CONCEPTIONS OF ACADEMIC TALENT: IMPLICATIONS FOR TALENT IDENTIFICATION AND DEVELOPMENT

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ABSTRACT
The terms often used in conceptualisations of academic talent are highly variable, with each term employed holding specific ideological implications. This article aims to provide a broad overview of the concept of ‘academic talent’ in the international and South African literature. In an attempt to connect international academic discourses to the local context, the review explores several discourses of academic talent within the South African context. It is argued that holistic, student-centred approaches towards nurturing academic talent will allow for contextual considerations in the identification of individuals selected to participate in talent development programmes. It is also argued that inclusive approaches to developing talent appear to be premised on the view that learners from educationally disadvantaged backgrounds can be nurtured towards academic success. Addressing educational disadvantage is not a ‘quick fix’ but requires intensive support and an understanding of issues facing disadvantaged learners (including values orientation conflicts, self-esteem and self-concept). What is pertinent in the article is that the assumptions and values upon which the constructs are based need to take into account individuals within a
particular context. Contextual variability, therefore, requires reformulations of the construct.

**Keywords:** academic talent, selection, giftedness, talent development, talent identification, disadvantage, psychometric testing

**INTRODUCTION**

Definitions of academic talent tend either to overlook or even be indifferent to most of the tensions, complexities and controversies associated professionally with the word. Any answer to the question tells as much about people’s values as it tells about the person they are labelling. Talent is both content and context dependent and whether a person’s knowledge and skill are recognised as talent depends on how much that knowledge or skill matters to others (Csikszentmihalyi and Robinson 1986). In particular, how a construct is defined has broad implications for the process of talent identification and development. In order to counter the possibility of exclusionary practices, the literature has pointed towards the importance of specifically defining how terms such as academic talent are used and of understanding the values and assumptions underpinning such definitions. Due to the variations in meanings of academic talent and background factors that mediate manifestations of academic talent, there are numerous difficulties in relying solely on one conceptualisation when identifying academic talent within the South African context.

**METHOD**

The research for the literature review was conducted using the following databases: Academic One File, Academic Search Premier, Ebscohost, Educational Resources Information Center, Masterfile, Teachers resources and Sabinet. Key search terms included: (definitions/conceptualisations/discourses of) ‘potential’; ‘talent potential’; ‘academic excellence’; ‘academic achievement’; ‘gifted’; ‘disadvantaged’; ‘gifted disadvantaged’; ‘marginalized’; ‘minority(ies)’ (and South Africa). Using the same keywords, additional searches were undertaken in Google Scholar in order to enable more comprehensive access of the existing literature on the topic. The selection of articles included in the literature review was based on the following criteria: articles that addressed issues of academic talent pertaining to the education context; articles that considered broader issues related to definitions of academic talent (e.g. theories or models); the identification of academic talent and selection of the talented amongst marginalised groups (e.g. personality attributes and profiles); methods of talent development (e.g. institutionalised programmes, supplementary tuition, teacher development, parental support); and other variables related to academic talent among the disadvantaged (e.g. challenges related to access, social and cultural capital).
Following a similar rationale to Tekian’s (2000), the articles accessed comprised literature reviews, critical commentaries and reports of empirical studies. A thematic content analysis of the discourses evident in the articles was undertaken in order to identify the range of conceptualisations of academic talent evident in the literature.

The literature abounds with terms that are used to refer to achievement within the educational context. Several discourses may be identified on the basis of specific definitions proposed, namely: (i) academic talent as a fixed, inborn quality predominantly determined by biological predispositions, genetics, heredity factors; (ii) academic talent as a nurtured ability and as a developmental construct; (iii) academic talent as a developmental construct where nurtured ability is central; and (iv) academic talent as a socially constructed entity which serves particular sociopolitical interests. The next section reviews literature on traditional conceptualisations of academic talent and, in so doing, identifies the specific discursive themes.

DISCOURSES OF ACADEMIC TALENT

Traditional conceptualisations of academic talent: academic talent as a fixed, innate and unidimensional attribute

As Plucker and Barab (2005, 203) point out, traditional conceptions of giftedness and intelligence (e.g. Cattell 1987; Jensen 1998; Spearman 1994; Thurstone 1938) were based on the assumption that these constructs resided within the individual. Whilst environmental factors were alluded to, the predominant focus was on the ‘individual as the locus of control and unit of interest’. Fox (1981) summarises the evolution of theories and concepts formulated to identify the ‘academically gifted’. This orientation to theorising academic talent is reflected in Galton’s (1869) initial attempt to explore the ‘genius’ concept, Whipple’s use of the term ‘gifted’ to define individuals with superior intellectual ability and Terman’s as cited in Oden (1959) operationalisation of giftedness and intelligence in intelligence tests. This orientation has been criticised as restrictive and limiting. As Fox (1981) documents, Renzulli (1978) offers the view that definitions of ‘giftedness’ vary depending on the performance area and the level of exceptionality. In addition, other debates have centred on whether ‘potential’ alone (or ‘potential’ alongside ‘achievement’) needs to be considered in definitions of ‘giftedness’ (Fliegler and Bish in Fox 1981). Renzulli (in Fox 1981, 1104) conceptualises the ‘Three Rings Definition’ of giftedness, which is based on the interaction among three trait clusters, namely: ‘above-average general ability, high levels of task commitment, and high levels of creativity’ applied to any performance domain that has potential value. However, as Fox (1981) notes, this conceptualisation translates to fewer students being selected, as compared to other conceptualisations (e.g. Stanley 1976 in Fox 1981) that define academic giftedness
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as excellence in a specific area without necessarily requiring general intellectual superiority as a whole. Overall, traditional conceptualisations of giftedness and intelligence appear to be confined to narrow constructs and operationalised largely in terms of psychometric scores. Identification of academic talent based largely on intelligence quotient (IQ) tests, for instance, falls back onto the assumption that intelligence is an innate ability (Lohman 2005), as the next section will elaborate.

Academic talent as an exceptional quality possessed by the rare few

As observed by Schroth and Helfer (2009), some theorists (e.g. Brody and Stanley 2005; Monks and Katzko 2005; Terman 1925) hold that ‘giftedness’ is a term for the extraordinary learner who possesses the qualities of eminence. It is held that such individuals perform at much higher levels than their peers and that such performance is verifiable by objective measures. The works of early theorists in the field of giftedness and talent exemplify this view. For instance, Galton (Morelock 1996) aimed to systematically examine individual differences and extraordinary achievement, the latter operationally defined as the attainment of eminence. Binet and Terman similarly upheld the notion of eminence and extraordinary achievement (Morelock 1996). As Morelock (1996) documents, Terman viewed the ‘gifted’ child as one whose mental age on intelligence tests was higher than his/her chronological age on abstract, logical and judgemental reasoning abilities. Based on superior performance abilities, he reasoned that the developmentally advanced child was bound for genius or near genius-level achievement. The advent of the Binet-Simon scale in 1908 also supported the view that intelligence was quantifiable and could be defined in terms of the individual’s IQ. Therefore, IQ measures and psychometric testing provided the scientific and empirical basis for the identification of ‘giftedness’ (Morelock 1996).

The development of the IQ test strongly influenced how academic talent (or intelligence or giftedness) was conceptualised. Thus, psychometric testing became the ‘scientific basis’ for identifying some learners as intellectually superior to others. Appel (1988), for instance, notes that psychometry is underpinned by the assumption of ‘the absolute dominance of heredity ... together with further assumptions as to the differential distribution of “ability” (later “intelligence”) among different social classes and races’ (Gould in Appel 1988, 98). Drawing from Simon’s ‘iron laws of psychometry’ (Gould in Appel 1998, 98), Appel (1988, 98–99) further notes that ‘intelligence’ was mythically regarded as ‘the highest mental function, innate, generally impervious to environmental influences, distributed “normally”, and measurable accurately by an Intelligence Test’. The notion that academic talent is predominantly based on IQ, therefore, seems to operate alongside other traditional conceptualisations, namely, discourses prescribing talent as having a genetic basis; as being a unidimensional attribute; and as an exceptional quality possessed by few.
As Appel (1988, 99) has argued, the assumptions that IQ testing measures people (i.e. as ‘static, finished products of genetics’) support the status quo and naturalise class and racial divisions among people. Moreover, Carlson (1987) notes that the problem of labelling (whether as ‘gifted’ or ‘dyslexic’) has been aggravated by theorists who have equated academic excellence with a high IQ.

Critics of intelligence testing, moreover, contend that measured intelligence is a poorer predictor of academic and life success than proven academic achievement (Maree 2006). Goleman (in Maree 2002), for instance, takes issue with the assumption that IQ predicts success, arguing that the former only contributes 20 per cent to the latter. Van Eeden (in Maree 2002) similarly argues that intelligence tests are essentially achievement tests; they predict what individuals have learned (former life skills, institutionalised education) rather than their potential for learning.

Academic talent as determined largely by hereditary influences

Galton was the first to make the connection between adult achievement and its early precursors. In his 1869 publication, *Hereditary Genius*, he emphasised the role of hereditary factors in the ‘emergence of genius’ (Morelock 1996, 12) although he gave some cognisance to the importance of environmental factors (e.g. quality of child-rearing). Morelock’s (1996) synthesis of the trends in thinking about ‘giftedness’ among early theorists summarises early conceptions of academic talent. First, ‘giftedness’ was considered ‘an unusual generalized capacity for judgement and abstract reasoning revealing itself in childhood’ (Morelock 1996, 24). Second, ‘giftedness’ was seen as ‘an intellectual development surpassing that expected for a child’s chronological years’ (Morelock 1996, 24). Consequently, ‘gifted’ individuals evidence an emotional vulnerability and educational and social needs that require special attention compared to their same-age peers.

The heredity view of talent has been criticised, as it is not known whether ‘gifts’ are manifested early enough in children to infer whether their talents are the result of nature or nurture (Simonton 2001). Howe, Davidson and Slobada (in Simonton 2001) suggest that researchers have failed to produce evidence of the genetic basis of talent; in other words, there is no specific ‘gene’ for mathematics or music. Many of these criticisms have influenced contemporary notions of academic talent as a social construct rather than as an essential quality.
Contemporary conceptualisations of academic talent: Academic talent as having an environmental basis

Standing out in contemporary approaches to conceptualisations of academic talent is the backgrounding of innate and biological aspects of intelligence and the growing recognition of the role of the environment in spurring academic achievement (Morelock 1996; Plucker and Barab 2005). Such conceptions also advocate broader and more culturally sensitive definitions of ‘giftedness’ that consider multidimensional facets of intelligence (Ford, Baytops and Harmon 1997). These are evident in several models. For instance, Sternberg’s (1985, 1986) Triarchic Theory of Intelligence, Ceci’s (1990) Bioecological Approach and Gardner’s (1983) Theory of Multiple Intelligences, acknowledge the role of the environment to a larger extent than did traditional approaches (in Plucker and Barab 2005). Sternberg (in Fox 1981), for instance, proposes an information-processing theory of intelligence in place of a psychometric-based one. Accordingly, giftedness consists of three main domains, namely: metacomponents (e.g. problem solving strategies); performance components (processes used in problem solving and acquisition, retention); and transfer of components (skills for learning, storing and applying information). However, Plucker and Barab (2005, 204) observe that the specific nature of the individual-environment interaction in these theories is not clear. Moreover, the focus remains fixed largely on the intrinsic nature of giftedness with references to context merely being regarded as the ‘application of talent’. Nevertheless, these theories are a development from traditional notions of academic talent that place inordinate emphasis on innate factors.

Vygotsky’s (1978) sociocultural theory has played a significant role in promoting the view that cognitive abilities are influenced either positively or negatively by cultural factors. Morelock (1996) credits Vygotsky with providing a comprehensive understanding of development that is cognisant of how the individual’s cognition is influenced by how he/she uses language (the socioculturally derived symbols) and how, through the mentoring of another, he/she is able to appropriate and understand the physical and psychological ‘tools’ and ‘signs’ of his/her culture. As Morelock (1996) points out, Vygotsky’s theory takes into consideration the inner and emotional experiences derived from learning and how these influence subsequent development. The recognition of the inter-psychological aspects of learning (i.e. facilitation through social interaction and the individual emotional processes) affirms the view that social and cognitive developments are interrelated.

Gagné (2004) makes the distinction between aptitudes (natural abilities in a particular domain) and achievements (systematically developed skills in a particular field of talent). These distinctions are reflected in his distinct definitions of giftedness and talent. Giftedness refers to
the possession and use of untrained and spontaneously expressed natural abilities (called outstanding aptitudes or gifts), in at least one ability domain, to a degree that places an individual at least among the top 10 per cent of age peers (Gagné 2004, 120).

Talent, on the other hand, denotes

the outstanding mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places an individual at least among the top 10 per cent of age peers who are or have been active in that field or fields (Gagné 2004, 120).

As these definitions reveal, both traits reflect ‘outstanding behaviours’ (Gagné 2004, 120). As Gagné’s Differentiated Model of Giftedness and Talent (DMGT) suggests, room is made for the role of hereditary factors (or natural abilities) reflected as giftedness in one or more domains of intellectual, creative, socio-affective and sensorimotor fields. Moreover, the model’s notion of talent as a developmental construct reflects both maturational processes (e.g. brain physiology) and opportunities for learning and mastery (e.g. informal learning in the acquisition of language or social skills, self-taught learning or formal institutional learning). Within this model, Gagné (2004) also identifies three specific catalysts that have either a facilitating or hindering effect on the talent development process. Interpersonal catalysts refer to self-management aspects (including initiative, efficient time management, autonomy, concentration and good work habits). However, both physical and mental characteristics have also been identified as having an influential role in talent development. Environmental catalysts in turn exert their influence in various ways (e.g. access to learning resources, the influence of significant others in the learner’s immediate environment). Lastly, chance catalysts (e.g. socioeconomic status, quality of parenting or hereditary characteristics) influence all environmental factors. In this model, the interplay between nature and nurture factors is accounted for.

However, some theorists have questioned the very notion of ‘talent’ (Howe et al. in Simonton 2001). Promulgating a more egalitarian perspective, advocates of such a position contend that all individuals are able to ‘become stars in almost any domain’ (Simonton 2001, 39) if deliberate and arduous practice is applied to a knowledge domain. Such a view represents a shift from the ‘rarity’ and ‘innate’ connotations of academic talent towards an understanding that individual effort and deliberate practice are involved.

Academic talent as a multidimensional construct

Contemporary perspectives have shifted from viewing IQ as the acceptable measure of ‘giftedness’ towards multiple conceptions of ‘talent’. This shift has simultaneously led to adoptions of the term ‘talent’, a more democratic and humane view of potential, as opposed to the elitism implied by the term ‘giftedness’. However, as Morelock (1996) observes, others have been less dismissive of the latter concept. Over the past
decade theorists have proposed a multidimensional view of intelligence that recognises
the multiple facets or ‘faces’ of academic talent. To quote Simonton (2001, 39),
‘rather than involving a unidimensional, additive, and static genetic process, talent
may instead emerge from a multidimensional, multiplicative, and dynamic process’.
Simonton’s (2001) model proposes a sophisticated process of how nature and nurture
jointly influence talent development. This is summarised in the interplay of what
Simonton (2001, 40) calls ‘emergenic inheritance’ and ‘epigenetic growth’ (2001,
41). The former is based on the assumption that talent domains are not conditional
upon the inheritance of a single trait, but ‘the simultaneous inheritance of several
traits’ (Simonton 2001, 39) – physical, physiological, cognitive and dispositional
– that bring about the ‘superior expertise’ within a given area. The latter concept
envisages talent as a dynamic process, transforming across the developmental stages
from childhood to early adulthood. According to this formulation, there may not be
early indicators of talent, apparent talents may change over time and talents may be
lost (Simonton 2001).

Recognition of contextual variability

Challenges related to the noticeable underrepresentation of minority and
socioeconomically disadvantaged students in ‘gifted’ programmes propelled the
shifts towards understanding how intelligence is mediated by contextual factors,
such as socioeconomic background, access to quality schooling, and so on. Lohman
(2005) proposes an aptitude theory of academic talent. The terms ‘ability’, ‘talent’
and ‘potential’ have often been used interchangeably. However, as Lohman (2005,
ix) proposes, aptitude is a ‘degree of readiness to learn and to perform well in a
particular situation or domain’ and includes achievements, cognitive, motivational,
and temperamental and other aspects required for the development of expertise. Key
to this perspective is the view that previously acquired learning represents important
aptitudes for learning. Moving away from static notions of academic talent, Lohman
(2005) maintains that aptitude is not something fixed from birth; it encompasses
more than cognitive constructs (ability and achievement), and includes traits such
as persistence. This perspective, therefore, takes into consideration that previous
learning (whether adequate or deficient) plays a significant role in individuals’
approach to subsequent learning experiences.

Echoing numerous authors, Davies (2010, 2) highlights the possibility that known
manifestations of talent, including ‘advanced memory, ability to make connections,
thirst for knowledge, advanced potential in a specific subject matter, excellent
problem solver, uncommon ability to express oneself in speaking and writing’ may
not necessarily be found across learners in diverse cultural and socioeconomic
contexts. Plucker and Barab’s (2005) contextual understanding of talent appears
to speak to this understanding. Acknowledging the interaction between aptitude,
cognitive processes and environmental influences, they argue that talent is potential. Within such a perspective, the context within which an individual is located is held as something that needs to be respected. This applies both to conceptions of academic talent as well as to the methods of assessment that are used to tap into the construct. However, there needs to be ‘evidence of novel, useful accomplishment to determine the presence of gifted behaviours’ (Plucker and Barab 2005, 207). Stated differently, documentable artifacts (i.e. behaviours, products and ideas) serve as evidence from which ‘giftedness’ may be identified and evaluated. In this respect, Plucker and Barab (2005) propose an alternative question. Rather than focusing on ‘Who is gifted?’, the question is, ‘How can children be matched to specific educational contexts to allow them to realise their potential for giftedness?’. Such a perspective then assumes that all individuals have the potential for ‘giftedness’. Although Cliff and Hanslo (2009) do not define ‘academic talent’ specifically, they argue for the importance of distinctions between potential and achievement. These distinctions are particularly important for learners defined by socioeconomic and educational disadvantage where emphasis should not be on their acquired knowledge but rather on their ‘potential’ to achieve in higher educational contexts.

Passow and Frasier (1996) use the terms ‘talent potential’ and ‘giftedness’ synonymously. They propose that the basic elements of ‘talent potential’ are universal, although these may manifest differently across different social and cultural contexts. For instance, although ‘the ability to be highly expressive with words or symbols’ may be a common attribute of gifted individuals, their manifestations across culture and context may vary. In this regard, they advocate for a multi-dimensional, multi-faceted and multicultural conceptualisation of talent.

Hoge’s (1989) comprehensive review suggests that the construct of ‘giftedness’ is far from unidimensional and universal. The variability in definitions may be reflected on several dimensions, namely: the breadth of construct (e.g. single characteristic or range of traits); the content of definition (e.g. cognitive capacities and/or personality and attitudinal variables); the level of exceptionally (e.g. as measured by cut-off scores on intelligence tests); static versus dynamic (e.g. as fixed by heredity or denoting potentiality); and precision of definition (e.g. solely based on operational definition or going beyond this to consider underlying constructs). Such variability in definitions, however, may not necessarily be undesirable as Hoge (1989) notes. What is pertinent, however, is that the assumptions and values upon which the constructs are based need to serve the individuals within a particular context. Contextual variability, therefore, requires reformulations of the construct. For instance, Passow and Frasier (1996) suggest that new paradigms or models of the ‘giftedness’ construct are needed which need to take into account how ‘giftedness’ manifests differently across socio-cultural contexts.

Reis and Renzulli (2009) attempt to debunk the myth that the ‘gifted’ and the ‘talented’ comprise a homogeneous group. Rather than talent being a fixed quality
that resides in the selected few, they assert that talented individuals are a diverse group, varying in terms of ability or potential in any specific domain (whether it be intellectual, creative or artistic). Such individuals emerge from a variety of ethnic and socioeconomic backgrounds and have a range of personality characteristics. Moreover, although the ‘gifted’ manifest a number of common characteristics (e.g. well developed memory, imagination and creativity), they do not necessarily display all these traits (Frasier and Passow in Reis and Renzulli 2009). Several theorists (e.g. Callahan and Miller 2005; Renzulli and Reis 1997; Sternberg 2003 in Schroth and Helfer 2009) suggest that, rather than focusing solely on academic-related factors, the concept should also include ‘those students who possess a capability and a desire to engage in academic challenges or who demonstrate great achievement in matters explored in the classroom’. For these latter theorists, learners’ superior potential is the result of task commitment and synthesis of thinking skills (Schroth and Helfer 2009).

Reis and Renzulli (2009) provide an overview of developmental characteristics, revealing the ways in which giftedness and talent may vary. First, aptitudes and abilities manifest variably depending on factors such as cultural and ethnic background, level of disability, motivation, creativity, and so on. Second, achievement varies across ‘high potential’ children. For instance, some ‘high-potential’ children underachieve and some ‘high-potential’ children may have disabilities. Third, academic background influences present academic development. Fourth, culture and identity factors interact with achievement in complex ways. Fifth, effort and motivation are intrinsic to high levels of performance. Sixth, individual passions, learning styles and creative opportunities play an important role in the extent to which potential is maximised. Apart from these considerations, Reis and Renzulli (2009) refer to ‘intelligences outside the normal curve’, namely, courage, optimism, locus of control and empathy that interact alongside non-cognitive skills, such as leadership and self-efficacy.

The importance of context is perhaps most aptly illustrated by Wu (2005) who offers a contrast between traditional Western conceptualisations of ‘giftedness’ and those in Chinese literature which depict the same. Whereas the former (informed by Platonism) emphasise giftedness as an innate ability, the latter (informed largely by Confucianist philosophy) place greater value on nurture factors, stressing the role of personal effort, familial support and school instruction. Western conceptions moreover place value on the level of exceptionality as a defining feature (i.e. ‘only some children have gifted potential’) and draw upon models informed by ‘nature versus nurture’ debates. On the other hand, Chinese conceptions suggest more inclusive definitions (i.e. ‘all children have gifted potential’) and highlight important prerequisites for talent development, including personal motivation, effort and curiosity. Others (e.g. Fox 1981) argue that it is possible that factors other than those assessed in intelligence tests are necessary to enable individuals
to be high achievers. Moreover, individuals with deficient nurturing in the home and educational environment may not score in the same ranges as individuals from advantaged backgrounds.

The dramatic revisions and developments within the field of ‘giftedness’ education and research, namely, the shift from innate, one-dimensional and biologically-based constructions toward a multidimensional, developmental and contextual understanding of intelligence have been conceptualised by some as a notable ‘paradigm shift’ (Morelock 1996). This shift has also reflected a move from elitist and exclusionary approaches (i.e. ‘giftedness’ as rare and exceptional) to an approach that embraces ‘talent development for all’. Proponents of this latter view place emphasis on the term ‘talent’ which connotes a developing ability, as opposed to ‘giftedness’, which implies ‘mature power’ (United States Department of Education in Morelock 1996). This formulation, therefore, places less emphasis on identifying ‘giftedness’ and more on the discovery and development of talent strengths.

Some authors argue that the multiplicity of definitions of academic talent suggests that giftedness cannot be defined. An alternative to the conceptualisations described above is the view that academic talent and giftedness are merely social constructs that are institutionally crafted to serve the interests of particular groups (Schroth and Helfer 2009). Here, debates about how such terms enforce the boundaries of inclusion and exclusion are informed by particular conceptualisations. On the one hand, traditional conceptions of academic talent are inclined to marginalise disadvantaged groups in their narrow formulations of intelligence (e.g. as based on IQ scores). On the other hand, more inclusive definitions attempt to ‘even the playing field’ as Schroth and Helfer (2009, 387) suggest, by enabling opportunities for marginalised groups. Borland (2005) argues that giftedness is a social construct of questionable validity. As such, it is historically constructed, in other words, located within a specific place and time.

Exploring discourses of academic talent and disadvantage in South Africa

In the South African literature as in international literature, various terms are used to denote academic talent, for instance, ‘potential’ (Wallace and Adams 1993); ‘academically talented’ (Cliff and Hanslo 2009; Wallace and Adams 1993); ‘academic success’ (Ross 2010); ‘academic potential’ (Enslin et al. 2006); and ‘high potential’, ‘high achieving’ (Scott 2008). It is worth noting, moreover, that the majority of these terms have not been explicitly defined. In order to infer their intended meanings, it is necessary to examine their applied use within each article. Literature in local context, however, is generally cognisant of the view that academic talent is not a neutral concept but is significantly influenced by history and context. Several local authors
make this explicit in their intentional use of terms, such as: ‘gifted disadvantaged’ (Maree 2006); ‘black gifted children’ (Scott 2008); ‘disadvantaged gifted’ (Van der Westhuizen 2007); or ‘non-achieving gifted’ (Van der Westhuizen and Maree 2006) that have been appropriated from the international literature.

The ‘giftedness’ construct in South Africa

In order to understand South African conceptualisations of academic talent, it is necessary to provide a brief overview of the ‘giftedness’ construct in terms of its historical and contemporary applications. According to Lategan (in Van der Westhuizen and Maree 2006), provision of programmes for the gifted were implemented in two phases. The first during the apartheid era involved ‘non-institutional provision for the gifted’. The second phase involved institutionalisation of programmes for the gifted by four education departments. As Van der Westhuizen and Maree (2006) document, in 1965 the Institute of Manpower Research of the Bureau for Educational and Social Research, emphasising the importance of gifted education, was involved in a longitudinal monitoring and testing of white learners numbering 70,000. Moreover, in 1967 the system of differentiated education was put into effect, making provisions for ‘gifted’ learners to opt for higher-grade streams in specific subjects (Van der Westhuizen and Maree 2006). In most instances, special provisions for ‘gifted’ children involved out-of-school programmes, for example, ‘vacation schools’, extra-curricular programmes, activity periods at resource centres, or enrichment in specialised settings implemented in the 1980s (Carlson 1987; Van der Merwe and Maree 2006). According to Van der Westhuizen and Maree (2006), such centres, located in Gauteng, KwaZulu-Natal, Western Cape and the Free State, made for other provisions, such as receiving visits from provincial specialists or enlisting colleges of education to offer courses to the learners.

During the late 1980s, proponents of ‘creative talent’ as an aspect of ‘giftedness’ sought to compare creative and talent perceptions across three groups of white, Indian and mixed ethnic learners (Hickson, Morse and Khatena 1989). The first group were drawn from the Schmerenbeck Centre for the Gifted, whilst the latter groups were categorised as ‘a non-identified gifted pupil population’ (Hickson et al. 1989, 680). Talent was operationalised as ‘versatility’ and ‘creative perception’, as defined by the psychometric measures used in the study, namely, the Khataena-Mores Multitalent Perception Inventory (KMMPI) and the Khataena-Torrance Creative Perception Inventory (KTCPI), respectively. The former is based on the assumption that individuals’ past experiences, whether in art, music, leadership or creativity, can ‘serve as good indicators of talent’, whilst the latter assumes that individuals can be identified as creative based on their ‘perceived personality traits, thinking processes, and products resulting from creative striving’ (Hickson et al. 1989, 681). The results revealed that the Schmerenbeck students (characterised as
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all ‘white’) scored better than the Indian students and students of mixed ethnicity respectively. As Hickson and others (1989) indicate, the screening devices used in the study represent autobiographical instruments to identify giftedness and creativity and perhaps reflect broader conceptualisations beyond intellectual ability. Despite this move towards recognising the multi-faceted nature of ‘giftedness’, the study implicitly attempted to find racialised differences for creativity and talent perceptions without due consideration of the background, contexts and locations in which the participants were located.

In his critical unpacking of the ‘giftedness’ construct, Appel (1988, 102) argues that the rhetoric surrounding the construct (e.g. through the discourse of Specialised Education) is a subtle attempt to establish and entrench ‘biased notions as a Science’. Like Borland (2005), who views ‘giftedness’ as a social construction, Appel (1988) argues that through its reliance on objective testing or IQ testing, Specialised Education is a hegemonic practice that is compatible with the Apartheid Project aimed at the categorisation of people according to a hierarchical pyramid, with the ‘highly gifted’ at the top and the ‘handicapped and impaired’ at the bottom. Appel (1988) and Borland (2005) make the important observation that the criteria for ‘giftedness’, rather than being absolute, are determined by the prevailing educational system, the school’s ‘criteria for adequate performance, their resources, their teaching methods and assumptions and the degree of conformity required’ (Ryan and Thomas in Appel 1988).

In light of the post-apartheid government’s attempts to encourage a more inclusive approach to education in South Africa, the rudimentary structures for gifted education established under apartheid were dismantled (e.g. through closing down of centres for the gifted) (Van der Westhuizen and Maree 2006). Subsequently, present-day initiatives are largely parent-driven programmes, for example, the Growth of Children’s Potential Saturday morning township (Soweto and Daveyton) projects. One example of an institutionalised project, however, is Thinking Actively in a Social Context (TASC), which was implemented by the Curriculum Development Unit of the University of Natal (Van der Westhuizen and Maree 2006).

The construct of ‘giftedness’ appears to have evolved in relation to specific target groups. It is apparent that the literature has shifted from an overt focus on ‘achievement’ to considering ‘potential’. Despite this shift, it is necessary to remain critical of how such terms are used and what purposes they serve. For instance, Appel (1988) argues that the field of gifted education attempted to steer attention away from criticisms of elitism by proverbially ‘casting a wider net’. Thus, rather than stringently targeting ‘high achievers’, those considered as having ‘great potential’ are also embraced under the ‘giftedness’ umbrella. This seemingly inclusionary practice, Appel (1988) argues, can provide a rather ‘sanitised cover’ for elitist practices to continue. It is, therefore, necessary to take these points into consideration in efforts to
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identify and nurture academic talent among learners from historically marginalised population sectors.

**Contexts of disadvantage as a barrier to nurturing academic talent**

In their review of the literature on gifted education, Van der Westhuizen and Maree (2006) give consideration to the socioeconomic and historical backdrop that defines and influences how local developments in the field should proceed. The cycle of poverty, which defines much of the present context, as the authors state, is characterised by ‘escalating socio-economic deprivation, lack of education, joblessness (a large percentage of society being forced to rely on government grants for survival), and spiralling crime levels’ (Van der Westhuizen and Maree 2006, 202). It follows then that within such a context, notions of academic talent need to be considered alongside notions of disadvantage.

In South Africa, a student is considered ‘disadvantaged’ if he/she did not have adequate access to quality education, with the result that opportunities to develop his/her academic potential are limited (Zaaiman in Mabila et al. 2006). Several studies specify the criteria for ‘disadvantage’ in terms of individuals having had an educationally disadvantaged background, a low socioeconomic status, and lived in isolated rural areas (Mabila et al. 2006). The notion of disadvantage is highly relevant in poverty settings in South Africa. Despite almost two decades having passed since apartheid, many black children grow up in contexts of poverty and lack basic food and shelter, factors that are associated with lowered academic performance (Carter and Murdock in Dass-Brailsford 2005). Kyburg, Hertberg-Davis and Callahan (2007) draw attention to some of the effects of poverty, all indicative of barriers to achievement. Low-resourced contexts translate to poor schooling facilities, less qualified teachers and staff and teachers who are less equipped to deal with students from multicultural settings. Wallace and Adams (1993) consider such conditions as barriers to talent development within the local context. Like Kyburg et al. (2007), they too highlight the relationship between disadvantaged contexts and underachievement. Amongst these are the macro-structural factors, such as location and access to formal schooling. On a micro-level, these relate to lack of resources in schools, overcrowding, teacher shortages or underqualified staff, ‘inappropriate’ curriculum and the mismatch between the language of instruction and the student’s home language.

For Howie, Scherman and Venter (2008), the inadequacies related to gifted education in South Africa are exacerbated by difficulties, such as low socio-economic background of learners, inferior learning materials, teacher shortages, unqualified teachers, structural difficulties such as classroom overcrowding and inadequate facilities, language difficulties and an unsupportive peer environment. For these
reasons, Van der Westhuizen and Maree (2006, 201) surmise that a large majority of the ‘gifted’ in South Africa ‘do not stand even the remotest chance of achieving up to near their potential’.

Relevance of inclusive approaches to academic talent conceptualisations

Given these contextual factors, the focus should, therefore, be not so much on identifying ‘unusual’ or ‘exceptional’ qualities as much of the international literature on traditional notions of giftedness implied (e.g. Passow and Frasier 1996) but on ‘sparks’ of indicators of potential academic success at university level. Although contemporary ideas of academic talent have more readily surfaced in the recent literature, some of these notions as well as practices have also been reflected in literature from the late 1980s. For instance, Carlson’s (1987, 31) overview of a programme on developing creative potential at St Andrew’s Preparatory School in Grahamstown speaks to a non-racial policy for gifted education aimed at providing process-oriented (as opposed to product-oriented) learning for ‘pupils of all abilities and all race groups’.

The more recent literature on this topic, however, is more concerned with identifying ‘potential’ in individuals from (previously) disadvantaged backgrounds. Zietsman and Gering (1986) use the term ‘gifted’ more loosely. Rather than referring to learners who exhibit exceptional academic performance, they propose the dual identification of learners who are both ‘gifted’ and ‘disadvantaged’ at the same time. In other words, when the individual is compared to all learners nationally, he/she may be shown to be below the academic standard. Alternatively, when compared against individuals of his/her matriculation class (learners within the same school), his/her performance may be deemed superior or ‘gifted’.

Maree (2002) makes a case for a more inclusive definition of intellectual functioning, one that shifts attention away from the assumption that cognitive processes exclusively determine academic success. Several theorists have affirmed this view. Passow and Schiff (in Maree 2002) assert that the employment of qualities of compassion and commitment, for instance, towards society’s greater good represents another facet of ‘giftedness’. Stated differently, the attributes of emotional intelligence (e.g. the capacity to regulate emotion, the use of emotions in guiding thought and action, persistence in the face of challenges, delayed gratification, creativity, social deftness, empathy and hope) provide some insight into the potential-achievement gap exhibited by individuals. Maree’s (2002) arguments have intrinsic merit within the South African context. Drawing upon aspects of Sternberg’s (1999 in Maree 2006) conceptions of intelligence, Maree (2006) argues that creativity, which may be defined as unconventional creativity, resourcefulness and resilience, is of critical importance in the case of disadvantaged learners. For Maree (2006),
the term ‘gifted disadvantaged’ (Erikson 1993 in Maree 2006) may be appropriated to describe many children, who despite living in rural communities in South Africa plagued by mortality, poverty, unemployment, inadequate housing and under-resourced facilities, are able to utilise creative problem solving for survival.

Once again, the contextual realities that define individual lives are highlighted. According to Maree (2006), underachieving students in contexts characterised by limited exposure to intellectual enrichment, lack of social experiences, behaviour models and vocabulary, may exhibit awkward outward behaviours that may mask their true potential. However, Maree (2006) cautions against the use of what he terms ‘deficit ideologies’. These notions confirm and reinforce the view that black students underperform in educational settings.

Alternatively, Maree (2006) advocates for a strengths-based perspective that allows a focus on individual strengths rather than shortcomings when explaining differences in achievement. Drawing upon Maree’s (2006) paradigm makes it possible to understand the strengths of African ubuntu philosophy despite the circumstances of adversity, poverty, poor access to resources and social fragmentation.

**Shift from ‘objects’ of testing to agentic meaning-making subjects of learning**

It may be argued that the developments in the field of intelligence in South Africa have undergone similar radical shifts to those in the United States (US). In particular, South Africa’s shift from sole reliance on IQ and psychometric testing as the basis for intelligence during apartheid toward multiple constructions of intelligence in the present-day mirrors the ‘paradigm shift’ in US gifted education documented by Morelock (1996). However, as Abrahams (2001) points out, this pattern shows divergence in terms of the context in which such developments occurred. For one, educational testing under apartheid was underpinned by ideological imperatives that aimed at drawing distinctions among ethnic and population groups. According to Dubow (in Abrahams 2001), this served two critical political goals, namely: (i) to solve the ‘native’ problem by segregating social life along racial lines; and (ii) to improve the living standards of the so-called ‘poor whites’. Within this context, psychological testing (the earliest recorded being the Binet-Simon test) focused on distinguishing between white and black South Africans based on notions of ‘intelligence’ and ‘aptitude’. As Abrahams (2001) reports, the main preoccupation was on the measurement of ability. Early studies spanning the early 1900s to the 1940s when ‘Bantu education’ was being established provided ‘evidence’ to support the view that blacks were inferior to whites in terms of learning ability, thereby affirming a hereditarian view of black ineducability. Conversely, lowered performance by ‘poor whites’ reported by the Carnegie Commission was attributed to environmental deprivation factors (Abrahams 2001).
The apartheid ideologies and their consequent segregation practices in education led to justifiable debates about fairness and bias implicit in test use (Foxcroft 1997). On the one hand, anti-test lobbyists called for the ban of tests due to their discriminatory nature. On the other hand, test developers and practitioners supporting the use of tests acknowledged their limitations and called for their use alongside other processes (Plug in Foxcroft 1997). Subsequent research suggested the combination methods enhanced the selection process particularly for individuals from disadvantaged contexts. For example, Huysamen (in Foxcroft 1997) found that psychological test results and demographic information could facilitate fair and unbiased admission procedures at universities.

Biographical, historical and socioeconomic contextual determinants of academic talent

Two predominant themes are reflected in the South African literature on academic talent. First, traditional conceptions of giftedness and talent do not have direct relevance in marginalised contexts. Second, the potential for success is mediated by contextual and cultural factors. Highlighting contextual factors, such as school background, socioeconomic status and population group, Cliff and Hanslo (2009) suggest that potential and achievement are non-uniform constructs. In other words, if demographic factors are overlooked in identification procedures, the majority of students from deficient schooling backgrounds would be excluded from participation in higher education learning. The authors use the term ‘academic talented students’ loosely to refer to students having the potential to engage in higher education learning, but give full cognisance to the possibility that students’ educational backgrounds ‘may militate against them’ (Cliff and Hanslo 2009, 265).

Ross (2010) proposes that academic success is influenced by a mix of cognitive, affective, motivational, dispositional, socio-cultural, economic and institutional variables. In this regard, ‘potential’ is referred to as the competence and capacity to develop cognitive ability, assessed in terms of biographical variables, matriculation scores and a test of ‘potential’ specifically designed for learners wanting to enter university who do not have English as a first language. Both Scott (2008) and Van der Westhuizen (2007) appropriate the term ‘giftedness’. Scott (2008, 135) draws upon Frasier’s (1989) definition of ‘giftedness’ as ‘a psychological construct that cannot be measured directly, but rather through multiple criteria assessments’, but extends this further. First, according to Scott (2008), ‘giftedness’ may be found in all contexts regardless of socioeconomic level, ‘race’ and language background. Second, ‘giftedness’ may manifest as high abilities in either one or more of the areas of intellectual, academic, creative, artistic or leadership. Van der Westhuizen (2007) does not define her notion of ‘disadvantaged gifted’ but incorporates various conceptions from the international literature. For instance, she argues that the
construct is not limited to intellectual or academic achievement and that focus should be on potential rather than manifest ability and that the importance of language, culture and context needs to be acknowledged. Wallace and Adams (1993) allude to the notion that ‘potential’ is a trait possessed by all. Like Scott (2008), they affirm, for instance, that learners across social, cultural, political or economic contexts can develop universally applicable cognitive tools that can guide them in learning (whether in informal cultural or formal learning contexts).

What appears to underlie these conceptions of academic talent is the multidimensional nature of the construct and the need to consider the contextual factors associated with low socioeconomic and disadvantage in South Africa. Maree (2006), who draws upon the notion of ‘gifted disadvantaged’, argues for a broadened view of ‘giftedness’. He illustrates the utility of contemporary theories for understanding manifestations of academic talent within impoverished settings within South Africa. Drawing upon Sternberg (1999), Maree (2006) suggests that this includes the ability to problem solve, competent reasoning abilities in real-life situations, creativity and its application in situations requiring survival, and resourcefulness and resilience in the face of adversity.

Enslin et al. (2006) similarly are mindful of the sociohistorical context of apartheid education and its continuing effects on the quality of schooling for the majority of black South Africans. Key to Enslin et al.’s notion of ‘academic potential’ is the view of learners as active, agentic and meaning-making individuals who are embedded in a particular life history. Thus, rather than the individual being an object of a ‘test’, each possesses specific qualities derived from a life story and a particular historical context. ‘Academic potential’ is, therefore, construed not as an objectively derived score, but as an ‘indefineable quality’, ‘sparkle’ or ‘talent’. This may include a number of traits or qualities deduced from complementary domains of learning, namely, the cognitive, conative and affective (Brockbank and McGill in Enslin et al. 2006), for instance, motivation, persistence, self-regulation, resourcefulness, capacity for self-reflection, internal locus of control, goal orientation and an awareness of community, political or social issues (Enslin et al. 2006). Similar to Maree’s views (2006), this understanding suggests a more humanitarian approach and holistic conception of academic talent.

CONCLUSION AND RECOMMENDATIONS

The current review has attempted to trace how conceptualisations of academic talent have evolved across the years. While notions of talent are varied across settings (geographical, cultural, institutional, historical, etc.) the literature highlights several ‘trends’ worth noting:
1. There has been a gradual shift from notions of academic talent (or intelligence, giftedness, talent, etc.) as innate, static and determined largely by genetics, toward contemporary notions that emphasise the environmental, multidimensional and contextual nature of talent.

2. Some theorists have gone so far as to question the existence of ‘giftedness’ and its related constructs, proposing instead the view that the former is a social construction.

3. The South African literature on academic talent has evolved in similar ways. The literature prior to and during the 1980s focused on the ‘giftedness’ construct and arguably mirrored the ideological traces of apartheid. In particular, although studies attempted to identify academic talent among learners, they were typically silent on issues related to socioeconomic background, access to resources, and quality of schooling received. Stated differently, understandings of academic talent were decontextualised.

4. Locally and in the US, there has been a gradual shift towards egalitarianism and inclusionary practice. Taking their cue from international trends, South African theorists and practitioners, because of the damaging policies of apartheid, began to embrace more inclusionary definitions of academic talent that included creativity, leadership ability and personality attributes. Moreover, the post-apartheid government’s move towards inclusionary policies in education also translated to practices whereby the ‘gifted’ are schooled alongside ‘average’ learners in the hope that the latter will benefit from the enrichment provided to the former.

5. Core contemporary understandings of academic talent have focused less on the ‘giftedness’ construct and have made distinctions between ‘achievement’ and ‘potential’. Some authors have embraced other terms, such as ‘gifted disadvantaged’, ‘academic potential’, ‘academically talented’ or ‘high potential’. More significantly, there has also been a shift in meanings of academic talent to embrace a holistic view of the learner, one that gives attention to the ‘subject of learning’ rather than the ‘object of testing’. In this regard, contemporary local writings have borrowed largely from theoretical formulations of postmodernism and the narrative to consider the life history of the learner as having a significant influence on how academic talent is developed.

6. The South African literature has added to international perspectives on academic talent in its consideration of qualities of resilience, persistence and creativity (e.g. transcending contexts of poverty) as facilitators of achievement or academic success.
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