11 Writing up research: writing an introduction

11.1 a The table below shows the main purposes of a thesis introduction and elements that contribute to these purposes. Complete the table with these elements.

- outline of how the thesis is organised
- brief review of previous studies on the topic
- · explanation of how the study will fill a gap, overcome limitations, or solve a problem

purposes of the introduction	elements of the introduction
a to describe the context for the study	 description of the general area of study (a1) background information relevant to the study (a2) definition of key terms (a3) (a4)
b to identify a specific issue to be studied	 identification of gaps or limitations in previous studies (b1) (b2)
c to say how the study will address the issue	 description of the aims of the study (c1) brief description of how the study was carried out (c2) brief description of what the study found (c3) (c4)

b Work in pairs. Discuss the questions.

- 1 Will all theses have all of the elements listed?
- 2 Can you think of any other elements that might be included in an introduction?
- 3 Will the elements always come in the order in which they are listed in the table?

11.2 a Match the sentences (1-5) in this research article introduction with elements from 11.1a (a1, a2, etc.).

The representation of scientists in the popular press: an exploratory study

- 1 The way in which the public's view of scientists and their work is shaped by the media is of growing research interest. _______
- 2 For example, a considerable amount of work has examined how scientists are represented in contemporary culture in novels (e.g. Alpert, 2008), films (e.g. Terzian & Grunzke, 2007) and on television (e.g. Dudo et al., 2010).
- 3 However, there seems to be much less research on the creation of the image of scientists in masscirculation newspapers.
- 4 The purpose of this study is to explore how newspapers create images of scientists for their readers through the language choices that journalists make.
- 5 It looks in particular at the adjectives that have been used to describe scientists in two English-language newspapers over the last year.

Note: Research article introductions often include some of the same elements as thesis introductions.

- b Analyse the longer research article introduction in Appendix 5, Text A, with the method used in 11.1a.
- c Identify elements in the thesis introduction in Appendix 5, Text B, that aren't in the research article introductions you have seen so far.
- d In pairs, discuss the reasons for these differences.

11.3 a Work in pairs. Underline expressions used in the introduction in **11.2**a and the introductions in Appendix 5 which identify a problem, gap or limitation in previous research.

b Discuss what kind of problem, gap or limitation is identified in each case.

Focus on your subject

Use your online library resources or a search engine to find journal articles or theses in your subject. Scan the introductions to find any places where the writers identify problems, gaps or limitations in previous research. Note any useful expressions you find and identify any areas of research that you would like to undertake yourself.

11.4 Work in pairs. Take turns to introduce your research to each other, following stages a-c in the table in **11.1**a.

- 1 Describe the context.
- 2 Say what specific issue you will study or have studied.
- 3 Outline how you will carry out or have carried out the research.

Appendix 5 Writing an introduction

A Research article introduction

Introduction

I just want my children to be happy.

- (36 year-old mother of 2)
- (25 year-old father of 3)
- (32 year-old father of 2)

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5 Parents want their children to be happy. But, what makes children happy? The answer to this seemingly simple guestion eludes parents, educators, researchers, and the general public. Although opinion-leaders have clearly voiced their concern about the increase in childhood depression, the answer to 10 the question of what contributes to children's happiness is debatable. With children being constantly bombarded with images suggesting that slim figures, trendy fashions, expensive toys, or other material goods are solutions to finding happiness, it is exceedingly difficult to determine what truly makes 15 children happy. Do children look to material goods to find happiness? Or, do they look to sports? Do they rely on other sources to experience happiness that adults have overlooked? Are there age related changes that need to be accounted for? While anecdotal evidence is abundant, empirical studies focused on investigating the sources that contribute to children's 20 happiness at different ages are missing. Such studies would

be beneficial not only because they would allow for a more informed discussion of children's global happiness, but also because they would help opinion-leaders guide children down the path towards happiness.

With the inception of the Journal of Happiness Studies in 2000, the prominence of the topic of happiness in today's pop culture, and the inception of conferences on happiness and positive psychology within the past year, the topic of happiness and subjective well-being has clearly become a highly valued matter (Diener 2000; Veenhoven 2000). Surprisingly, researchers have been slow in developing studies that specifically address children's happiness. Although a rapidly developing "positive psychology" movement that emphasizes people's strengths instead of their weaknesses is quickly steering social scientists towards conducting studies on happiness, most of these studies have focused on adults, not children. Studies have primarily

used surveys to examine how external correlates of adults' lives
(e.g. income, employment, marital status, etc.) affect happiness
(Andrews and Withey 1976; Bortner and Hultsch 1970; Campbell et al. 1976; Cohn 1979; Cummins 2000). Studies have also been designed to assess *how* happy people are, as opposed to *what* makes them happy.

Park and Peterson (2006) point out that studies of happiness in children have been neglected. In addition to the conceptual gap in understanding what makes children happy, measures that are more conducive to studying an abstract construct such as happiness in a children's sample are also needed. Questionnaires developed for adults cannot be simply lifted and used with

50 children, whose cognitive abilities are not as sophisticated as those of adults. Thus, not only do current happiness studies fall short of providing meaningful answers to questions related to what makes today's children happy, but they also lack effective measures that are suitable for examining age differences across a wide age range.

Our research responds to Park and Peterson's (2006) urge for more research on children's happiness in two ways. First, we introduce a novel measure that is simple, engaging and appropriate for a broad age range of children and adolescents
60 (ages 8–18) to express what makes them happy – a "collage" measure. Second, we use this new technique in combination with more traditional measures to address critical questions that have remained unanswered - what aspects of life make children happy (e.g. people, hobbies, material things)? Do these sources
65 of happiness vary across ages?

We begin by reviewing research on the topic of happiness. We then discuss two studies designed to explore the question – "What makes children happy?" Study 1 collects information about what general themes (e.g. people and pets, hobbies,
70 material things) contribute to children's happiness, using an open-ended task. Study 2 uses a semi-structured thought listing task and a collage task to test for age differences in children's and adolescents' happiness. We conclude with a discussion of the implications of our findings and future research directions.

Chaplin, L. N. (2009). Please may I have a bike? Better yet, may I have a hug? An examination of children's and adolescents' happiness. *Journal of Happiness Studies*, 10: 541–562.

B Thesis introduction

Background

TecUology has the potential to enhance the quality of life of people. It is ironic when tecUology may in fact be having the opposite effect. It is this ironic situation that the people of northern Saskatchewan now find themselves confronting. Skilled employment opportunities are plentiful, yet unemployment is high. As is common across the country, the tecUology "skills" of the people are not at the level to meet the tecUology "needs" of industry. Until we understand why this dilemma exists, and more importantly, endeavor to correct it, the situation will persist. This study is a part of that process. It examined one aspect of the tecUology skills gap dilemma; the role that teachers play in the computer education of students in northern Saskatchewan.

Northern Saskatchewan is the term used to describe the top "half" of the province of Saskatchewan. The socioeconomic status of the region is much lower in many categories than the rest of the province. The rate of unemployed adults over age 25 is three times as high in the

- north. The overall unemployment rate in the north is 20% compared to 7% provincially (Northern Labour Market Committee, 2002). Although unemployment levels in the north are nearly three times as high as in the rest of the province, the paradox is that employment 20 opportunities in a number of resource sectors exist. These jobs, as part
- of agreements between government and industry, are targeted for northern Aboriginal people. The jobs are simply not being filled. This paradox can more succinctly be referred to as the "tecUical skills gap". Jobs in the 21st century require higher skill levels, and northerners are not meeting that skill level to benefit from the jobs.
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This then, provides the context for this study. In summary, in order to enhance the quality of life for many disadvantaged northerners, employment has to increase. Job opportunities exist, but northerners are not taking advantage of the opportunities and filling the jobs.

- 30 Employment opportunities require tecUically skilled and computer literate people, and currently, many people in the region seeking employment do not have these skills. Arguably, there are a number of reasons why northerners have not been meeting the need for skilled employment. This study looks at one piece of the puzzle by surveying 35
 - teachers in the provincial and First Nation school systems to determine whether or not they are preparing students for the new reality of a computer literate workforce. In a general sense, the study will provide a snapshot of student computer use.

Rationale and aims

Although pre-existing data specific to the computer use of students in 40 northern Saskatchewan are scarce, general data reveal that our public schools have increased the number of computers in their facilities. In the early part of the decade, most schools had about one computer for every 20 to 25 students. By the end of the decade, these numbers overall in Saskatchewan have dropped to around eight students for

- 45 every computer (Statistics Canada, 1999). One can anticipate that well before the start of the next decade, a computer for every student will be the norm. Schools have increased the level of tecUology, or more precisely the number of computers, within their walls, however, this has not necessarily translated into an increased use of computers.
- 50 Recent data from the Saskatchewan Department of Education show that overall in the province about 70% of grade 5 students, 90% of grade 8 students and 90% of grade 11 students report they use a computer to do school assignments at least once a week (Saskatchewan Education, 2001). At first glance, this looks like a positive indicator,
- however, further analysis reveals that of the same grades, 65%, 55%, 55 and 50% respectively, report that they use a computer less than one hour per school week. Considering there are 25 instructional hours in a typical school week, we can deduce that the majority of students in grades 5, 8 & 11 in Saskatchewan use a computer less than 4% 60 of the time they are in school. In short, Saskatchewan students are
- significantly underachieving in meeting the standards of computer

usage at school.

Many studies have assessed the computer attitude of both pre-service and inservice teachers (Delcourt and Kinzie, 1993; Francis, 1993; Larson & Smith, 1994; Metu, 1994; Mitra, 1998; Omar, 1992; Pepper, 1999; Reece & Gable, 1982;). Most of these studies also examined the computer ability of the subjects. In the majority of cases, it was found that a positive relationship existed between the computer attitude of respondents and their computer ability. The general consensus seems to be that a higher degree of computer ability translates into a more positive computer attitude. Further, most of these studies examine demographic variables such as age, gender and educational background. Not nearly as numerous as studies into the attitude and ability of teachers, a relatively small number of studies have examined the frequency and type of computer use demonstrated by students in schools. The primary purpose of this study is not a comprehensive examination of what students are doing with computers in schools. The purpose rather, is to determine if a relationship exists between teachers' attitudes towards computer use, the level of their ability to use computers and the computer use of students.

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The following research question provides the direction for this study: Are teacher attitudes, computer ability, demographic profile and working environment related to student computer usage? Specifically, the purpose of this study is to show whether teachers' attitudes toward computers and competency in using computers as an effective educational tool (computer ability) are factors that are related to the frequency and type of computer use by students. In addition, this study will determine if the demographic and environmental variables of teachers are related to the frequency and type of computer use of students.

To assess student computer use, the same criteria as those employed in the 1999 Provincial Learning Assessment in TecUological Literacy (Saskatchewan Education, 2001) have been utilized. Three components of student use were examined: The overall frequency of computer use, the frequency of specific types of computer activities and the use of computers in subject areas. A comprehensive and critical assessment of how effectively students are using computers in the classroom is beyond the scope of this study.

This study is of value for many reasons. The study is a snapshot of the use of computers in the teaching and learning process in northern Saskatchewan. The study provides insight into what is going on in schools, and by extension, may be of some use to those who are trying to close the "tecUical skills gap". The study also provides information to those responsible for the educational system that may be of help to determine the inservice needs of teachers and to assess the level of computer integration across the curriculum.

Outline

Chapter One has provided the context, rationale and purpose of the study. It presents the research question that is answered and definition of terms. Chapter Two reviews the literature relevant to the topic. Chapter Three describes the research methodology, the instrument used and the population studied. Chapter Four presents the data derived from the survey, while Chapter Five examines and discusses the findings. Chapter Six summarizes the study, highlights the significant findings, draws conclusions and makes suggestions for future research

Definition of terms

The following are definition of terms commonly used in this study: Provincial School refers to a school as defined by the Education Act, 1995 and governed by a board of elected trustees.

First Nation School is a school administered within the Indian Act. Tribal Council is a term used to describe an association of First Nations. Survey and questionnaire are used synonymously to define the tool used to collect data.

Greschner, K. J. (2003). The relationship between teacher attitudes and skills and student use of computers in northern schools. Unpublished Master of Education thesis, University of Saskatchewan, Saskatoon, Canada.