IS GIFTEDNESS BEING IDENTIFIED AMONG STUDENTS OF POVERTY?

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ABSTRACT

Limitations may exist in the current practices to assess and identify giftedness, particularly among children of poverty (Davis & Rimm, 2004; Slocumb & Payne, 2000). The purpose of this study was to examine educators' perceptions about the concept of giftedness, specifically if children of poverty are being adequately identified in the recruitment process for enrichment programs. An adapted version of the survey entitled, *Assumptions Underlying the Identification of Gifted and Talented Students* (Renzulli, Brown, & Gubbins, 2005) was distributed to approximately 500 administrators, classroom teachers, and resource room/learning assistance teachers of elementary schools in a large urban school division. There were 101 respondents. The survey consisted of twenty-five statements, utilizing a five point Likert scale, exploring teachers' perceptions of assessment practices used to identify gifted and/or talented students. Respondents were also invited to convey their personal professional opinions regarding giftedness by answering a series of open-ended questions.

Descriptive analyses (e.g., mean, standard deviation) of continuous variables (e.g., years of experience), and frequency distributions of categorical variables (e.g., school setting, current position) were conducted. Analyses of variance (ANOVA's) were conducted for comparisons among the average responses (i.e., teacher responses, administrator responses) for each factor. In addition, Pearson correlations were also conducted to investigate relationships between dependent variables (e.g., the factors) and independent variables (e.g., age, years of experience). Open-ended questions were

categorized with consideration to common themes based upon the responses of the participants and analyzed using descriptive analyses. The culminating examinations and interpretations indicated that educators believe the processes of defining and identifying giftedness among students in poverty are flawed and restrictive. Furthermore, the responses were indicative of educators' desires to embrace giftedness in a variety of contexts and domains.

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DEDICATION

"I can do one more year of this!" wasn't really just about me. It also meant one more year for my family to stare at my back while I punched keys, read, researched, wrote, revised and revised *and revised*, and declared my own stunning brilliance aloud on more than one occasion!

May God bless my husband, Dean, for tolerating the tears, stress, and bouts of insanity, from me and the kids! That background noise, a.k.a. Nisk and Em, must be a source of music somewhere in heaven, down here it was usually timely interruptions for a girl who needed to turn around in her chair and just be mumma for a while. Thank you *mi familia*. I love you!

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CHAPTER 1: INTRODUCTION

Within any given society, conditions for poverty exist which may be commensurate with the increasingly diverse needs of school-aged children (Payne, 1998). One distinctive need is responsiveness to equitable opportunity for selection into enrichment programs. Researchers have identified a significant disparity in the number of disadvantaged children that are selected for gifted programs (Baldwin, 2005; Begoray & Slovinsky, 1997; Borland & Wright, 2000; Callahan, 2005; Elhoweris, Mutua, Alsheikh, & Holloway, 2005; Naglieri & Ford, 2005; Scott & Delgado, 2005). Under-representation in the identification process is largely exclusive to children of ethnic minority and low socioeconomic status. However, neither the environment nor the culture in which a child is raised should preclude assumptions about intelligence, giftedness, or any other exceptionality (Bianco, 2005; Borland & Wright, 2000).

Factors contributing to the underrepresentation of disadvantaged children in gifted programs are broad, numerous, and frequently subject to interpretation. Contributing factors that may independently or mutually exacerbate the problem include ambiguity in defining giftedness, teacher perceptions, under achievement, culturally biased assessments, singular standardized evaluations, and inadequate teacher training (Brown, Renzulli, Gubbins, Siegle, Zhang, & Chen, 2005; Davis & Rimm, 2004). Previous standards of timed paper and pencil, one shot only evaluations have not adequately reflected or assessed a multicultural representation of superior intelligence and potential (Baldwin, 2002, 2005; Brown et al., 2005). Subsequently, the notion of a systemic challenge in which current recruitment practices adopt attitudes, policies, and

procedures that address these impediments and embrace the intellectual talents of gifted students from poverty must be addressed (Slocumb & Payne, 2000).

If it is the duty of educators to capitalize on individual strengths, talents, and interests of students, then it seems reasonable to investigate contemporary models that have been developed by researchers in order to broaden the pool from which selection for enrichment programs typically occurs (e.g. Renzulli, Reis, & Smith, 1981). Furthermore, it is worthy to examine the credence of educators' perceptions to determine if giftedness is indeed being identified among students of poverty.

1.1 Purpose

The purpose of this study was to investigate educators' perceptions about giftedness, specifically among children in poverty. Existing data on this topic has focused on bias in intelligence assessments, teacher perceptions of giftedness, the significance of multidimensional evaluations, and giftedness in broader terms (e.g. Baldwin, 2002, 2005; Borland & Wright, 2000; Brown et al., 2005; Callahan, 2005; Cross, 2004; Davis & Rimm, 2004; Mann, 2005; Slocumb & Payne, 2000). However, there have been minimal investigations into the intra-relationship of all of these characteristics and poverty. Brown et al., (2005) addressed this paradox:

> What is interesting about differences between recent developments in theory and in teachers' reactions to identification decisions is that no one has empirically examined the attitudes of people most affected by identification systems and people who frequently make policy decisions or advise decision makers. The beliefs of practitioners and policymakers are important because,

> in the final analysis, these are the people who must carry out their responsibilities harmoniously and ensure that there is integrity. (p. 68)

Thus, an investigation of educational professionals' opinions, beliefs, and practices is necessary to provide insight into their assumptions regarding giftedness and to contribute to this elusive subject area. An initial investigation may be commenced by considering the following research questions:

1. Is giftedness being identified among students of poverty?
    a.) What are the current beliefs about practices related to identifying gifted and/or talented students?
    b.) Do educators' teaching experiences in diverse socio-economic communities affect their perceptions of giftedness?
2. What practices should be employed to identify giftedness?

1.2 Definition of Terms

1.2.1 Giftedness

Giftedness generally denotes the demonstrability of intellectual talents with immediacy in identification and product (Ford & Harmon, 2001). For the purpose of this thesis, the term giftedness will also include the intellectual potential a student possesses and may better express with effective, consistent, nurturing and guidance by educators. Intellectual potential recognizes the attributes a student is demonstrating along the pathway to what is commonly considered giftedness (Callahan, 2005; Coleman, 2006). Furthermore, giftedness will remain synonymous with the terms exceptional and talented for the purpose of this research.

1.2.2 Poverty

Payne (1998) contends that poverty is "the extent to which an individual does without resources" (p. 16). While poverty is generally considered in financial terms only, Payne (1998) maintains that financial resources are only a fraction of the sum totals other resources may contribute to poverty. Payne (1998) recognized other significant resources which may influence poverty to include: emotional, mental, spiritual, physical, support systems, relationships/role models, and knowledge of hidden rules (i.e., social nuances).

1.3 Overview of Chapters

A thorough review of the existing literature in Chapter 2 provides clarity and conceptualizes the coexistence of giftedness and poverty. Chapter 2 is divided into two sections with the first section examining the topic of giftedness (i.e., definition, implications, and theory) and the second section examining the topic of poverty and its influence on assessment, recruitment, and programming. Chapter 3 discusses the methods and procedures implemented in this project. In Chapter 4, the results of the data are presented. In the concluding chapter, Chapter 5, a discussion regarding the outcomes of the data is expressed as well as possible implications and limitations of this research experience.

CHAPTER 2: LITERATURE REVIEW

The review of the literature related to teachers' perceptions of giftedness among students of poverty is organized into two major sections. The first section critically reviews literature specific to theories and models employed for recruitment to gifted programs, while the second section critically reviews literature central to the implications of identifying giftedness in students vulnerable to the effects of poverty. The purpose of the literature review was to investigate and identify important aspects which may influence current practices in the recruitment of disadvantaged students for gifted programs.

2.1 Giftedness

2.1.1Definition of Term

Definitions for exceptionally gifted and talented students are largely based on scientific criteria (e.g., intelligence measurements) and vary among school divisions and geographic boundaries (Vaughn, Bos, & Schumm, 2003). Consequently, the restrictiveness in policies ranges from being very liberal (e.g., use multiple criteria) to very conservative (e.g., precise cut-off scores) which permeates ambiguity in the characterization of giftedness (Renzulli, Reis, & Smith, 1981). Identification continues to remain somewhat subjective in the United States despite the provision of a federal definition (Ysseldyke, Algozzine, & Thurlow, 2000). A definition was established by the Gifted and Talented Children's Act of 1978 that identified gifted students as individuals:

> who are identified at the preschool, elementary, or secondary level as

> possessing demonstrated or potential abilities that give evidence of high performance capabilities in areas such as intellectual, creative, specific academic, or leadership ability, or in the performing and visual arts, and who by reason thereof, require services or activities not ordinarily provided by school. (Ysseldyke et al., 2000, p. 77)

However, it is not currently mandated in American federal policy that gifted programs must be provided in special education (Ysseldyke et al., 2000). In Canada, policy regarding giftedness is also largely tenuous. "Across Canada, 'Gifted' for the purposes of legislation, is usually defined as intellectual ability" (Leroux, 2000, p. 695). Although education is publicly legislated, individual provinces are largely independent in the delivery of special education programming. Leroux (2000) identified a few ministries of education who reported that no separate legislation existed for gifted learners, while a few others did report provincial legislation.

> In general, it appeared that while equity in education is publicly legislated policy across Canada, programs and services for gifted children most frequently are subsumed in the regular classroom because there is no consistent legal mandate or support for a wide range of other services. (Leroux, 2000, p. 696)

In Saskatoon, Elaine Stakiw (personal communication, April 17, 2007), Coordinator of Gifted Learner Education and Elementary Science at Greater Saskatoon Catholic Schools described their policy in the identification of gifted and talented students. Specifically, their practice promotes the consideration of many factors beyond a

standardized assessment. These factors include: academic aptitude, motivation, creativity, visual or performing arts ability, psycho-motor ability, and psycho-social and cultural leadership (personal communication, April 17, 2007). The assessment tool most frequently used to screen students in the Greater Saskatoon Catholic Schools Division is the Canadian Cognitive Abilities Test and is usually conducted with students in grades three and six. Students scoring at or above the 96th percentile are generally identified as possessing giftedness and/or talent (personal communication, April 17, 2007). For the purpose of this literature review, the terms gifted and talented will be synonymous with intelligence.

The fundamental ideals and beliefs regarding definition and the selection of exceptional students is that they are advanced in language and thought, and typically possess a higher mental age when contrasted to their chronological age (Davis & Rimm, 2004). Traditionally, inferred intelligence and the identification of giftedness have been imbedded in psychometric evaluations of intelligence quotients (I.Q.) (Brown et al., 2005; Ford & Harmon, 2001; Passow & Frasier, 1996). For example, a historical contribution was put forth "in the 1920's when Lewis Terman identified a large sample of 1500 children [in] California . . . who were estimated to be within the most intelligent 1 per cent of their generation" (Howe, 1997, p. 100). However, no relationship was found between the intelligence quotients and the future academic or professional successes of these individuals. It was later concluded that I.Q. could not be a measure for, nor a determinant of, future outcomes (Howe, 1997). Another example of the use of psychometric evaluations to infer intelligence can be found in Herrnstein and Murray's (1996) *The Bell Curve*.

This book assisted in establishing the boundaries that denote superior intelligence (i.e., a I.Q. score of 120 or greater) and controversial correlations to race (e.g., minority groups) and poverty (Ford & Harmon, 2001; Herrnstein & Murray, 1996). Specifically, conclusions were determined concerning various ethnic groups (i.e., African Americans) stating that some cultures are inherently inferior intellectually and culturally (Ford & Harmon, 2001; Herrnstein & Murray, 1996). Furthermore, Weschler (1974) stated that cognitive tests seek to measure, "overall capacity for intelligent behavior" (p. 30). Although cognitive tests have traditionally been used to measure intelligence, it is important to note that there are exceptions and variance in the identification of giftedness in children. Albert Einstein, Thomas Edison, Leonardo da Vinci, and Pablo Picasso were individuals who, though exceptionally talented, developed basic academic skills (e.g. speaking, reading, and writing) very late in their childhood development (Davis & Rimm, 2004; Mann, 2005).

The diversity that exists in the definition of giftedness is indicative of a need for broader descriptors, since a vast number of individuals in certain pockets of the population are being overlooked (Plucker, 1998). Definitions also need to incorporate broader perceptions of intelligence because minority children of culturally diverse backgrounds are often undetected in the conventional definitions used for recruitment to gifted programs (Baldwin, 2005; Callahan, 2005). Frasier (1989) attributed "Sternberg's (1981) Triarchic Theory of Intelligence and Gardner's (1983) Theory of Multiple Intelligences [as] major breakthroughs in expanding the definition of *intelligence*" (p. 17). While this may be true, there continues to be a disproportionate number of individuals from different ethnic backgrounds in the

groupings for enrichment programs (Frasier, 1989; Grantham, Frasier, Roberts, & Bridges, 2005). Subsequently, the *National Excellence* report (U.S. Department of Education, 1993) indicated ". . . that only 9% of students in gifted and talented programs were categorized in the bottom quartile of family income" (as cited in Callahan, 2005, p. 98). Exploring the notion of a change in terminology so that labels of talent replace labels of giftedness is a means to expand the panel of students identified in gifted programs (Brown et al., 2005; Davis & Rimm, 2004). Valuing what potential or promise a child holds as opposed to what they immediately demonstrate on a standardized assessment would be more equitable even if "this slight shift in terminology might appear to be an exercise in heuristic hair splitting" (Brown et al., 2005, p. 77); furthermore, it would foster a significant impact on programming considerations and applications which may "redress the inequities" (Callahan, 2005, p. 99).

2.2 Implications of Giftedness

2.2.1 Bias in I.Q. Measurements

At the center of the debate regarding selection protocol for enlistment into enrichment programs is the use and interpretation of standardized assessments (e.g. the Stanford-Binet). There are frequent and continuing debates regarding cultural bias in I.Q. tests (Callahan, 2005; Davis & Rimm, 2004; Katzman, 2003). The I.Q. scores on a bell curve range from 50 or less to greater than 150, with the average score being 100 (Howe, 1997). The application of cut-off scores, which is typically over 120 to identify giftedness (Van Tassel-Baska, & Olszewski-Kubilius, 1994), is interpreted as an absolutist view and regrettably a poor indication of

curriculum knowledge abilities (Davis & Rimm, 2004; Katzman, 2003; Scott & Delgado, 2005). A further complication is that there is no one absolute definition or theory for giftedness. Therefore, a comparison of samples in the research may obscure important differences as the parameters of giftedness will vary among schools, districts, and students (Passow & Frasier, 1996; Van Tassel-Baska et al., 1994). The greatest irony in the I.Q. debate on giftedness is that originally "in 1904 Binet was asked to devise a diagnostic instrument for differentiating between schoolchildren of normal ability and pupils who were too far below the average to profit from the usual school curriculum, and therefore better suited to special schooling" (Howe, 1997, p. 17). Today, the converse is true; measures of intelligence are garnered to identify and program for the high-ability pupils as opposed to less able pupils.

Evidence pertaining to domination, or cultural bias, may exist in the framework of intelligence tests, since intelligence tests are largely constructed to meet the norms of a dominant White, middle-class population (Fahey & Reid, 2000). Consequently, misconception also plays a role in the flawed and restricted opportunities poor and culturally diverse students encounter, because the dominant culture often assumes that the inferior culture will reveal sub par academic achievement (Fahey & Reid, 2000). The underlying concern is that language and culture may pose a considerable barrier and erroneously evaluate true cognitive ability and potential because:

> many gifted minority and economically disadvantaged children will be overlooked if intelligence tests are used as the only or most

> important identification instrument. Their use is recommended, but average or low scores should be interpreted with caution, and in consideration of the language, cultural and family background, and the circumstances of testing. (Davis & Rimm, 2004, p. 280)

Jensen (2000) puts forth a valid argument for what may be deemed as the cause of discrepancy in cultural groupings in intelligence testing. Cut-scores will always delineate discrepancy among groups; subsequently, the higher the cut-score, the greater the discrepancy (Jensen, 2000). However, this does not warrant a need for cultural-specific assessments for this jeopardizes individual rights and it also infers negligent assumptions about specific populations.

> It is important that teachers understand that there is as much difference within groups of culturally diverse individuals as there is between groups. Therefore, a blanket generalization should not be made about all of the gifted students from culturally diverse backgrounds. (Baldwin, 2002, p. 145)

Hence, the focus of assessment should be central to what an individual may demonstrate and not be generalized by what their ethnic culture may or may not demonstrate (Jensen, 2000).

2.2.2 Philosophical Theories

Without dispute, concepts of giftedness are largely shaped by cultural values and influences (Passow & Frasier, 1996; Wu, 2005; Ysseldyke et al., 2000). An example of philosophical and cultural differences was demonstrated by Wu's (2005) investigation of factors contributing to talented performance (TP). Confucian

philosophy integrates a nurture rather than nature theory that values personal volition and an upstanding work ethic (Wu, 2005). In contrast to Western ideals, Chinese models concede that "the task of developing TP is more significant than the task of identifying giftedness" (Wu, 2005, p. 231). There were several unique features to this study. First, was the purposeful selection of secondary teachers to interview regarding their perceptions of two key factors: (1) conceptions of talent and giftedness, and (2) opinions about the main factors affecting students' development of TP. The selection process of secondary teachers as opposed to elementary teachers is deemed unique because typically in Western society giftedness is identified in the early elementary years (Elhoweris, Mutua, Alsheikh, & Holloway, 2005). However, "many secondary schools in China separate students into different classes according to their achievement level and because teachers in these schools have more experience teaching talented students than do their primary school counterparts" (Wu, 2005, p. 237). A second unique feature to this study was the recurring theme that traditional Chinese culture is embedded in the notion that not only do children possessing giftedness achieve TP, but so can children possessing average and below average abilities (Wu, 2005). Central in the overall findings of this study was the overriding philosophy that nurturing environments may be the mainstays of successful gifted programs in China (Wu, 2005).

An investigation of Western philosophies that have shaped models and frameworks for giftedness is necessary to determine if and how it accommodates giftedness of both poverty and non-poverty environments. This examination begins with Tannenbaum (1983) who theorized that children may demonstrate promise in

the realm of giftedness; however, the true growth of high level intelligence would only be realized in adulthood (Baldwin, 2005; Gagne, 2004; Wu, 2005). In addition, interactions with five factors were also specified (Hollingsworth, 2003). These included: (1) general intelligence; (2) special ability; (3) nonintellective traits; (4) environment; and (5) chance (Brown et al., 2005; Davis & Rimm, 2004; Hollingsworth, 2003). While this is a unique perspective it does not, however, coincide with the vast body of research pertaining to exceptional intelligence identified as innate in young children (e.g., Gagne & Belanger, 1993; Herrnstein & Murray, 1996; Sternberg, 1985).

Jensen (2000) examined factors of general ability, coined as the *g* factor, which is "the highest-order common factor in mental tests or tasks" (Jensen, 2000, p. 4). Baldwin (2005) identified Galton, "the father of differential psychology," as a pivotal character in the development and acceptance of the concept *g* (p. 108). However, Herrnstein and Murray (1996) discussed Spearman as "the first to hypothesize that the tests were correlated . . . [to] the general mental ability he then labelled g" (Herrnstein & Murray, 1996, p. 559). Despite the conflicting points of view, Jensen (2000) explained the complexities surrounding the *g* factor theory by stating:

> It is *g* that, as researchers say, "accounts for" the fact that all such mental tests are positively correlated to some degree, and *g* accounts for a greater proportion of the variance, or individual differences, than any other single factor that can be identified in the correlations

> among any large collection of diverse mental tests given to a representative sample of the general population. (p. 4)

Hence, the fundamental of the theory of *g* is that a *g* factor exists in all cognitive assessments and will continually denote variation among its subjects (Jensen, 2000).

Gagne (2004) instituted a model which philosophized about a "relationship among promise and fulfillment, or giftedness and talent" (Wu, 2005, p. 236). This model, known as the Differential Model of Giftedness and Talent (DMGT) is largely conceptualized by distinguishing between the terms *giftedness* and *talent* (Gagne, 2004). Gagne (2004) conceded that giftedness is comprised of the top ten percent of individuals who possess natural abilities in domains such as intellectual, creative, socioaffective, and sensiormotor; whereas talent is described as the top ten percent of the population who possess mastery of methodically developed fields such as arts, sports, and technology. The DMGT model involves catalysts in the developmental process which may either contribute or inhibit growth towards talent. These catalysts include interpersonal factors, environmental factors, and factors of chance (Gagne, 2004; Hardman, Drew, & Egan, 2006). Using the metric system as the preferred tool of measurement, Gagne (2004) established five degrees of giftedness: mildly; moderately; highly; exceptionally; and extremely. Each of these levels represents the top ten percent of the previous group. In order to address what populations may be representative of this equation, Gagne (2004) asserted that:

> different reference groups should be adopted for gifts and talents. In a nutshell, since everyone possesses some degree of every natural

> ability, it follows that the whole population should serve as the reference base to select the top 10 per cent for any form of giftedness. The only caveat is age. Because natural abilities have strong developmental curves, at least until early adulthood, the comparison must be made with same age individuals. (p. 131)

While the inclusion of many contributing factors in determining giftedness is a philosophical perception that has been investigated in the literature, Davis and Rimm (2004) acknowledged theories that consider relativity and culture based on differing norms and values as it contributes to the identification process. Of particular interest was Sternberg (1985, 2003), who developed an Implicit Theory of Giftedness. This theory considers excellence, rarity, productivity, demonstrability, and value. In addition, Sternberg (1985, 2003) constructed a Triarchic Theory that incorporated more than just an I.Q. score; included were analytic giftedness, synthetic giftedness, and practical giftedness (Sternberg, 1985, 2003). More specifically,

> analytic intelligence is exhibited by people who perform well on aptitude and intelligence tests. Individuals with synthetic giftedness are unconventional thinkers who are creative, intuitive, and insightful. People with practical intelligence are extraordinary adept in dealing with problems of everyday life and those that arise in their work environments. (Hardman et al., 2006)

Sternberg's (1985) conception of intelligence maintained that "accounts of intelligence are of two basic kinds: explicit theories and implicit theories" (p. 3).

Most intelligence tests possess the bias of its creators in respect to what intelligence is rather than on sound theory (Sternberg, 2003). Personal evaluations of intelligence usually reflect implicit theories moreover than explicit theories (Sternberg, 2003). "In 2000, Sternberg modified his Triarchic theory to include wisdom as a subtype of practical intelligence" (Davis & Rimm, 2004, p. 26) but not without criticism. While the trait of wisdom prompted reflection upon reputably respected individuals such as Ghandi and Mother Teresa, so too could individuals known for their ill-repute (e.g., Adolph Hitler; Davis & Rimm, 2004).

Gardner (1999) refuted addressing intelligence as moral or immoral, but rather viewed it as "strictly amoral" which may be put to constructive or destructive purposes (p. 45). For example, individuals may demonstrate mastery of a specific skill and use it to benefit society, while someone who possesses mastery of the same skill may choose to use it to malign society. Standardized assessments were dismissed as being an effective means of measuring intellect, since "intelligence is too important to be left to the intelligence testers" (Gardner, 1999, p. 3). Rather, Gardner (1983) proposed a theory of multiple intelligences [MI] in which individuals could better conceptualize the concept of intelligence. In all, seven intelligences were named: linguistic; logical-mathematical; spatial; musical; bodily-kinesthetic; interpersonal; and intrapersonal (Gardner, 1983). While seven types of MI were initially identified, additions of three new intelligences were also considered: naturalist intelligence; spiritual intelligence; and existential intelligence (Gardner, 1983). In addition, notions of emotional intelligence have been embraced by some individuals, but not necessarily by all. For example, Gardner (1999)

criticized Goleman's (1995) work that examined value in measuring emotional intelligence. Gardner (1999) equated emotional intelligence as concurring with the interpersonal and intrapersonal intelligences, except:

> when Goleman speaks about emotional intelligence as if it entails a certain set of recommended behaviors–empathy, considerateness, or working toward a more smoothly functioning family or community-he leaves the realm of intelligence, in a strictly scholarly sense, and enters the separate spheres of values and social policy. (Gardner, 1999, p. 69)

In sum, the MI theory demonstrates that as humans we inherently share commonalities due to our species but genetically we remain forever individual (Gardner, 1999).

2.2.3 Programs

The development of programs that conceptualize an enhancement in skill development for gifted students has been the pursuit of many respected researchers in special education. Significant contributions by Joseph Renzulli (e.g., 1971, 1977, and 1978) have been identified in the literature. Examples of Renzulli's work include the Three-Ring Conception of Giftedness that incorporates above average ability, task commitment, and creativity as equal aspects that determine giftedness (Renzulli, Reis, & Smith, 1981). Significantly, achievement in all three areas is not necessary in order to be identified as gifted in this model (Davis & Rimm, 2004). An additional development is the Revolving Door Identification Model. This model incorporates the same three criteria as the Three Conception of

Giftedness, but was expanded to include "four general families of information that can be used to analyze human abilities: psychometric, developmental, performance, and sociometric" (Renzulli et al., 1981, p. 32). In addition, to further promote inclusion in the exceptionalities of giftedness, Renzulli and Reis (1997) formatted a five step identification plan that considers: test score nominations; teacher nominations; alternate pathways (a multidimensional avenue); special nominations; and action information nominations (special interest in a particular project) (Davis & Rimm, 2004). Subsequently, Purcell and Renzulli (1998) have also constructed a Total Talent Portfolio that examines interests and abilities with an in depth look at preferences in learning, thinking, and teaching styles (Lopez, 2003; Purcell & Renzulli, 1998*)*. The overriding theme in much of Renzulli's efforts (e.g. Renzulli & Reis, 1997; Renzulli, Reis, & Smith, 1981) has been to broaden assessment strategies and the scope of enlistment practices that go beyond hard and fast intelligence measures.

Further models of inclusion for giftedness have been researched and applied to academic study in a variety of frameworks (Olenchak, 2001). Of particular interest are models that focused primarily on learners' individual needs within a classroom setting. Olenchak (2001) identified four such popular models: the Enrichment Triad Model established by Renzulli (1977); the Purdue Three–Stage Model constructed by Feldhusen and Kolloff (1978); the Individualized Programming Planning Model designed by Treffinger (1986); and finally the Autonomous Learner Model researched by Betts (1991). These models are similar in that ". . . all concentrated on modifications of content, process, and product at a

personal level" (Olenchak, 2001, p. 186). Thus, models for differentiated instruction were established with the intent of further developing the gifts of exceptional students within a regular classroom setting; unfortunately, these models often reflected poorly upon teachers' abilities to modify instruction effectively (Olenchak, 2001). For example, teachers " . . . chose to set educational goals that were easy to implement as opposed to selecting goals that might be more appropriate to individual student needs" (Olenchak, 2001, p. 188).

Differentiation has two perspectives: differentiated instruction, which focuses on the gifts of the student; and differentiated curriculum, which focuses on the delivery of content for gifted individuals (Olenchak, 2001). Hence, new approaches surfaced that could accommodate sophisticated learning of the regular curriculum. For example, Renzulli's (1988) Multiple Menu Model, and Renzulli and Reis' (1997) Schoolwide Enrichment Model were more accommodating in uniting differentiation of curriculum and instruction (Olenchak, 2001). In sum, differentiated instruction is an effective teaching practice for gifted students despite teacher limitations and "differentiation of some type, at least some of the time, is not only appropriate but also necessary for high-ability pupils" (Olenchak, 2001, p. 195).

Just as it is important to critically review the numerous theories that have contributed to frameworks and models existing in programs of giftedness, it is important to also critically review the possible implications of identifying giftedness among students in poverty.

2.3 Poverty

2.3.1Definition of Poverty

Concepts that form the definition of poverty are generally relative to economic inequality among citizens in any given society (Avis, 1989*).* However, *measures* are typically used to define poverty in Canada, since like most other countries, Canada has no *official* definition of poverty (Ross, Scott, & Smith, 2000). Rather, rates of poverty are categorized in absolute terms (i.e., a comparison of an individual's total income and his ability to purchase and maintain basic sustenance) or relative terms (i.e., a comparison of income and spending habits against the general population) to clarify levels of poverty (Ross et al., 2000). In addition, critical issues of depth and rate of poverty are debated, as are the varied formulas that are used to calculate and establish poverty lines (Ross et al., 2000).

In a classroom environment, lines of poverty may be assessed by reflecting on the contributing factors affecting the student population (Cross, 2004; Payne, 1998; Ryerse, 1990). In Canada, child poverty has been described in consideration of the effects on the child. This includes education, child abuse, and delinquency to children's rights (Ryerse, 1990). However, consideration of a working definition for poverty as it relates to the educational environment can be succinctly described as ". . . the extent to which an individual does without resources" (Payne, 1998, p. 16). A lack of resources, categorized as financial, emotional, mental, spiritual, physical, support systems, relationships/role models, and knowledge of hidden rules (understanding habits and unspoken cues)

contributes to the inequities which exist for the impoverished, gifted child (Slocumb & Payne, 2000).

In so far as policy, U. S. Congress (1988) addressed national concerns of underrepresentation among minority groups in gifted programs, and passed the Jacob K. Javits Gifted and Talented Students Education Act of 1988 (Ford, 1998). The purpose of this legislation was to honour talented and gifted minority students by providing financial assistance to schools (Ford, 1998). Years later,

> the National Association for Gifted Children (1997) published a position statement urging educators to use more than one test to make educational and placement decisions about gifted students and to seek equity in their identification and assessment instruments, policies, and procedures. (Ford & Harmon, 2001, p. 1)

However, an underrepresentation of disadvantaged children in gifted programs persists (Elhoweris, Mutua, Alsheikh, & Holloway, 2005; Schultz, 2002).

2.4 Implications of Poverty

2.4.1 Teacher Perception

A critical issue in the selection process for identifying gifted students in poverty is teacher perception (Callahan, 2005; Elhoweris et al., 2005). Children of poverty should not be served as though they arrived at school with the same background experiences as children from non-poverty homes, because these types of assumptions foster inequitable treatment among students (Slocumb & Payne, 2000). For example, minority children are often over-represented for cognitive deficits and under-represented for intellectual strengths in special education programs (Baldwin,

2005; Borland & Wright, 2000; Cross, 2004; Fahey & Reid, 2000; Ford, 1998; Ford & Harmon, 2001; Katzman, 2003; Passow & Frasier, 1996). Moreover, "treating all students equally in the identification of gifted students all too often results in the extreme under-identification of an entire segment of the student population who come to school quite 'unequal' " (Slocumb & Payne, 2000, p. 4). Fallacies in teacher perception may occur because: teacher nomination is not representational of potentially talented students; there is engagement in negative attitudes regarding culturally and linguistically different backgrounds; or English language proficiency is evaluated in nomination procedures for gifted programs (Elhoweris et al., 2005).

Brown, Renzulli, Gubbins, Siegle, Zhang, and Chen (2005) assessed teachers' assumptions regarding the identification of gifted students. Approximately 3000 participants, from teachers to university professors, participated in a study that evaluated their opinions on methods that may be employed to identify students for gifted programs. A 20 question survey instrument was used to explore teachers' perceptions of assessment practices. These 20 questions were organized into five factors: (1) Restricted Assessment; (2) Individual Expression; (3) Ongoing Assessment; (4) Multiple Criteria; and (5) Context-Bound.

One very significant finding in the study was the overall, consistent, and collective agreement among the participants that giftedness is not adequately being identified among students of poverty. This was significant particularly because it was a broad sampling of a population with varied educational interests and experiences. Furthermore, while the results indicated a general preference for Individual Expression, Ongoing Assessment, Context-Bound procedures, Multiple

Criteria, and strong disagreement with Restricted Assessment, it was in sharp contrast to real world practices (Brown et al., 2005). Comparisons were drawn against state mandates that enforce identification for gifted and talented programs to be solicited from data obtained in the delivery of intelligence and achievement tests almost exclusively (Brown et al., 2005). This outcome clearly indicated that both policy and practice were not reflective of educators' perceptions about what constitutes giftedness.

Elhoweris et al., (2005) investigated children's ethnicity on teacher's referral decisions for gifted programs. These researchers cited the existence of a paradox: (1) teachers identified that giftedness exists in all socioeconomic and ethnic groupings; and (2) very few students from low socioeconomic and minority backgrounds are in gifted programs. This was demonstrated when approximately 207 elementary teachers were solicited to participate in a short referral exercise for enrichment programs. All of the participants received a brief written description of a hypothetical student "who possessed the research-based characteristics of an individual who could be classified as gifted" (Elhoweris et al., p. 27). One third of the participants were informed that the student was European American, one third of the participants were informed that the student was African American, and one third did not receive any ethnic information regarding the student (Elhoweris, et al., 2005). After reading the description, participants answered two questions using a Likert scale (i.e., strongly agree, agree). The first statement asked participants to rate if the student should be referred for an evaluation for possible placement in a gifted

program. The second statement asked participants to rate if the student should be placed in a gifted program.

According to the results, the hypothetical child's ethnicity contributed to differences in the referral decisions of the participants. The participants were more inclined to recommend a referral when student ethnicity was not identified, followed by an inclination to refer the student of European American descent, and least likely to refer the student of African American descent (Elhoweris et al., 2005). The decision for immediate placement into a gifted program did not demonstrate any significance based on student ethnicity in the results. While there may be numerous factors contributing to the decisions made by the participants (e.g., age, gender, years of teaching experience), it is important to recognize that indeed teacher perception may be skewed; furthermore, it does not alter the fact that there remains an underrepresented population (i.e., minority populations, individuals living in poverty) of students in gifted and talented programs (Callahan, 2005; Elhoweris et al.; 2005 Frasier, 1989).

2.4.2 Underachievement

Another compounding factor of underserved populations is the existence of underachievement, which may be intrinsically or extrinsically perpetuated (e.g., personal social or emotional needs not being met, education not valued in the home, lack of appropriate programming). Cross (2004) described and discussed the experiences of teachers in the state of Wyoming regarding extrinsic factors contributing to underachievement among their gifted student population. The educators primarily described issues of seclusion in their dedication to deliver gifted

programs of education. This was perpetuated by a lack of financial support, and an absence of priority demonstrated by administrators (Cross, 2004). Underachievement was further impacted by a lack of concern from state departments, a limited amount of general resources, and minimal training available to teachers in the area of gifted education (Cross, 2004). Despite working and teaching with limited resources, these teachers strived to remain flexible and accommodating in gifted education; however, what remains at issue is the fact that gifted students may demonstrate underachievement due to the shortcomings of what their educators are experiencing (Cross, 2004).

A case study conducted by Schultz (2002) examined possible causes of underachievement in gifted students. The students were identified by their demonstrated discrepancies of academic performance and their measured cognitive abilities. Data for the two grade ten students, one male and one female, selected for this study was collected through a series of observations and interviews. Distinctions between each participant included gender differences, membership to social peer groups, and extra-curricular interests. The female student was observed to be reluctant to demonstrate above-average abilities, while the male student readily demonstrated academic success but with a lack of interest or challenge. In respect to course selection, neither participant was strongly inclined to take more appropriately challenging classes (i.e., historically many of the schools' gifted population opted for a health credit over a science credit to meet minimum graduation requirements and did not pursue the sciences any further), and there was a tendency to place greater priority on social groups and acceptance from peers (Schultz, 2002).

Participants were also asked how educators could improve their courses to better meet the needs of underachieving gifted learners (Schultz, 2002). The students identified a greater need for hands-on activities, more individualized instruction, and more enjoyable time spent in the classroom (e.g., lengthy lectures were considered boring; Schultz, 2002). In addition, the participants identified a desire for greater personal input in designing class course work and assignments that would still meet course requirements. It was indicated by one participant that if choices could be provided in how the curriculum was going to be delivered it may remove a stigmatism, and "I could do my interests without being put on the spot or compared to my friends" (Schultz, 2002, p. 210). In sum, the overriding message conveyed in this study was that choice and interest equated with engagement. Hence, the gifted student population may be more inclined to demonstrate superior skills and abilities if they are part of a more inclusive educational environment.

2.4.3 Paradigms

While research has not remained static over the last several years, the literature repeatedly identifies a need to not only cultivate alternative measures for gauging talent and intelligence, but more importantly an active employment of such methods (Slocumb & Payne, 2000). Championing for a shift in "the identification paradigm" (Slocumb & Payne, 2000, p. 45) is deemed necessary if practices are to be in alignment with current research findings. Numerous examples of how a shift in practices of measurement and assessment could occur were illustrated by contrasting current methods with possible alternatives:

> Cut off scores to preponderance of evidence; questioning admittance to providing support; relying on quantitative measures to relying on qualitative measures; recommendations to perceptions; nominations to whole-class screening; equality to equity; reliance on school work to consideration of environmental factors. (Slocumb & Payne, 2000, p. 45)

Adherence to new paradigms for the selection process may provide a host of new or additional criteria that could eliminate bias and translate into equity for students of poverty and non-poverty (Passow & Frasier, 1996).

The need to consider multidimensional, dynamic assessments in order to identify students who do not meet the standards of the mainstream population is a significant issue in gifted education (Frasier, 1989). More specifically, recommendations for an assessment of spatial ability have been identified as a critical component in assessing gifted students who may have poor verbal skills (Mann, 2005; Shea, Lubinski, & Benbow, 2001). However, spatial ability has been neglected in assessments of giftedness, since historically it has not been associated with academic and professional domains (Shea et al., 2001). Research that contradicts this notion may be found in the twenty-year longitudinal study of young gifted adolescents that examined the importance of spatial ability (Shea et al., 2001).

Approximately 563 gifted students between the ages of 12 and 14 were tracked to the age of 33 (Shea et al., 2001). The purpose of the study was to examine the usefulness of assessing spatial ability as a predictor of academic and professional outcomes of individuals demonstrating superior math or verbal reasoning scores in

the seventh grade (Shea et al, 2001). Data was collected over "four developmentally sequenced outcomes: (a) favorite and least favorite high school class, (b) undergraduate degree major, (c) graduate degree major, and (d) occupation at 33 years" (Shea et al., 2001, p. 605). Researchers found that the majority of boys chose a math or science as their favourite high school class, and a majority of girls chose humanities or social science as their favourite. The least liked high school classes were in the humanities and social sciences among the boys, and the maths or sciences among the girls. During their college years it was observed that mathematics, electrical engineering, or computer science were sought by individuals possessing both strong math and spatial skills. (Shea et al., 2001). Participants who possessed strong verbal skills sought areas such as humanities, social sciences, and biology. An examination of graduate degrees denoted similar findings. In terms of occupational pursuits, there was "significant migration across categories from undergraduate or graduate degree groups to occupational groups" (Shea et al., 2001, p. 609).

> The overall findings of the longitudinal study revealed that: intellectually talented adolescents with stronger spatial ability relative to verbal ability were more likely to be found in engineering and computer science-mathematics fields, whereas those with the inverse ability pattern tended to gravitate toward humanities, social science, organic science, medical arts, and legal fields. (Shea et al., 2001, p. 611)

These outcomes raised an important issue about the procedures and methods used to identify gifted and talented students. Many student gifts are being compromised

when math and verbal standards are the only criteria, or most important criteria, for entrance into gifted and talented programs (Shea et al., 2001). In addition, spatial ability has been correlated with socioeconomic status (SES); therefore, "utilizing spatial ability measures will identify more talented students from lower SES levels than do current talent-search procedures" (Shea et al., 2001, p. 612). This comprehensive study concluded that spatial ability must be recognized as a "crucial feature of the human cognitive repertoire" (Shea et al., 2001, p. 612).

Another example of alternative methods that may be applied to affect a paradigm shift in the identification process of gifted and talented students is in the delivery of an assessment. Scott and Delgado (2005) conducted a study to identify gifted minority preschool children using an instrument previously used to identify gifted minority children in kindergarten. The instrument used to screen the children consisted of nine cognitive tasks. Six were identification tasks (e.g., picture pointing, picture recognition), and three were generating tasks (e.g., description of word meaning, sharing of information about an item or topic; Scott & Delgado, 2005). The screening itself required only fifteen to twenty minutes to complete and was offered in English, Spanish, or both languages. Language preference was "determined by using a combination of the teacher's recommendation, the child's stated preference, and the child's actual response to a given language" (Scott & Delgado, 2005, p. 202). Prior to beginning the assessment, the children were shown a variety of certificates and stickers and informed they could select one upon completion of the screening. The children were praised during the assessment (Scott & Delgado, 2005). The assessment instrument possessed many unique features;

namely the provision of multiethnic exemplars, exemplars in word meaning, as well as an adaptation of using concrete familiar objects that transcend race and culture (Scott & Delgado, 2005). While accommodations such as the ones used by these researchers may not be age appropriate for older children, the employment of positive reinforcement and encouragement is significant. Furthermore, the notion of adapting assessment instruments and test-taking environments to enhance the assessment experience is thought provoking and innovative when contrasted to traditional assessment methods. However, the challenge of integrating novel techniques and approaches (i.e., qualitative measures) so that they may become common practices used in assessing and measuring giftedness in students remains daunting because adherence to quantitative practices prevails.

2.5 Summary

Theories and practices for identifying giftedness are ambiguous and complex (e.g., Cross, 2004; Schultz, 2002). Diversity exists in defining giftedness, as well as measuring and assessing for giftedness. In addition, there are a variety of factors affecting the identification of talents among children of poverty (e.g., Slocumb & Payne, 2000). Typically, conventional methods do not adequately assess the talents of impoverished populations. However, there is an absence of uniformity among what has been theorized and what is actually being conveyed by educators and researchers (e.g., Brown et al., 2005). An investigation of educators' assumptions about methods and procedures for identifying giftedness among students in poverty is a necessary first step in improving measurement and assessment practices.

CHAPTER 3: METHODS & PROCEDURES

3.1 Introduction

Poverty is a critical issue in Special Education for it may place exceptionally talented and gifted children at risk of being overlooked for referral into gifted programs (Slocumb & Payne, 2000). Identifying the culminating factors and conditions, which may contribute to this phenomenon, is essential in order for teachers and administrators to affect positive change in their current selection practices.

A comprehensive literature review in Chapter 2 was conducted to investigate and identify important aspects that may influence current practices in the recruitment of disadvantaged students for gifted programs. The identified gaps and inconsistencies in the literature have lead to the following research questions:

1. Is giftedness being identified among students of poverty?
    a. What are the current beliefs about practices related to identifying gifted and/or talented students?
    b. Do educators' teaching experiences in diverse socio-economic communities affect their perceptions of giftedness?
2. What practices should be employed to identify giftedness?

Inquiring about how educators identify and assess giftedness among students of poverty may inform ideas and opinions policy makers (i.e., school boards) may possess about practices that are being employed in schools today.

3.2 Instrument

An adaptation of the survey constructed by Renzulli, Brown, and, Gubbins (2005), entitled "Assumptions Underlying the Identification of Gifted and Talented Students", was used to investigate educators' perceptions and experiences regarding giftedness (see Appendix A). A revised version of this survey included the addition of: (1) five questions specific to identifying, assessing, and nominating students of poverty for gifted education programs; (2) a section to collect participants' demographic information (e.g., age, current position, years of experience); (3) and three open-ended questions soliciting opinions about giftedness and the delivery of programs. The 25 items on the survey utilized a five point Likert scale for respondents to indicate the extent of agreement with each statement (see Appendix B). The survey instrument addressed many of the complex issues surrounding giftedness very succinctly.

3.2.1 Reliability

In the original survey, reliability for each factor, excluding the factor of poverty, was calculated using Cronbach's alpha's resulting in estimates of 0.61, 0.67, 0.51, 0.54, 0.65, and 0.36 (Brown et al., 2005). A sixth factor was initially included in the survey (unnamed with an alpha value of 0.37), but it was omitted since the alpha level was very low and only consisted of two items (Brown et al., 2005). This was established in consultation with "four outside experts in gifted education [who] believed that the items of the fifth and sixth factor were conceptually connected and these two factors could be collapsed" (Brown et al., 2005, p. 73). "The new factor (a combination of factors 5 and 6) …had an alpha = 0.52" (Brown et al., 2005, p. 74). "In general, in the social and behavioral sciences, a good measure should have a Cronbach's alpha of at least .6 or .7

and preferably closer to .9" (Aron, Aron, & Coups, 2005, p.382). Thus, the overall internal consistency of the measures used in the survey may not demonstrate great reliability or stability in the results.

3.2.2 The Six Factors

The items in the original version of the survey were categorized into five factors. The five factors were established by creating scale scores for each "by summing the values associated with each item of each factor and dividing by the number of items for each respondent in the sample" (Brown et al., 2005, p. 74). In order to determine if giftedness was being identified among students in poverty, a sixth factor was added in this study that incorporated five new statements specific to poverty. Additionally, Cronbach's alpha was conducted to investigate reliability in the newly constructed sixth factor.

Factor one, titled Restricted Assessment, consisted of five statements pertaining to opinions about the sole use of test data with precise cutoff scores. Factor two, titled Individual Expression, consisted of four statements relative to the use of case study data and multiple formats of expression (e.g., Identification should include options that allow students to express themselves in many ways). Factor three, titled Ongoing Assessment, consisted of four statements regarding periodic review and using alternative criteria in the identification process. Factor four, titled Multiple Criteria, consisted of three statements inquiring about selection for gifted programs using multiple types of information (e.g., An effective plan for identification requires the use of several types of information about the student). Factor five, titled Context-Bound, consisted of four specific statements to consideration of culture, background

experiences, and environment. The sixth factor, titled Identifying Poverty, consisted of five statements specific to disadvantaged, impoverished student ability (Appendix C).

3.2.3 Factor Weighting

The six factors in the survey instrument were composed of a varying number of statements. Consequently, the total possible minimum and maximum scores or a value that could be obtained in each factor differed. For example, factor one consisted of five statements. If a participant was to strongly disagree with all five statements in factor one, the participant's total score on this factor would be 25. These values were determined by weighting the Likert scale used in the survey. Participants were offered five choices to determine agreement or disagreement with each statement: (1) strongly agree; (2) agree; (3) uncertain; (4) disagree; and (5) strongly disagree. The numerical value appointed to each choice was one through five, respectively. Thus, determining the extent to which a participant or category of participants agreed on any particular factor was evaluated by considering the minimum and maximum value of each factor. The statements in factor one were written with a desire to solicit disagreement by the participants (i.e., obtain a higher score), whereas the remaining factors were written with a desire to solicit agreement (i.e., obtain a lower score). This was the format used in the original survey and was subsequently followed in the adapted version. Differences also exist in the minimum and maximum values of each factor due to the differing number of questions within each factor (i.e., factor four consisted of only three questions, factor five consisted of five questions).

Table 1 Factor Scale Scores

Factor	Items	Possible Minimum & Maximum Scale Scores
I: Restricted Assessment	5	5 - 25
II: Individual Expression	4	4 - 20
III: Ongoing Assessment	4	4 – 20
IV: Multiple Criteria	3	3 - 15
V: Context-Bound	4	4 - 20
VI: Identifying Poverty	5	5 - 25

Note: Items are the number of statements comprising each factor; Scale Scores represent the range of possible scores in each factor.

3.3 Participants

One hundred and one of the approximately 500 surveys that were submitted to educators in a large urban school division were returned, resulting in approximately a 20% response rate. Educators were asked to respond to a variety of demographic questions, including: age; current school position; highest level of post secondary education; ethnic background; years of work experience with students who are gifted and/or talented; and years of work experience in low socioeconomic communities (Table 1).

The majority of participants were classroom teachers (73.3 %), who were between 30-40 years of age (31.7 %), with Bachelor degrees (57.4 %). The majority of participants also possessed 1-5 years of experience in their current roles (28.7 %), had

1-5 years of experience working with gifted and/or talented students (32.7 %) and had 1-5 years of experience teaching in a low socio-economic community (33.7 %).

Table 2 Demographic Findings

Demographic		Percentage
Current Position	Classroom Teacher	73.3
	Administrator	10.9
	Special Educator	8.9
	Other*	6.0
Level of Education	Bachelor	57.4
	After Degree	21.8
	Master's	12.9
	Other**	2.0
Age	20-30 years	27.7
	31-40 years	31.7
	41-50 years	23.8
	50+ years	14.9
Years Experience	1-5 years	28.7
	6-10 years	25.7
	11-20 years	25.7
	20+ years	19.8
Teaching Gifted	0 years	23.8
	1-5 years	32.7
	6-10 years	11.9
	10+ years	18.8
Low SES	0 years	19.8
	1-5 years	33.7
	6-10 years	22.8
	10+ years	17.8

Note: *Other teaching positions may include release teachers, catalyst teachers, and teacher librarians; ** Other levels of education may include diplomas, certificates, and doctorates.

3.4 Data Collection

Distribution of the surveys commenced following University of Saskatchewan Ethics Board approval and the approval of the school division director (see Appendix D). The intent and purpose of this study was presented to the principals of the elementary schools in person or by mail. Once principals agreed on staff participation, packages of questionnaires and a letter of instruction were provided and/or mailed out to the principals (see Appendix E). This was an opportunity for the researcher to offer specific information about, and instruction regarding, the research tool.

The questionnaire was then submitted to three groups of potential participants, including elementary school classroom teachers, resource room/ learning assistance teachers, and administrators for completion. The survey itself required approximately ten minutes to complete. There were provisions for anonymity and confidentiality (e.g., surveys were inserted into a stamped return envelope that was to be placed in secure location by the principal) to prevent any concerns regarding the solicitation of information that may be deemed threatening.

Self-addressed, stamped return envelopes were provided in each questionnaire package for principals to return the completed questionnaires via Canada Post. The questionnaire and letter of intent provided contact information for the researcher, her university supervisor, and the University of Saskatchewan Research and Ethics Board in case further questions and/or concerns arose. The return period for questionnaire packages was to occur within a two-week period following receipt of the packages. Follow-up telephone calls, emails, and letters were extended to the principals approximately three weeks after packages were distributed to inquire about surveys

which had not been returned (see Appendix F). This was repeated again in late September, and early October. Confidentiality was secured in all instances by forwarding participants' correspondence to a third party at the participating board office. In some instances, the original return envelope was used. Every effort was made to respect and ensure the privacy of each participant. Furthermore, provision of the results of the study was noted as being made available after April 2007 at the University of Saskatchewan Education Library.

3.5 Data Analysis

All data was entered into, and analyzed using, the Statistical Package for the Social Sciences (SPSS). The accuracy of the entered data was checked by another individual (i.e., a graduate student) for 100% verification prior to analysis. Categorical variables were coded when entered into SPSS (e.g., male coded as 0, female coded as 1).

The information collected was reviewed for missing data prior to conducting analyses. If there were only a few missing data points, and they were randomly distributed among the variables in the study, they were left as missing data. If the missing data was confined to one or two variables, the participants' non-responses were left out of the analyses. Demographic information collected from participating educators included current school setting (e.g., rural), current position (e.g., grade two classroom teacher), years of experience, level of post-secondary education attained, age, and ethnic background. Descriptive analyses (e.g., mean, standard deviation, and variance) were conducted on the continuous variables of age and years of experience. Frequency distributions of the categorical variables school setting, current position,

level of post-secondary education attained, and ethnic background were also considered. Similar to the data analysis of the original survey, a comparison of means was also conducted for this adapted version by calculating the factor scale scores. Following the data analyses conducted for the original survey (Brown et al., 2005), several univariate analyses of variances (ANOVAs) (i.e. a comparison of average responses of teachers, administrators, and Special Education teachers on the factor scale scores) were conducted. The relationship between independent educator variables (e.g., age, years of teaching experience) and the scale scores of the six factors (i.e., dependent variables) were also investigated using correlational analyses to determine the magnitude and direction of statistically significant relationships ($p<0.01$; $p<0.05$). In addition, Cronbach's alphas were conducted to investigate internal consistency within the six factors. Unlike the original survey, factor analyses of the six factors were not calculated due to the fact that the response rate was not adequate to do so. The response rate was 101 participants, and a few hundred would be necessary per factor (Aron, Aron, & Coups, 2005). Chapter four reports the results of these analyses.

CHAPTER 4: RESULTS

4.1 Introduction

This study examined educators' perceptions regarding the practices employed to recruit students into gifted programs. The central point of the survey was to have educators convey whether or not equity exists in these practices for students of poverty.

The present study set out to answer the following questions:

1. Is giftedness being identified among students of poverty?
    a.) What are the current beliefs about practices related to identifying gifted and/or talented students?
    b.) Do educators' teaching experiences in diverse socio-economic communities affect their perceptions of giftedness?
2. What practices should be employed to identify giftedness?

In order to investigate these issues, the survey was distributed to approximately 500 participants in a large, urban school division. The survey included demographic questions (e.g., age, current position) and a series of statements that inquired about the educators' level of agreement (i.e., 1) strongly agree; 2) agree; 3) uncertain; 4) disagree; and 5) strongly disagree). The statements were designated and arranged for the incorporation of factors. The six factors were categorized as follows: (1) Restricted Assessment, (2) Individual Expression, (3) Ongoing Assessment, (4) Multiple Criteria, (5) Context-Bound, and (6) Identifying Poverty. Furthermore, three open-ended questions were included to solicit opinions and assumptions regarding giftedness among students living in poverty. Specifically, participants were solicited to provide a definition for poverty, to express concerns regarding the identification of giftedness

among students in poverty, and to describe possible future directions of assessment practices that should be considered. Of the approximately 500 surveys that were submitted to educators in a large urban school division, 101 were returned. This resulted in an approximately 20% response rate. The majority of respondents were classroom teachers (73.3%) who had completed a Bachelor's degree (57.4%).

Descriptive analyses were used to examine participants' demographic information (e.g., years of experience, highest level of post-secondary education attained). Frequency distributions of the categorical variables (e.g., current position, level of post-secondary education attained) were also investigated by examining the scale scores. Univariate analyses of variance (ANOVAs) (i.e. to compare the average responses of teachers, administrators, and Special Education teachers on each factor) were examined to see if relationships or statistical significance existed between the variables. Correlational analyses were conducted to explore the magnitude and direction of relationships among the dependent variables (e.g., the six factors) and independent variables (e.g., current position, age, and years of experience teaching gifted students). In addition, Cronbach's alphas were also conducted to determine estimates of internal consistency for each of the six factors.

4.2 Survey Results

4.2.1 Research Question 1

The first research question asked: Is giftedness being identified among students of poverty? The adapted version of the survey *Assumptions Underlying the Identification of Gifted and Talented Students* (Brown, Renzulli, Gubbins, Siegle, Zhang, & Chen, 2005) used in this study contained six factors. These six factors

succinctly addressed giftedness in poverty by examining an array of dynamics that contribute to the identification and assessment processes. Moreover, responses to these six factors reflected educators' assumptions about identifying giftedness in poverty.

Descriptive analysis identified the participants according to very specific demographic data collected on the survey (e.g., current position, age, highest level of post-secondary education attained). This data provided insight about who responded to the survey (e.g., classroom teachers, administrators, resource room teachers). An analysis of the factor frequencies examined how the participants responded to the survey statements. Additionally, the frequencies provided data regarding the number of participants that responded to each factor, the total minimum and maximum values for each factor, as well as the means, standard deviations, and scale scores of the six factors (see Table 3). The original survey constructed the factors which were used in the adapted version. Furthermore, the original version of the survey instrument incorporated a reverse weighting for factor one which was subsequently applied in the adapted version. The five items in factor one were presented in a non-confirmatory manner (i.e., the statements were intended to be opposed to by the participant). Hence, the mean for factor one is significantly higher in comparison to the other factors.

4.2.2 Research Question 2

The factor frequencies further informed the second research question which asked: What are the current beliefs about practices related to identifying gifted and/or talented students? While the frequencies provided an adequate summary of educators' current beliefs about practices related to identifying gifted and/or talented students, the results were very homogeneous among the groupings. Therefore, a more in-depth

analysis was conducted to determine any statistical significance among the factors and the variables to better inform what the current beliefs about practices related to identifying gifted and/or talented students were among the participants.

Table 3 Average Factor Means

Factor	N	*M (SD)*
I: Restricted Assessment	100	18.63 (2.81)
II: Individual Expression	101	7.68 (1.82)
III: Ongoing Assessment	98	8.02 (1.69)
IV: Multiple Criteria	101	4.50 (1.28)
V: Context-Bound	100	8.59 (2.23)
VI: Identifying Poverty	93	11.13 (2.58)

*Note: N number in sample; M mean; Values in parentheses represent standard deviation

Correlations were conducted to investigate the relationships among the dependent variables (i.e., the factors) and the independent variables (i.e., age, current position, and years of experience). Typically, correlations are conducted between the numerical variables as means to identify the extent of how they may correspond (Sweet & Grace-Martin, 2003). Six correlations were determined to be statistically significant at levels of $p<0.01$, or $p<0.05$, indicating that chance was an unlikely cause of the relationships, which is of particular importance in a small sample size (Sweet & Grace-Martin, 2003). A positive correlation was determined among factor one (restrictive

assessment) and current position (.263; $p<0.01$). There were negative correlations denoted among factor four (multiple criteria) and age (-.217; $p<0.05$); factor five (context bound) and current position (-.209; $p<0.05$), as well as highest level of post-secondary education attained (-.265; $p<0.01$). There were also negative correlations detected in the sixth factor (identifying poverty) among current position (-.212; $p<0.05$), and years of experience teaching gifted and/or talented students (-.250; $p<0.05$; see Table 3). Correlations around +/- 0.2 are typically considered very weak; therefore, these results are non-specific indications of relationships among the variables (Aron, Aron, & Coups, 2005). However, practical importance exists in the individual responses and in the variables.

In addition, two open-ended questions also informed the second research question. The first open-ended question asked: How do you define giftedness and/or talent? The responses to this question were informative in understanding what educators' beliefs are concerning the practices related to identifying gifted and/or talented students because notions of what constitute giftedness were disclosed by the participants. Approximately 89% (N = 90) of the participants responded to the first open-ended question (see Appendix G). The results of the first open-ended question have been categorized into three themes: (Theme A) responses that included a description of ability (i.e., exceptional) and/or a measurement in multiple capacities (i.e., in many capacities); (Theme B) responses that included a description of ability (i.e., exceptional) and/or a measurement in a single capacity (i.e., one academic area); and (Theme C) responses that included a description (i.e., exceptional) but did not

Table 4 Correlation Results

Factors	1	2	3	4	5	6
Independent Variables						
Current Position	.263**	---	---	---	-.209*	-.212*
Years Experience	---	---	---	---	---	---
Level of Education	---	---	---	---	-.265**	---
Age	---	---	---	-.217*	---	---
Years in Low SES	---	---	---	---	---	---
Years Experience w/ Gifted	---	---	---	---	---	-.250*

Note: *indicates correlation was significant at the 0.05 level; **indicates correlation was significant at the 0.01 level.

include a measurement of capacity (i.e., one or more academic areas). The themes were constructed by examining similarities in the responses.

Furthermore, the second open-ended question was also informative in better understanding educators' current beliefs about practices related to identifying gifted and/or talented students by asking: Do you believe educators should be concerned about the extent children in poverty are identified for gifted and/or talented programs? (Why or why not?). The second open-ended question was answered by approximately 90% of the participants (N = 91; see Appendix G). The participants disclosed opinions conveying: (1) either a belief that concern exists or do not exist; and/or (2) to what

extent. The results of this data have been categorized into two themes: (Theme A) a sampling of affirmative responses (i.e., *"yes, because too often they are disregarded")*; and (Theme B) a majority of the negative and/or objective responses (i.e., *"no, the test should be valid without information about socio-economic situation").* The themes were constructed by examining similarities in the participants' responses.

4.2.3 Research Question 3

The third research question asked: Do educators' teaching experiences in diverse socio-economic communities affect their perceptions of giftedness? The descriptive analysis informs this research question by identifying that only 23.8 % of respondents noted having no experience teaching in low socio-economic communities (see Table 3). Thus, the majority of participants shared perceptions, assumptions, and opinions about the procedures used to identify giftedness in poverty with first-hand experience of teaching in impoverished communities. Therefore, it is largely their perceptions of giftedness that are reflected throughout the data (e.g., the factor frequencies, the correlations, and the open-ended questions).

Analyses of variance (ANOVA's) were used to investigate differences that may exist between the means and within the means of the groups (i.e., administrators, classroom teachers) on the variables (i.e., age, level of education) to better inform if teaching experiences in diverse socio-economic communities affected perceptions of giftedness. When comparing the dependent variables (i.e., the six factors) and the independent variables (i.e., current position, years of experience) the ANOVA results indicated there was no statistical significance in the mean scores at the 0.01 and 0.05 levels. This was likely due to the small sample sizes in some of the groups.

Appropriately, the approximate number of participants required in each group (i.e., a group of 3: administrators, classroom teachers, learning assistance teachers) needed in order to maintain 80% power for an ANOVA at the .05 significance level would be approximately 50 individuals to demonstrate a medium effect size (.25; Aron et al., 2005). A power of 80% reflects the probability of observing real differences between and among the groups. Furthermore, effect size (small .10, medium .25, and large .40) denotes the strength or effect of differences found between the variables (Aron et al., 2005). Allowance for a type I error occurring (rejecting the null hypothesis even though it is true) is only 5% when the significance level is set at .05, and only 1% when set at .01

Table 5 ANOVA Results

Independent Variable: Current Position	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.59 (2.78)	6, 92	1.27	.277
Factor 2	7.70 (1.82)	3, 97	.148	.931
Factor 3	8.02 (1.69)	6, 91	.411	.870
Factor 4	4.50 (1.28)	6, 93	.565	.757
Factor 5	8.60 (2.23)	6, 93	.958	.458
Factor 6	11.13 (2.58)	6, 86	.734	.624

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

Independent Variable: Years Experience	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.63 (2.81)	3, 96	2.75	.047
Factor 2	7.68 (1.82)	3, 97	.148	.931
Factor 3	8.02 (1.69)	3, 94	.821	.485
Factor 4	4.50 (1.28)	3, 97	1.50	.220
Factor 5	8.60 (2.23)	3, 96	.696	.557
Factor 6	11.13 (2.58)	3, 89	.251	.860

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

Independent Variable: Level of Education	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.69 (2.79)	4, 89	.481	.750
Factor 2	7.68 (1.82)	4, 90	1.34	.262
Factor 3	7.98 (1.73)	4, 87	1.14	.345
\				
Factor 4	4.50 (1.28)	4, 90	.551	.699
Factor 5	8.60 (2.28)	4, 89	2.56	.044
Factor 6	11.06 (2.62)	4, 83	.885	.477

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

Independent Variable: Age	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.65 (2.82)	3, 95	3.52	.018
Factor 2	7.67 (1.82)	3, 96	1.05	.376
Factor 3	8.00 (1.69)	3, 93	.717	.544
Factor 4	4.50 (1.28)	3, 96	1.67	.179
Factor 5	8.58 (2.24)	3, 95	.994	.399
Factor 6	11.10 (2.58)	3, 88	.819	.487

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

Independent Variable: Years in Low SES	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.72 (2.80)	3, 90	1.19	.317
Factor 2	7.67 (1.86)	3, 91	.702	.553
Factor 3	8.02 (1.72)	3, 88	.325	.807
Factor 4	4.48 (1.30)	3, 91	.839	.476
Factor 5	8.55 (2.28)	3, 90	.485	.693
Factor 6	11.01 (2.54)	3, 84	1.17	.325

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

Independent Variable: Years Teaching Gifted	*Mean (SD)*	*df*	*F*	*p*
Dependent Variables:				
Factor 1	18.70 (2.87)	3, 83	.644	.589
Factor 2	7.75 (1.90)	3, 84	.211	.888
Factor 3	8.06 (1.77)	3, 81	.542	.655
Factor 4	4.50 (1.29)	3, 84	.880	.455
Factor 5	8.53 (2.30)	3, 83	1.69	.176
Factor 6	10.89 (2.60)	3, 76	1.80	.155

Note: * indicates alpha was significant at the 0.01 level; ** indicates alpha was significant at the 0.05 level.

4.2.4 Research Question 4

The fourth research question asked: What practices should be employed to identify giftedness? The mean results of the factor frequencies (see Table 3) were indicative of practices educators hold preferences for; however, the written responses of the third open-ended question were very explicit and informative. The third open-ended question asked: What future directions would you like to see the area of giftedness take (i.e., relating to identification, assessment, programming)? The responses were categorized in three themes: (Theme A) responses that addressed identification (i.e., by whom, timelines, labels, and domains); (Theme B) responses that addressed assessment (i.e., measurement tools); and (Theme C) responses that addressed programming (i.e., delivery models of gifted education). These themes were constructed by examining similarities in the participants' responses.

The third open-ended question was unanswered frequently throughout the survey (N = 75; only approximately 74% responded); however, it was also the most varied in respect to responses. In their written responses, educators expressed a multitude of ideas, opinions, and recommendations to improve or change current practices for identifying giftedness. Examples of their recommendations included: more inclusive assessments (approximately 25%), periodic reviews (approximately 7%), and greater teacher input (approximately 7%; see Appendix G).

In summary, the results of the data included a description of the demographics (i.e., largely classroom teachers possessing bachelor degrees, and between 30-40 years of age). The ANOVA's were inconclusive due to limited respondent participation. The correlations only indicated areas of potential relationships but were considerably weak and Cronbach's alpha for the newly constructed sixth factor was 0.53. The open-ended questions were responded to by 90% of the participants with multiple themes.

A detailed discussion of the results and possible implications of the study are presented in chapter five.

CHAPTER 5: DISCUSSION

5.1 Summary

5.1.1 Purpose and Procedures

The purpose of the research project was to identify educators' perceptions about giftedness in poverty. The major research question put forth asked: 1) is giftedness being identified among students in poverty? While this research question is very direct, it contains some ambiguity. Therefore, in order to better investigate a more thorough and comprehensive answer, subsequent questions were posed: 1a) what are the current beliefs about practices related to identifying gifted and/or talented students? 1b) do educators' teaching experiences in diverse socio-economic communities affect their perceptions of giftedness? To conclude the study, the closing question inquired: 2) what practices should be employed to identify giftedness?

The purpose of the survey instrument, "Assumptions Underlying the Identification of Gifted and Talented Students" (adapted from Renzulli, Gubbins, & Brown, 2005; see Appendix B) was to evaluate educators belief systems about the concept of giftedness, specifically towards impoverished children. The survey requested demographic information (i.e., age, highest level of post-secondary education attained, years of experience teaching gifted individuals,) inquired about level of agreement for a series of statements categorized into six factors (i.e., restrictive assessment, individual expression, ongoing assessment, multiple criteria, context-bound initiatives, and identifying poverty), and asked for responses to three open-ended questions (i.e., 1) How do you define giftedness? 2) Should educators be concerned

about the extent children in poverty are identified for gifted and/or talented programs? 3) What future directions would you like to see the area of giftedness take?).

The procedures included distributing approximately 500 surveys to a large, urban school division's elementary schools. Letters of instruction accompanied the survey packages that were delivered to secure efforts made to protect the confidentiality of the participants. Follow-up phone calls, emails, and visits were conducted to generate greater response and return rates. In sum, 101 surveys were returned (approximately a 20% response rate). The following is a discussion of the results, the limitations, a conclusion, and implications for practice and future research.

5.2 Findings

The major findings in this research include:

1. Greater awareness should be devoted to the cultural and environmental experiences of the student for recruitment into gifted and/or talented programs.
2. The participants expressed concern that current standards used to recruit students to gifted and/or talented educational programs may not necessarily reflect equitable or best practices.
3. Most participants possessed experience teaching in diverse socio-economic communities and expressed broad and multifaceted perceptions of giftedness.
4. A majority of the participants identified a desire for broader identification strategies in the processes that identify students for programs of enrichment. This included recommendations for a broader definition of

giftedness, consideration of individual expression, implementing multiple forms of criteria, permitting individual expression, and on-going assessments.

5.2.1 Research Question 1

The first research question posed was: Is giftedness being identified among students in poverty? It was important to firstly identify who the participants were that responded to the survey questions. However, the results of the factor frequencies inform opinions and assumptions held by educators about the degree to which giftedness is being identified among students in poverty. An examination of the results for each factor indicates that there should be alternative and broader strategies to assess and identify students of poverty for gifted and/or talented programs.

5.2.1.1 factor one: restrictive assessment. Factor one examined educators' assumptions about restrictive assessment practices in the identification of gifted and talented students (e.g., using intelligence tests or achievement tests as the primary means of identifying giftedness). Importantly, factor one implemented reverse weighting because the statements were written in a non-confirmatory manner (i.e., the statements were intended to be opposed; e.g., Identification should be restricted to a fixed percentage of the total population). The participants responded relatively positively (N= 100, *M*=18.63, *SD*= 2.81; absolute possible maximum value 25). A high rating indicated that participants were relatively opposed to using restrictive assessment techniques. There appeared to be a common belief among these educators that restrictive assessment is not an effective application for identifying gifted students when used exclusively. The implication of these findings is that practice is not concurrent with opinion. Hence, relying on a statistical score should not be the most telling piece of evidence to indicate

giftedness. Specifically, using a cut-off score on an intelligence test to classify students into enrichment programs does not illuminate student abilities which are greater than what can be evaluated on a single standardized measure.

5.2.1.2 factor two: permitting individual expression. Factor two inquired about educators' perceptions in relation to utilizing individual expression in the identification process for gifted and talented students. The statements in factor two inquired about implementing case study data, self-expression (i.e., written, oral, visual, constructed, interpersonal), assessment of non-intellectual factors (e.g., creativity, leadership), and some student selected tasks (i.e., creative performance). The mean (N=101, *M*=7.68, *SD*=1.82) for factor two indicated that participants were partial to the allowance of individual expression. This was demonstrated by contrasting the total possible numerical minimum and maximum values for factor two (i.e., 4 and 20). Furthermore, the relatively low mean indicated strong agreement of the statements presented in factor two. Participants advocated provision of individual expression in the identification of gifted and talented students. The implications of this finding are important because it is accepting of a more inclusive model. This adaptation of traditional assessments for identifying giftedness would permit students to participate in their evaluation and express their giftedness in domains that are meaningful for the student. Furthermore, it would be a more holistic way to assess the skills and abilities of students.

5.2.1.3 factor three: ongoing assessment. Factor three examined the use of on-going assessment (e.g., periodic reviews, using alternative criteria) in the identification of gifted and talented students. The participants' assumptions reflected a need for this consideration when assessing students for gifted and/or talented programs (N=98,

M=8.02, *SD*=1.69) as indicated by the low mean. Similarly, the low factor mean indicated strong agreement of the statements presented in factor three. This was illustrated by contrasting the total possible minimum and maximum values for factor three (4 and 20, respectively). Specifically, the results demonstrated that participants believed that ongoing assessment is a valid method for identifying gifted students. The implications of this finding are important because it would positively expand the boundaries of criteria used to recruit students into enrichment programs. By increasing the criteria characteristics: 1) artistically talented students may be better evaluated; 2) regular periodic reviews for both previously identified and non-identified students may occur; and 3) the collection of student data may be beneficial for follow-up programming.

5.2.1.4 factor four: use of multiple criteria. The fourth factor queried educators' beliefs regarding the use of multiple criteria to select students for gifted programs. The total possible minimum and maximum values for factor four were 3 and 15. Participants conveyed strong agreement to the three statements included in this factor, as indicated by the mean (N=101, *M*=4.50, *SD*=1.28). On average, participants perceived there was great value in the administration of multiple criteria for identifying gifted and talented students. Their assumptions regarding beliefs that gifted and talented students may express their abilities in many ways, that giftedness in some students may develop at certain ages and in specific areas of interest, and that an effective plan for identification requires the use of several types of information about the student is very progressive and revealing. This implies that conventional definitions and concepts of giftedness have been too restrictive in the identification process.

5.2.1.5 factor five: use of context-bound initiatives. Factor five investigated the employment of context-bound initiatives (e.g., consideration of culture, environment, and background experiences) for the purpose of identifying gifted and talented students. The overall mean value of responses was low (N=100, *M*=8.59, *SD*=2.23) which illustrated agreement for the statements outlined in factor five, particularly when contrasted to the lowest and highest values possible for that factor (4 and 20 respectively). Furthermore, this indicated that the participants were amenable to considering the concepts of locally developing methods and criteria for identification of gifted and talented students, as well as explicit teaching of resilience in gifted programs to ensure recruitment and retention of students from poverty. Educators wanted to assess the needs of a community, as well as the types of services provided in their schools and school division, when determining methods that may best assess giftedness in students.

5.2.1.6 factor six: identifying poverty. The sixth factor addressed educators' assumptions about whether or not it is essential to identify poverty among gifted and talented students. The mean (N=93, *M*=11.18, *SD*=2.58) response indicated that participants recognized a need to consider the issues of poverty in the identification process for gifted and talented programs. This was evident by contrasting the minimum and maximum values for factor six which were identified (i.e., 5 and 25 respectively). This factor specifically addressed what educators may or may not deem important about the existence of poverty among gifted students. The message expressed in the means of this factor conveyed that these educators believed there is importance in recognizing the coexistence of giftedness and poverty when identifying gifted and talented students.

Moreover, gifted students in poverty may be at a disadvantage in the current identification processes employed for identifying students for enrichment programs.

5.2.1.7 summary of factor findings. Educators in this sample did not advocate for exclusive restrictive assessment practices in the identification of giftedness. However, initiatives such as individual expression, ongoing assessments, establishing multiple criteria, considering contextual frameworks, and acknowledging issues of poverty were considered important components to the selection process for gifted programs. Furthermore, the frequencies are very informative about how the participants responded to the variables in the survey and provide practical importance to this study.

In sum, educators indicated a variety of directions and initiatives that should be considered when identifying giftedness in poverty. The summarized responses examined in the factor means highlight important concepts, ideals, and beliefs. The statistical data gathered to answer the second research question contributes a general guide to answering: Is giftedness being identified among students in poverty?

5.2.2 Research Question 2

The second research question asked: What are the current beliefs about practices related to identifying gifted and/or talented students? Correlational analyses were conducted to investigate relationships among the dependent variables (i.e., the factors) and the independent variables (i.e., age, current position, and years of experience). The results of these analyses illuminated general indications of relationships among the variables; unlike the factor frequencies which summarized the data and provided a large overview.

5.2.2.1 correlational findings. Firstly, statistical significance was observed among the independent variable current position and factor one (restrictive assessment; $r = .263$; $p < 0.01$). The positive correlation indicated that as a current level of position increased (classroom teacher, administrator, and other) so too did the scaling in opposition of the statements in factor one. That is, a high mean in factor one indicated strong disagreement of the statements posed regarding restrictive assessment practices. The positive correlation indicated that administrators and other individuals (learning assistance teachers, teacher librarians, and catalyst teachers) were more inclined to oppose such practices than classroom teachers. This correlation implied educators with areas of specialization (e.g., learning assistance, administration) were more inclined to dismiss practices of exclusivity, in so far as assessing students for giftedness based solely on norms and/or measures of intelligence. Educators' current beliefs about practices related to identifying gifted and/or talented students indicated that restrictive assessments may be quite limiting in scope.

A statistically significant negative correlation was observed between the independent variable of age and factor four (multiple criteria; $r = -.217$; $p<0.05$). This indicated that as the age of participants increased, their mean scores for factor four decreased. The older the educator, the greater value placed on the implementation of multiple criteria being used in the identification of gifted students. However, the concept of variety in assessment techniques was valued by a large majority of the participants. In sum, educators' current beliefs about practices related to identifying gifted and/or talented students indicated the use of multiple criteria as an important investment for students. An educator's age may be an influencing factor for this belief.

A statistically significant negative correlation was observed between the independent variable current position and factor five (context bound initiatives; $r = -.209$; $p<0.05$). As the category of positions increased in value, participants' ratings of implementing context-bound initiatives decreased. A low rating on this factor indicated strong agreement toward incorporating context-bound practices (e.g., consideration of a student's culture, background experiences) in the identification and assessment of giftedness in students.

In addition, the independent variable highest level of post-secondary education attained and factor five (context bound initiatives) also demonstrated a significant negative correlation ($r = -.265$; $p<0.01$). This relationship indicated that as levels of post-secondary education increased (e.g., bachelor's degree, Master's degree, and other levels of training and education) the respondents were more likely to demonstrate strong agreement for incorporating context-bound initiatives (i.e., as indicated by a decreased numerical score). Educators with training beyond a bachelor's degree were more inclined to consider liberal practices in the identification of gifted and talented students. Perhaps, this finding can be attributed to participants' higher levels of education, specialization, or training.

Educators' current beliefs about practices related to identifying gifted and/or talented students indicated that the incorporation of context –bound initiatives would be a beneficial undertaking. An educator's position and/or level of post-secondary education are influential in these beliefs. These relationships are practically important because it presents a view those educators with higher and/or additional levels of education, and who hold positions beyond regular classroom teachers, are more likely

to be sensitive to the underlying implications of a gifted student's culture and background experiences.

A significant negative correlation was found between the independent variable current position and factor six (identifying poverty; $r = -.212$; $p<0.05$). This relationship indicated that as the categories of current level of position increased (i.e., a value of 1 represented classroom teachers, a value of 2 represented administrators, a value of 3 represented others such as resource room teachers) the response to the statements regarding poverty (e.g., Students of poverty should be assessed and referred to gifted programs for their potential) decreased. This is considered a positive finding because a low mean for factor six (identifying poverty) indicated strong agreement to the statements that were posed. Furthermore, it may be inferred that educators with experience or expertise beyond classroom teachers were more inclined to identify poverty as a significant issue in the identification of gifted and talented students.

In addition, a significant negative correlation was observed among the independent variable years experience teaching gifted individuals and factor six (identifying poverty; $r = -.250$; $p< 0.05$). That is, as educators acquired more years of experience teaching gifted students, they were more likely to be in stronger agreement with the statements that discussed the significance of poverty (e.g., Our current assessment practices are lacking an inclusiveness of students of poverty) and the identification of gifted and talented students. This relationship inferred that educators with more experience teaching gifted students are perhaps more cognizant of the issues poverty may have on the gifted identification process. Educators considered poverty to be a significant area to consider in identifying gifted and/or talented students. An

educator's position and/or years of experience teaching gifted individuals affect these beliefs.

5.2.2.2 correlation summary. The results of the correlational analyses informed the second research question which asked: What are the current beliefs about practices related to identifying gifted and/or talented students? There were several very general relationships, indicated by both positive and negative correlations, which were identified between the variables. Furthermore, these correlations also inform the major research question posed which asked: Is giftedness being identified among students in poverty? by illuminating some specific ideas and opinions of particular participants.

5.2.2.3 open-ended questions 1 & 2. The second research question posed asked: What are the current beliefs about practices related to identifying gifted and/or talented students? Correlational analysis identified general indications of positive and negative relationships between several of the variables. However, two open-ended questions at the end of the survey also sought to inform the second research question.

The first open-ended question inquired: How do you define giftedness and/or talent? Response to this question further informed what the current beliefs are regarding the concept of giftedness and/or talent. The definitions of giftedness and/or talent were central to ability and domains (see Appendix G). Many respondents identified giftedness as naturally possessing capacity of an unusual degree. Terms used included: *extraordinary, exceeding, and excelling.* Interestingly, attached to the definition was generally a unit of measurement expressed in domains. For example, many participants identified giftedness as occurring in only one domain (i.e., academically, or artistically, or musically). However, there were some individuals that defined giftedness as

occurring in several domains (i.e., occurring in many areas such as academically and socially). Furthermore, there were a few respondents who determined that giftedness could exist in either one or more domains. For example, one participant identified giftedness as “a natural ability in one or more areas”. The results of the first open-ended question have been categorized into three themes: (Theme A) responses that included a description of ability (i.e., exceptional) and/or a measurement in multiple capacities (i.e., in many capacities); (Theme B) responses that included a description of ability (i.e., exceptional) and/or a measurement in a single capacity (i.e., one academic area); and (Theme C) responses that included a description (i.e., exceptional) but did not include a measurement of capacity (i.e., one or more academic areas; see Appendix G).

The second open-ended question asked: Do you believe educators should be concerned about the extent children in poverty are identified for gifted and/or talented programs? The responses to this question supplemented the data to better inform what the current beliefs about practices related to identifying gifted and/or talented students may be. In sum, the responses conveyed opinions of whether or not concern exists in the current practices used to identify giftedness, and/or to what extent. For example, most of the responses began with either a *yes* or a *no* and was followed by an explanation (see Appendix G). Approximately 79% of the respondents answered yes, that there was reason to believe there is concern regarding the extent to which children of poverty are being identified for gifted and/or talented programs. Individuals conveyed reasons such as: cannot be assessed the same way; these students require greater support; there lacks equity in opportunity; they are disadvantaged in the process; other needs take precedence they lack enriching background experiences; and

it is difficult to get past the barriers of poverty. In contrast, very few respondents (approximately 20%) answered no and/or objectively, that there is no or little reason to believe concern exists regarding the extent to which children of poverty are being identified for gifted and/or talented programs. Examples of their justification included: "if a student is gifted, it is recognized no matter what the circumstance"; and "unsure; I am hopeful all kids are identified, but they may not be; may be by chance". The results of this data have been categorized into two themes: (Theme A) a sampling of affirmative responses, and (Theme B) a majority of the negative and/or objective responses (see Appendix G).

5.2.2.4 open-ended questions 1 & 2 summary. The participants' responses to the first two open-ended questions shed valuable insight on the current beliefs about practices related to identifying gifted and/or talented students. In sum, the participants indicated that notions of giftedness are varied and multifaceted, and concerns surrounding the recruitment practices for gifted programs are not without limitations. However, there is additional significance in these responses because they address the major research question: Is giftedness being identified among students in poverty? These responses may very well be the most compelling piece of evidence indicating that giftedness is not adequately being identified among impoverished student populations.

5.2.3 Research Question 3

The third research question posed was: Do educators' teaching experiences in diverse socioeconomic communities affect their perceptions of giftedness? The majority of respondents (33.7%) possessed 1-5 years of experience teaching in low socioeconomic communities, and an additional 40.6% of respondents possessed greater

than five years of experience when the remaining categories were combined (e.g., 6-10 years, 10+ years). Thus, it may be determined that a great majority of the participants had experience teaching in low socioeconomic communities (19.8% reported having no experience).

Subsequently, it is possible that the participants' experiences of teaching in low socioeconomic communities have affected their perceptions of giftedness. While the variable years of experience teaching in a low socioeconomic community did not demonstrate statistical significance in the ANOVA's, the practical importance is important. It is reasonable to assume that the first two open-ended questions were responded to by a large number of individuals possessing experience teaching in low socioeconomic communities. The response rates to the first two open-ended questions were approximately 89% and 90% respectively. Thus, it may be inferred that a great majority of the data was influenced by educators' experiences teaching in low socioeconomic communities. Furthermore, had the sample size been larger in each of the groupings, the likelihood of observing differences between and among the means would have been better. In addressing the major research question: Is giftedness being identified among students in poverty? It may be asserted that educators possessing experience teaching in low socioeconomic communities identified inadequacies that exist in the gifted identification processes.

5.2.5 Research Question 4

The fourth research question inquired: What practices should be employed to identify giftedness? The responses derived from the third open-ended question best informed what the participants believed were avenues to pursue to affect positive

change in the identification of gifted and/or talented students. The third open-ended question asked: What future directions would you like to see the area of giftedness take (i.e., relating to identification, assessment, and programming considerations)? This question was most frequently not answered (only about 73% of respondents replied). In addition, there was a small percentage (approximately 3%) that was uncertain what the recommendations should be (i.e., "unsure", and "not certain at this time"). The participants' responses to the third open-ended question have been arranged into three themes: (Theme A) responses that addressed identification (i.e., by whom, timelines, labels, and domains); (Theme B) responses that addressed assessment (i.e., measurement tools); and (Theme C) responses that addressed programming (i.e., delivery models of gifted education; see Appendix G).

However, the participants who did respond to this question provided a multitude of recommendations. Some recommendations included: creativity could be better recognized; that kids should not be labeled as gifted; there should be culturally sensitive testing; the gifted students should be grouped according to age throughout a school division; earlier identification; there should be a broadening in the means and ways of assessment; there should be team analysis and identification; and there should be more frequent assessment and monitoring. Essentially, the written responses of the participants were a reiteration of the six factors: there should be less use of restrictive assessments; allowances for more individual expression; regular ongoing assessments; application of multiple criteria; acknowledgement of context-bound factors; and identification of issues of poverty. What was most significant about the third open-ended question was that the respondents articulated these needs, opinions, beliefs, and

suggestions in their own words. Significantly, the responses to question three were synonymous with the responses on the survey instrument. The similarities may be a reiteration of the language presented in the items on the survey; nonetheless, the responses still reflect personal opinions and beliefs. Furthermore, the recommendations outlined indicated that in order for giftedness to be identified among students in poverty effectively, multiplicity and diversity in assessment, and programming are required.

In sum, the collective voice of the educators who participated in this research project represented with conviction in their personal experiences, wisdom, and knowledge that giftedness is not being identified among students in poverty adequately.

5.3 Limitations

It is imperative to recognize that the results and subsequent suggestions communicated throughout the research project are reflective of a small pocket of the population. The participants all hailed from the same school division. In addition, approximately 75% of the participants possessed 1-5 years of experience teaching in a low socio-economic community. Hence, the first limitation in this study was insufficient generalization. The lack of input from private educational institutes, and significant rural school divisions, must be considered a limitation because communities largely determine what constitutes giftedness and poverty. Differences and similarities may not be generalized across other school divisions across Saskatchewan for this reason. In addition, an absence of high school teachers' opinions may also be considered a limitation. High school educators' assumptions, observations, and experiences may be very revealing about the identification of giftedness among students in poverty. For example, high school educators would be able to report

different observations and experiences based on different student ages, greater independence, and growth in interests and abilities. In addition, high school educators would be in a better position to track students labelled as gifted and/or talented to observe and report the potential outcomes of those students post-elementary.

A second limitation was the low response rate. Respondents were from one large urban school division. Despite the accessibility to a few hundred educators, their response was minimal. Perhaps the survey could have been made accessible through email which may have been more convenient and certainly more time efficient for educators. Another alternative would have been to meet with educators in each participating school to discuss the purpose of the study and administer the survey as a follow-up to the presentation. Future considerations for replicated studies should sample a more diverse population to better reflect education communities in the province of Saskatchewan. In addition, more participants would enable more statistically advanced analyses (e.g., factor analysis) and increase the probability of obtaining statistically significant results.

Another limitation to this study was poor reliability which existed largely in the instrument itself. The Cronbach's alphas reported in the original survey (and observed in the adapted version) held values that indicated poor reliability (i.e., below .7). Thus, the grouping of items to construct the factors may have lacked stability in the design. Worthy of noting is that "future researchers may wish to develop a longer survey with more tightly aligned items. This should increase the reliability estimates of the factors" (Brown et al., 2005, p. 77).

5.4 Conclusion

The implications of the statistically non-significant results of this study are that the practical importance remains valuable. The individual responses of the participants (i.e., factor scale scores, open-ended questions) concur with the literature that exists on giftedness and poverty. Disadvantaged children are being overlooked for programs of giftedness. Furthermore, the fundamental ideals and beliefs regarding a definition and selection of giftedness are flawed and restrictive. This was observed in the participants' responses throughout the survey. It was also expressed in the individual responses when defining poverty, identifying the concerns that limit gifted students of poverty from being selected for gifted and/or talented programs, and in the numerous recommendations participants outlined.

While the practice of restrictive assessments (i.e., cognitive tests, cut-off scores) was not unanimously nor adamantly rejected by the participants, the incorporation of a broader recognition of attributes was advocated. The necessity to remain diligent to due process is warranted; however, greater discretion must be endorsed to ensure equity and parity in the representation of gifted students from poverty. An examination of alterable factors (i.e., age of assessment, grade of assessment, assessment instrument, and cultural context) may significantly modify assumptions about poverty and intelligence. An excellent example was identified in the research conducted by Scott and Delgado (2005) when they screened minority preschool children for giftedness. Specifically, their qualitative approach readily accommodated language barriers, cultural interpretations, and the use of concrete objects. If educators believe that learning exists

on a continuum, it bears to reason that perhaps giftedness should be embraced and assessed in a variety of contexts, domains and developmental stages.

With the advent of specialized learning academies (i.e., soccer, dance), it may be inferred that there is a stronger movement toward acknowledging special talents outside of the academic arena. Perhaps parity and equity in giftedness would be more transparent if other skills and talents were assessed with greater vigor so appropriate programming could be implemented to strengthen and promote these gifts. Every child's attributes should be celebrated as giftedness or talent. Wu (2005) acknowledged merit in the Asian model of assessing Talent Performance (TP). Firstly, talent is assessed in high school, and secondly, focus was central to potential development rather than the identification of giftedness. As it remains, students who can successfully demonstrate superior cognitive ability at an established point in time, are largely the ones that are designated as gifted.

In retrospect, when Terman began his longitudinal study in the 1920's of approximately 1500 of the population's top 1% gifted individuals, his study failed to accurately predict security or success in the professional endeavors of the participants as adults despite possessing superior I.Q.'s (Howe, 1997). A reasonable question to ask is why is intelligence and/or giftedness valued at all then? The answer is because it is all about providing enriching experiences and programs of education to students identified as requiring such services. Conversely, this is done for students identified with cognitive and/or physical disabilities. What is in question is how well this service is being provided.

5.5 Implications for Practice

Giftedness is not being identified among students in poverty effectively. Educators' concerns and recommendations to improve identification processes for gifted programs may not be directly addressed. Momentum for change in the current identification and assessment practices would require the initiative of the educators. Participating in this survey may spur some discussion about inclusion and assessment for participants and their school staffs. This topic would benefit placement on a staff meeting agenda to facilitate dialogue and consideration. Furthermore, it is not reasonable to believe that this research project alone will enhance or improve systems currently in place to identify gifted and/or talented students; however, distribution of the results to the participating school division may facilitate constructive discussions on possible future directions that could be taken to improve the identification and assessment practices of gifted students.

5.6 Implications for Future Research

Future researchers replicating this study should want to gather data from a large repertoire of sources (e.g., classroom teachers, administrators, curriculum writers, rural school divisions, high school teachers). This would help benefit extensions of this study that may compare and contrast identification and assessment processes in a variety of educational environments. Examples of differing environments include: private (i.e., Christian Academy), reserve (Band-run schools), and public schools; rural, suburban, and urban communities; and inner-city and non-inner city schools that exist throughout the province of Saskatchewan. Provincial comparisons of educational environments

would also be informative of how practices of identification and assessment for gifted programs differ throughout the country.

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APPENDIX A: ORIGINAL SURVEY

Assumptions Underlying the Identification of Gifted and Talented Students

Joseph S. Renzulli, Scott W. Brown, & E. Jean Gubbins

Listed below are 20 assumptions related to the identification of gifted and talented students. Read each statement, and indicate the degree to which you agree or disagree by **circling** the appropriate response using the following scale:

SA = Strongly Agree A = Agree U = Uncertain D = Disagree SD = Strongly Disagree

SA A U D SD 1. Gifted and talented students may express their abilities in many ways.

SA A U D SD 2. Giftedness in some students may develop at certain ages and in specific areas of interest.

SA A U D SD 3. An effective plan for identification requires the use of several types of information about the student.

SA A U D SD 4. Identification should be based primarily on an intelligence or achievement test.

SA A U D SD 5. Identification should take into consideration the cultural and experiential background of the student.

SA A U D SD 6. At least part of the identification process should be individualized, using case study data unlikely to be obtained by group standardized instruments.

SA A U D SD 7. Identification should include the assessment of tasks selected by the student as well as required activities.

SA A U D SD 8. A precise cut-off score should be set for all tests used in identification.

SA A U D SD 9. Information obtained during the identification process should provide the basis for follow-up programming experiences and opportunities.

SA A U D SD 10. Identification should include options that allow students to express themselves in many ways (e.g., written, visual, oral, constructed, interpersonal).

SA A U D SD 11. Teacher judgment and other subjective criteria should not be used in identification.

SA A U D SD 12. Identification techniques can be locally developed using methods and criteria that are appropriate for a particular population.

SA A U D SD 13. The identification process should include the judgment of persons best qualified to assess the quality of performance in particular areas of study.

SA A U D SD 14. Identification should be restricted to a fixed percentage of the total student population.

SA A U D SD 15. Only identified students should have access to special program services.

SA A U D SD 16. Identification should include the involvement of persons who understand the cultural and environmental background of individual students.

SA A U D SD 17. Alternative identification criteria should be developed for identifying artistically talented students.

SA A U D SD 18. Regular, periodic reviews should be carried out on both identified and on-identified students.

SA A U D SD 19. The identification process should include the assessment of non-intellectual factors such as creativity and leadership as well as academic performance.

SA A U D SD 20. The identification process should reflect the types of services and activities provided by individual schools and school districts.

APPENDIX B: ADAPTED SURVEY

Assumptions Underlying the Identification of
Gifted and Talented Students
(Adapted from Renzulli, Brown, & Gubbins, 2005)

This study will explore educators' perceptions of giftedness among students in poverty. For the purposes of this survey, the term poverty is defined as *the extent one does without resources* (Payne, 1998). The term giftedness is defined as *possessing a natural aptitude or talent* (Avis, 1989).

The survey should only require **10 minutes of your time**. There are no known risks to completing this survey. In fact your participation will provide valuable insight to the current practices being employed to identify giftedness in students. In addition, your ideas and opinions on this matter will further illuminate some possible future directions for the identification and programming of gifted students. If additional correspondence is necessary you may contact Jody Lorenzo, at www.jcr138@mail.usask.ca, or my Supervisor, Dr. McIntyre, at (306) 966-5266, or the University of Saskatchewan Research and Ethics Board (306-966-2084). The University of Saskatchewan Behavioural Research Ethics Board approved this study on ethical grounds on May 11, 2006. Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). Out of town participants may call collect. Please return your completed survey in the attached envelope to the location your principal has placed the self-addressed, stamped return envelope for the collection of all the surveys.

Please be informed that your participation is entirely voluntary and anonymous; furthermore, you may withdraw from the study for any reason, at any time, without penalty of any sort or consequence. Participation in this survey implies consent to use the data, with the provision of anonymity, in presentations to professionals, parents, and educators, or publications for professional or scholarly journals. All data would be reported in aggregate form to secure anonymity.

Thank you for your participation!

Assumptions Underlying the Identification of Gifted and Talented Students
(Adapted from Renzulli, Brown, & Gubbins, 2005)

Please read the following 20 statements and indicate to what extent you agree or disagree by **circling** the appropriate response by using the following scale:

SA = Strongly Agree A = Agree U = Uncertain D = Disagree SD = Strongly Disagree

1. Gifted and talented students may express their abilities in many ways. **SA A U D SD**
2. Giftedness in some students may develop at certain ages and in specific areas of interest. **SA A U D SD**
3. Our current assessment practices are lacking an inclusiveness of students of poverty. **SA A U D SD**
4. Identification should be based primarily on an intelligence or achievement test. **SA A U D SD**
5. Identification should take into consideration the cultural and experiential background of the student. **SA A U D SD**
6. At least part of the identification process should be individualized, using case study data unlikely to be obtained by group standardized measures. **SA A U D SD**
7. Gifted students of poverty are sufficiently supported by family and peers in regard to self-concept, motivation, and personal success. **SA A U D SD**
8. A precise cut-off score should be set for all tests used in identification. **SA A U D SD**
9. Students of poverty should be assessed and referred to gifted programs for their potential.. **SA A U D SD**
10. Identification should include options that allow students to express themselves in many ways (e.g., written, visual, oral, constructed, interpersonal). **SA A U D SD**
11. Teacher judgment and other subjective criteria should not be used in identification. **SA A U D SD**
12. Identification techniques should be locally developed using methods and criteria that are appropriate for a particular community. **SA A U D SD**
13. The identification process should include the judgment of persons best qualified to assess the quality of performance in particular areas of study. **SA A U D SD**
14. Identification should be restricted to a fixed percentage of the total population. **SA A U D SD**

15. Factors of resilience need to be taught in gifted programs to students of poverty to ensure recruitment and retention. **SA A U D SD**

16. Identification should include the involvement of persons who understand the cultural and environmental background of individual students. **SA A U D SD**

17. Alternative identification criteria should be developed for identifying artistically talented students. **SA A U D SD**

18. Regular, periodic reviews should be carried out on both identified and and non-identified students. **SA A U D SD**

19. The identification process should include the assessment of non-intellectual factors such as creativity and leadership as well as academic performance. **SA A U D SD**

20. An effective plan for identification requires the use of several types of information about the student. **SA A U D SD**

21. Students of poverty can be appropriately identified using standardized assessment measures for gifted programs. **SA A U D SD**

22. Information obtained during the identification process should provide the basis for follow-up programming experiences and opportunities. **SA A U D SD**

23. Students of poverty arrive at school with different background experiences than non-poverty students and therefore must be evaluated differently. **SA A U D SD**

24. Identification should include the assessment of tasks selected by the student as well as required activities. **SA A U D SD**

25. Only identified students should have access to special program services. **SA A U D SD**

Please complete the following demographic information.

School Setting: ____ Urban ____ Rural

Current Position: ____ Administrator ____ Classroom Teacher

____ Resource Room/Learning Assistance Teacher

____ Other (*please specify*) _____

Years of Teaching or Administration Experience: (Which ever position is current)

____ 0

____ 1 to 5 years

____ 6 to 10 years

____ 10 to 20 years

Level of Post-Secondary Education Attained:

____ Bachelor of Education

____ An After Degree

____ A Master's Degree

____ A Doctorate Degree

Your Age:

____ 20-30 years old

____ 30-40 years old

____ 40-50 years old

____ 50+ years old

Your Ethnic Background:

____ Aboriginal

____ Caucasian

____ Other (*please specify*)

_____

Years Experience Teaching in a Low Socio-Economic community:

____ 0 ___ 1 to 5 ___ 6 to 10 ____ 10+ years

Years Experience Teaching Gifted Individuals:

____ 0 ___ 1 to 5 ___ 6 to 10 ____ 10+ years

In order to further explore participants' perceptions of the identification of giftedness and/or talent in children of poverty, please complete the following questions.

1.) How do you define giftedness and/or talent?

_____

_____

_____

2.) Do you believe educators should be concerned about the extent children in poverty are identified for gifted and/or talented programs? Why or Why not?

_____

_____

_____

3.) What future directions would you like to see the area of giftedness take (i.e., relating to identification, assessment, programming considerations)?

_____

_____

_____

The results of the study will be made available to the public after April 2007, in the Education Library at the University of Saskatchewan.

Thank you for taking time to participate in this study.

APPENDIX C: THE SIX FACTORS

The following list itemizes the six factor categories, and their corresponding questions, from the survey instrument, "Assumptions Underlying the Identification of Gifted and Talented Students" (adapted from Renzulli, Brown, & Gubbins, 2005). Some of the questions have been renumbered.

1st Factor: Restricted Assessment (the sole use of test data with cutoff scores)

4. Identification should be based primarily on an intelligence or achievement test.
8. A precise cut-off score should be set for all tests used in identification.
11. Teacher judgment and other subjective criteria should not be used in identification.
14. Identification should be restricted to a fixed percentage of the total population.
25. Only identified students should have access to special program services.

2nd Factor: Individual Expression (case study data, multiple formats of expression)

6. At least part of the identification process should be individualized, using case study data unlikely to be obtained by group standardized measures.
10. Identification should include options that allow students to express themselves in many ways (e.g., written, visual, oral, constructed, interpersonal).
19. The identification process should include the assessment of non-intellectual factors such as creativity and leadership as well as academic performance.
24. Identification should include the assessment of tasks selected by the student as well as required activities.

3rd Factor: Ongoing Assessment (periodic review, using alternative criteria)

13. The identification process should include the judgment of persons best qualified to assess the quality of performance in particular areas of study.
17. Alternative identification criteria should be developed for identifying artistically talented students.
18. Regular, periodic reviews should be carried out on both identified and non-identified students.
22. Information obtained during the identification process should provide the basis for follow-up programming experiences and opportunities.

4th Factor: Multiple Criteria (selection using multiple types of information)

1. Gifted and talented students may express their abilities in many ways.
2. Giftedness in some students may develop at certain ages and in specific areas of interest.
20. An effective plan for identification requires the use of several types of information about the student.

5th Factor: Context-Bound (consider culture, environment, background experiences)

5. Identification should take into consideration the cultural and experiential background of the student.
12. Identification techniques should be locally developed using methods and criteria that are appropriate for a particular community.
15. The identification process should reflect the types of services and activities provided by individual schools and school divisions.
16. Identification should include the involvement of persons who understand the cultural and environmental background of individual students.

6th Factor: Identifying Poverty (emphasize disadvantaged, impoverished student's ability)

3. Our current assessment practices are lacking an inclusiveness of students of poverty.
7. Gifted students of poverty may not be sufficiently supported by family and peers in regard to self-concept, motivation, and personal success.
9. Students of poverty should be assessed and referred to gifted programs for their potential.
21. Students of poverty may not be appropriately identified using only a standardized assessment measure for gifted programs.
23. Students of poverty arrive at school with different background experiences than non- poverty students and therefore must be evaluated differently.

APPENDIX D: CONSENT

Jody Lorenzo
1126 Byng Avenue
Saskatoon, SK S7L 5J5
(306) 659-7360 work
(306) 931-8617 home

March 31, 2006

Attention: _____, Director of Education

I am a teacher in the Saskatoon Catholic School Division, and a graduate student at the University of Saskatchewan in the Department of Educational Psychology and Special Education. As part of the requirements for the completion of my master's degree, I am conducting a research project that will examine educators' perceptions of giftedness among students in poverty. Poverty is a critical issue in Special Education. There is a vast amount of literature that indicates students of poverty are more frequently referred for Special Education programming for deficits they may have in their learning, and less likely to be evaluated or considered for intellectual potential or giftedness (e.g., artistic talent, visual-spatial ability).

The focus of my research involves delivering a questionnaire to elementary classroom teachers, resource room teachers/learning assistance teachers, and administrators to complete (please see attached survey). These individuals have been sought as the target group for they are the very individuals that advise, refer, and implement policy and programs of enrichment for their students. The beliefs, opinions, and suggestions expressed by the participants will provide insight on this subject matter, as well as points of consideration for possible future directions to pursue in regard to identification and assessment of giftedness. Participation is both entirely voluntary and anonymous. Completion of the survey will only require about ten minutes. Participants are able to withdraw at any time from completing the survey. Information identifying the participant is of no significant value to this study and thus any correspondence will remain confidential and anonymous. If participants require additional assistance, information, or they wish to withdraw from the study they will be able to contact myself, Jody Lorenzo, at www.jcr138@mail.usask.ca, my Supervisor, Dr. Laureen McIntyre at (306) 966-5266, or the University of Saskatchewan Research and Ethics Board (306-966-2084).

All data received will be made available upon completion of my thesis from the Education Library at the University of Saskatchewan on or before April, 2007. In addition, the results may be published and/or used for conferences and seminars. The

dissemination of the results may benefit school divisions' policies and practices of programs for enrichment by indicating areas of strengths, possible directions for improvement, and consideration for alternatives.

This project has been approved on ethical grounds on May 11, 2006, by the Behavioural Research Ethics Board of the University of Saskatchewan (Behavioural Ethics Approval #: 06-94).

Thank you for your thoughtful consideration. I look forward to hearing from you at your earliest convenience.

Sincerely,

Jody Lorenzo, B. Ed.
Graduate Student
Department of Educational Psychology and Special Education
University of Saskatchewan

APPENDIX E: LETTER OF INSTRUCTION

Jody Lorenzo
1126 Byng Avenue
Saskatoon, SK S7L 5J5

March 31, 2006

Dear Principal,

I am a graduate student in the Department of Educational Psychology and Special Education at the University of Saskatchewan. I have received permission from _____, Director of Education, to submit surveys to all of the elementary schools in your division to assist my thesis. Specifically, I am researching teacher perceptions about the identification of giftedness among students of poverty.

Poverty is a critical issue in Special Education and there is a vast amount of literature that indicates students of poverty are more frequently referred for Special Education programming for deficits they may have in their learning, and less likely to be evaluated or considered for intellectual potential or giftedness. I would be most grateful if you would please provide a copy of my survey to your **classroom teachers, resource room teachers, and administrators**. These individuals have been sought as the target group for they are the very individuals that advise, refer, and implement policy and programs of enrichment for their students. Multiple copies have been included for your convenience. The questionnaire should require no more than **10 minutes** of time to complete fully. Please note that participation is entirely voluntary and anonymity will be ensured for the identification of any participant is not of any value to this project; thus, all correspondence will remain confidential. Furthermore, participants may withdraw from completing the survey at any time. The data collected from the surveys may be used in the future for publication and/or seminars and conferences. The dissemination of the results may benefit programs for enrichment by indicating areas of strengths, possible directions for improvement, and consideration for alternatives.

For your convenience I have also provided a self-addressed, stamped return envelope. To enhance anonymity please inform your staff of a discrete location the return envelope will be placed for the collection of completed surveys. If any participant requests additional correspondence I may be contacted at my personal e-mail address (www.jcr138@mail.usask.ca.) or my Supervisor, Dr. McIntyre, may be reached at her office (306-966-5266), or you may choose to contact the University of Saskatchewan Research and Ethics Board (306-966-2084). Any and all additional correspondence will remain confidential.

Please be informed that the Behavioural Research Ethics Committee of the University of Saskatchewan has considered and approved my project on ethical grounds on May 11, 2006 (Ethics Approval #: 06-94).

It would be appreciated if the collection and return of the surveys could be done within a two week period or less so the return date should be on or near April ____, 2006. Data regarding my study will be available for all interested individuals in the Education Library at the University of Saskatchewan upon completion of this project.

The participation of your staff is greatly appreciated and I thank you for your kind assistance in this matter.

Sincerely,

Jody Lorenzo, B. Ed.
Graduate Student
Department of Educational Psychology and Special Education
University of Saskatchewan

APPENDIX F: FOLLOW-UP LETTER

Jody Lorenzo
1126 Byng Avenue
Saskatoon, SK S7L 5J5
(306) 659-7360 work
(306) 931-8617 home

March 31, 2006

Dear Principal,

I am following up on the survey package you should have received a few weeks ago in the mail asking if you and your staff would participate in a project I have under way for my thesis. If you have not received a package in the mail would you kindly contact me so that I may get a new package out to you? I am currently in the process of the collecting the data to review and analyze the results and any completed surveys you have to contribute would be of great value to this project. Should you have any concerns regarding the surveys or return of the surveys, please do not hesitate to contact me through email (www.jcr138@mail.usask.ca) or by telephone at either location as listed above.

Thank you for your assistance in my project.

Sincerely,

Jody Lorenzo, B. Ed.
Graduate Student
Department of Educational Psychology and Special Education
University of Saskatchewan

APPENDIX G: PARTICIPANT RESPONSES TO SURVEY QUESTIONS

The following excerpts are a sampling of the participants' responses to the open-ended questions in the survey.

Q1: How do you define giftedness and/or talent?

Theme A: Responses that included a description of ability (i.e., exceptional) and/or a measurement in multiple capacities (i.e., in many academic areas).

- God-given attributes to problem solve, create, communicate
- successful academically/socially/organizing/maturity/work skills
- natural ability in one or more areas
- natural in any area or areas
- all students in certain areas
- excel in certain areas
- exceptional talent in any area
- greatly surpassing expectations in grade level in one or more areas
- natural ability in one or more areas
- many curriculum areas
- aptitude for excellence in an area or overall
- exceptional in all academic areas/creative/introverted or extroverted
- excelling in different areas
- skills/abilities above average
- above average in one or many areas
- exceed curriculum/subject areas, score above norms on standard tests
- expressed earlier than normal/exceeding that of average person in many ways
- abilities to demonstrate/explain/show/lessons/work beyond usual
- succeed at a particular task/ sets apart from rest of students excels in areas of study

Theme B: Responses that included a description of ability (i.e., exceptional) and/or a measurement in a single capacity (i.e., one academic area).

- an extraordinary ability to do a particular thing
- particular interest, motivation for extended learning; aptitude for a specialty
- beyond average standards in a particular area
- strong interest/aptitude in a given area
- excel in a particular area
- exceptional/innate/aptitude in some area
- excelling in a skill area
- beyond average in an activity
- a strength in a skill
- interest and ability in a certain area
- ability/skill/effort to excel in an area
- natural ability of subject or task
- passion or interest in a particular area
- talent and passionate in a particular area
- excels/shows keen interest in an area
- above average/exceeding norms in a certain area

Theme C: Responses that included a description of ability (i.e., exceptional) but did not include a measurement of capacity (i.e., one or more academic areas).

- a natural ability (aptitude)a student has for higher level thinking
- people who do not respond to learning within the norm – outside the box
- any talent that exceeds what majority of kids can do
- perceive things differently than others
- see things in a new way
- expressed earlier than normal/exceeding that of average person in many ways
- specific skill, better than the norm
- beyond learned abilities, born with
- think creatively
- ease of learning
- above and beyond ordinary
- artistic, athletic
- natural talent
- a skill in a natural way
- unique ability/creativity/insight
- excel with insight above peers
- natural/beyond average/academic
- smarter than instructor/above curriculum standards
- knowledge and ability that far exceeds the norm
- achieve or express
- achieving higher than normal child does academically
- gift that a person believes in
- comprehend and articulate beyond conventional ways
- excels at classroom work/motivates self to learn on own
- skills/abilities above average
- great natural ability

Q2: Do you believe educators should be concerned about the extent children in poverty are identified for gifted and/or talented programs? Why or why not?

Theme A: A sampling of affirmative responses.

- disadvantaged children may not have had the environment conducive to developing their higher level thinking skills; this puts them at a disadvantage on standardized tests
- we should be concerned about identification of all children; many are missed because they don't "test" or because of attention difficulties
- absolutely; children in poverty can't be compared or assessed in the same way that children from a higher socio-economic status [are]
- yes, anything that can expand a child's world is a good thing
- absolutely; we must provide equity of opportunity to all socio-economic groups and **seek** to find these kids; we must be their advocates
- educators should make every effort to I.D. children in poverty because based on child's personal life this may be a major way in helping and supporting that child so he/she as an adult may get out of the "poverty" cycle
- yes, because too often they are disregarded
- yes, but there is nothing that can be done until money is invested in a program
- yes, because large scaled/standardized tests do not offer a complete picture of giftedness or ability for many populations (i.e., poverty, some ethnic groups, etc.)
- at home, students who are gifted are not allowed to excel due to limited resources; therefore, their true potential will not be evident when they reach school
- definitely, all children deserve to excel, or have the opportunity to explore an interest in depth
- yes, I believe all students should have an opportunity to be involved [in] gifted programs not only based on I.Q.
- yes, they shouldn't be short changed for no fault of theirs
- I feel that strategies for teaching gifted children should be employed by classroom teachers and that they should have support for this in the regular classroom
- yes, many standardized tests we currently use do not recognize "nontraditional" knowledge (i.e. artistic)
- yes, student may lack family support for ELO program (transportation, emotional support)

Theme B: A majority of the negative and/or objective responses.

- no, the test should be valid without information about socio-economic situation
- no, because even students in poverty are taught the curriculum, and if something is or comes "naturally" to them , it will show in their performance in the area
- if a student is gifted, it is recognized no matter what the circumstance
- it should be explored by classroom teachers
- unsure; I am hopeful all kids are identified, but they may not be; may be by chance
- it is more difficult to focus on academics when basic needs are a priority
- sometimes students are not given an opportunity by their parents to grow

Q3: What future directions would you like to see the area of giftedness take (i.e., relating to identification, assessment, programming considerations)?

Theme A: Responses that addressed identification (i.e., by whom, timelines, labels, and domains).

- creative giftedness more recognized
- train teachers to ID kids at an early age for future consideration
- catch in later years (gr. 6 or 7)
- further programs to seek out giftedness
- use other criteria
- do not label as gifted
- teachers should have greater influence on ID
- ID happens now but programming does not always take place
- all students ID at beginning of year to set up programs
- use someone from the school who knows background of kids and their community
- broaden the definition of giftedness
- inclusion of all
- team analysis and ID
- specific areas of talent or interest: music, artistic, athletic; not just academic

Theme B: Responses that addressed assessment (i.e., measurement tools).

- move away from standardized test
- standardized tests that take ethnic/culture into account
- interview
- periodic assessments
- ongoing assessment
- look at dynamic assessments using current brain research
- beyond IQ and Gr. 3 screening
- more frequent assessments/monitoring
- more frequent assessments/monitoring
- a variety of assessments – not just test scores
- broadening the means and ways of assessment
- standardized test should not be the only assessment
- develop unbiased assessments by professionals with experience in impoverished
- assess earlier – preschool age
- give teachers more to better assess giftedness
- more assessment

Theme C: Responses that addressed programming (i.e., delivery models of gifted education).

- use strategies for giftedness in all units
- greater support for students i.e. transportation
- have a catalyst specialist to teach a unit in every class
- new ways to stimulate and challenge
- more help for primary teachers in programming/planning
- more in–class challenges
- do not isolate gifted kids
- occur outside of regular classroom; do not replace it
- group gifted kids according to age through out division
- follow the curriculum better & all students will receive more individual attention
- government funding for smaller class sizes
- pull out is very beneficial
- each school should have a teacher/facilitator/coordinator to run gifted programs in each school
- have programs for all of the "intelligences"
- greater variety of program considerations: culturally or community specific
- make more programs available
- keep programming in the home school, not elsewhere
- programming
- more catalyst teachers
- smaller class sizes
- extension classes in more community based programs
- ID important but programming to ensure success most crucial
- expand programs
- more teachers