (clear and feasible)	
research question clearly answered within Conclusion	
text clearly subdivided	
each chapter starts on a new page	
paragraphs neither too long, nor too short	
spacing: 1.5	
adequate length	
adequate margins for binding	
word count at the end	
spell-check	
in References: all sources acknowledged	
all references included	
alphabetical ordering	
all details present	
all details correct	

3.4 Marking

CONTENT	40 points - 80%
Literature review	15 points
Research and analysis	25 points
FORM	10 points – 20%
Format	5 points
Language	5 points
Altogether	max. 50 points

Appendix 1
Literature support at the PPCU

BOOKS
Several books on research methods, approaches and thesis writing are available in the campus library, including the following:

Allwright, D. (1988). *Observation in the language classroom.* Longman.
Allwright, D. – K. M. Bailey (1991). *Focus on the language classroom: an introduction to classroom research for language teachers.* Cambridge: Cambridge University Press.
Ashman, S. - P. Creme (1996). *How to write essays.* London: University of North London.
Bell, J. (1993). *Doing your research project.* Buckingham-Philadelphia: Open University Press.
Burns, A. (1999). *Collaborative action research for English language teachers.* Cambridge: Cambridge University Press.
Kontráné Hegybíró E. – Kormos J. (eds.) (2004). *A nyelvtanuló: Sikerek, módszerek, stratégiák.* Budapest: Okker.
McDonough, J. - S. McDonough (1997). *Research methods for English language teachers.* London: Arnold.
Larsen-Freeman, D. – M. H. Long (1991). *An introduction to second language acquisition research.* Harlow: Longman.
Nunan, D. (1992). *Research methods in language learning.* Cambridge: Cambridge University Press.
Wallace, M. J. (1998). *Action research for language teachers.* Cambridge: Cambridge University Press.

JOURNALS AVAILABLE ON CAMPUS
- Campus library: *ELT Journal* (1999-), *English Teaching Professional;* in Hungarian: *Educatio, Könyv és Nevelés, Köznevelés, Magyar Pedagógia, Új Pedagógiai Szemle*
- *ELT Journal on CD-ROM*, all volumes 1981-1998. Available on Computer 2 in Ambrosianum 131. Ask the secretary for the key to the room and the CD-ROM.
- JSTOR (www.jstor.org - online international database of journal articles, available from campus computers): *American Speech* (1925-1999)*, Language* (1925-2004)*, Modern Language Journal* (1916-2006).
- EISZ (www.eisz.hu - online Hungarian database of journal articles, available from campus computers): *Across Languages and Cultures, English for Specific Purposes, Journal of English for Academic Purposes, Journal of Pragmatics, Journal of Second Language Writing, Language and Communication, Linguistics and Education, Magyar Terminlógia, System,* etc. Web of Science also via http://www.isiknowledge.com/
- **NEW** from campus computers: Project MUSE (muse.jhu.edu): *American Speech, Anthropological Linguistics, The Canadian Journal of Linguistics, The Canadian Modern Language Review, Dictionaries, Language* (Vol. 77 (2001) -- current issue), *Linguistic Inquiry, Rhetoric & Public Affairs; Feminist Teacher, The High School Journal, Journal of College Student Development, Journal of Education Finance, The Journal of General Education, The Journal of Higher Education, Pedagogy, Radical Teacher, The Review of Higher Education, Theory Into Practice,* etc.

FREE ONLINE SOURCES
There is a growing number of journals, databases and newsletters that can be accessed via the Internet as well as some which are exclusively published online. The following list of journals, associations, organisations and database access services is only a small selection of those currently available:
- free online journals: *APPLES, CALL Electronic Journal, English Teaching Forum, Humanising Language Teaching, The Internet TESL Journal, Iskolakultúra, Journal of Intercultural Communication, Language@Internet, Language Learning and Technology, Language, Society and Culture, The Language Teacher, Magyar Nyelv, Magyar Nyelvőr, Magyar Pedagógia, Reading in a Foreign Language, The Reading Matrix, Working Papers in Second Language Studies, TESL-EJ (Teaching English as a Second or Foreign Language Electronic Journal), Új Pedagógiai Szemle, The Web Journal of Modern Languages and Linguistics, Working Papers in Language Pedagogy,* etc.
- English Language Teacher's Forum http://www.eltforum.com/bibliographies.html
- TESOL: http://www.tesol.org/s_tesol/seccss.asp?CID=6&DID=7 Here you can access publications of the international organisation of the Teachers of English to Speakers of Other Languages.
- The ERIC database: http://www.eric.ed.gov/ "ERIC provides unlimited access to more than 1.3 million bibliographic records of journal articles and other education-related materials, with hundreds of new records added multiple times per week. If available, links to full text are included."
- The Linguist List, www.linguistlist.org , the most versatile site for linguistics-related information.
- For excellent phrases to guide your academic writing visit the *Manchester University Academic Phrasebank* at http://www.phrasebank.manchester.ac.uk/

Appendix 2
Hints for Designing Effective Questionnaires

Robert B. Frary, Virginia Polytechnical Institute

The purpose of this digest is to offer tips in designing quality questionnaires and on avoiding common errors. Some of the more prevalent problems in questionnaire development are identified and suggestions of ways to avoid them are offered.

Do keep the questionnaire brief and concise. Some questionnaires give the impression that their authors tried to think of every conceivable question that might be asked with respect to the general topic of concern. The result is a very long questionnaire causing annoyance and frustration on the part of the respondents resulting in non-return of mailed questionnaires and incomplete or inaccurate responses on questionnaires administered directly. To avoid this first potential problem the investigator must define precisely the information desired and endeavor to write as few questions as possible to obtain it. Peripheral questions and ones to find out "something that might just be nice to know" must be avoided. A clear-cut need for every question should be established.

Do get feedback on your initial list of questions. Feedback may be obtained from a small but representative sample of potential responders. A field trial of a tentative form of the questionnaire is also desirable.

Do locate personal or confidential questions at the end of the questionnaire. The early appearance of unsettling questions may result in respondents discontinuing the questionnaire.

Do order categories. When response categories represent a progression between a lower level of response and a higher one, it is usually better to list them from the lower level to the higher in left-to-right order, for example,

1) Never 2) Seldom 3) Occasionally 4) Frequently

Do consider combining categories. In contrast to the options listed just above, consider the following:

1) Seldom or never 2) Occasionally 3) Frequently

Combining "seldom" with "never" might be desirable if responders would be very unlikely to mark "never" and if "seldom" would connote an almost equivalent level of activity, for example, in response to the question, "How often do you tell you wife that you love her?" In contrast, suppose the question were, "How often do you drink alcoholic beverages?" Then the investigator might indeed wish to distinguish those who never drink. When a variety of questions use the same response scale, it is usually undesirable to combine categories.

Do ask responders to rate both positive and negative stimuli. There is sometimes a difficulty when responders are asked to rate items for which the general level of approval is high (the "apple pie" problem). There is a tendency for responders to mark every item at the same end of the scale. By offering positive and negative responses the respondent is required to evaluate each response rather than uniformly agreeing or disagreeing to all of the responses.

Do choose appropriate response category language and logic. The extent to which responders agree with a statement can be assessed adequately in many cases by the options:

1) Agree 2) Disagree

However, when many responders have opinions that are not very strong or well-formed, the following options may serve better:

1) Agree 2) Tend to agree 3) Tend to disagree 4) Disagree

These options have the advantage of allowing the expression of some uncertainty. In contrast, the following options would be undesirable in most cases:

1) Strongly agree 2) Agree 3) Disagree 4) Strongly Disagree

Some would say that "Strongly agree" is redundant or at best a colloquialism. In addition, there is no comfortable resting place for those with some uncertainty.

Avoid open-ended questions. In most cases open-ended questions should be avoided due to variation in willingness and ability to respond in writing.

Avoid the response option "other." Careless responders will overlook the option they should have designated and conveniently mark the option "other" or will be hairsplitters and will reject an option for some trivial reason. An exception to the foregoing advice is any case in which the categories are clear-cut, few in number, and such that some responders might feel uncomfortable in the absence of an applicable response.

Avoid category proliferation. A typical question is the following:

Marital status:

1) Single (never married) 2) Married 3) Widowed 4) Separated 5) Divorced

Unless the research in question were deeply concerned with conjugal relationships, the distinctions among all of these categories are not useful. Usually, such a question reflects the need to distinguish between a conventional familial setting and anything else. If so, the question could be:

Marital status: *1) Married and living with spouse 2) Other*

Avoid scale point proliferation. In contrast to category proliferation, which seems usually to arise somewhat naturally, scale point proliferation takes some thought and effort. An example is:

1) Never 2) Rarely 3) Occasionally 4) Fairly often 5) Often 6) Very often 7) Almost always 8) Always

Such stimuli run the risk of annoying or confusing the responder with hairsplitting differences between the response levels. Psychometric research has shown that most subjects cannot reliably distinguish more than six or seven levels of response. Offering four to five scale points is usually quite sufficient to stimulate a reasonably reliable indication of response direction.

Avoid responses at the scale mid-point and neutral responses. The use of neutral response positions had a basis in the past when crude computational methods were unable to cope with missing data. In such cases, non-responses were actually replaced with neutral response values to avoid this problem. The need for such a makeshift solution has long been supplanted by improved computational methods. Consider the following questionnaire item:

The instructor grades fairly.

1) Agree   2) Tend to agree   3) Undecided   4) Tend to disagree   5) Disagree

There is no assurance whatsoever that a subject choosing the middle scale position harbors a neutral opinion. A subject's choice of the scale midpoint may result from: Ignorance, Uncooperativeness, Reading difficulty, Reluctance to answer, or Inapplicability.

In all the above cases, the investigator's best hope is that the subject will not respond at all. Unfortunately, the seemingly innocuous middle position counts, and, when a number of subjects choose it for invalid reasons, the average response level is raised or lowered erroneously (unless, of course, the mean of the valid responses is exactly at the scale midpoint).

In the absence of a neutral position, responders sometimes tend to resist making a choice in one direction or the other. Under this circumstance, the following strategies may alleviate the problem:

1) Encourage omission of a response when a decision cannot be reached.

2) Word responses so that a firm stand may be avoided, e.g., "tend to disagree."

3) If possible, help responders with reading or interpretation problems, but take care to do so impartially and carefully document the procedure so that it may be inspected for possible introduction of bias.

4) Include options explaining inability to respond, such as "not applicable," "no basis for judgment," "prefer not to answer."

The preceding discussion notwithstanding, there are some items that virtually require a neutral position. Examples are:

How much time do you spend on this job now?

1) Less than before 2) About the same 3) More time

The amount of homework for this course was

1) too little. 2) reasonable. 3) too great.

It would be unrealistic to expect a responder to judge a generally comparable or satisfactory situation as being on one side or another of the scale midpoint.

Avoid asking responders to rank responses. Responders cannot be reasonably expected to rank more than about six things at a time, and many of them misinterpret directions or make mistakes in responding. To help alleviate this latter problem, ranking questions may be framed as follows:

Following are three colors for office walls: 1) Beige 2) Ivory 3) Light green

Which color do you like best? _____

Which color do you like second best? _____

Which color do you like least? _____

By carefully evaluating the need of every question used in an instrument and carefully wording the responses, you will collect information which will yield more satisfactory and meaningful results.

Additional Reading

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York: John Wiley.

Frary, R.B. (1996). *Brief Guide to Questionnaire Development*. Washington, DC: ERIC Clearinghouse on Assessment and Evaluation (30 pages)

Grunlund, N.E. (1993). *How to make achievement tests and assessments.* Needham Heights, MA: Allyn and Bacon.

Hinkle, D. E., Oliver, J. D., & Hinkle, C. A. (1985). How large should the sample be? Part II--the one-sample case. *Educational and Psychological Measurement*, 45, 271-280.