in the Development of Giftedness

The history of education in the United States is replete with stories highlighting movements intended to facilitate the education of our unlearned masses. From the initial establishment of postsecondary education, to the requisite implementation of secondary schooling, ours has been a complex journey toward discovery.

Some of the more noted junctures in the evolution of our educational system has been the creation of specific school types designed to meet the learning needs of children. The creation of these school types is predicated upon correlations between the students' levels of developmental readiness and the schools' provision of learning contexts to meet them. The evolution of the middle school concept provides a particularly relevant example of this process. According to Alexander and George (as cited in Chance, 1998),

The concept of a bridging school is not enough, however, because children of middle school age have their unique characteristics and needs which cannot be subordinated to the impact of the elementary school or to the demands of the high school. An effective middle school must not only build upon the program of earlier childhood and anticipate the program of secondary education to follow, but it must be directly concerned with the here-and-now problems and interests of students. Furthermore, the middle school should not be envisioned as a passive link in the chain of education below the college and university, but rather as a dynamic force in improving education. (p. 2)

It was the establishment of the middle school that served as a means to address a number of issues (e.g. curriculum relevance, environment, developmental readiness, self-esteem, teaching practices) students were experiencing with school transition processes. Add to the complexities associated with this transitioning experience (the myriad issues impacting gifted students), and many individuals, particularly teachers, are left perplexed. Yet, these two areas of focus (i.e., middle school education and gifted education) should be complementary. As Chance (1998) asserted, "Gifted education and middle school education share many of the same constructs and ideas. Not only should they not be in conflict, but gifted education within the middle school setting should be a perfect fit" (p. 138).

Method

The purpose of this investigation was to assess the factors that lead to success in transitions of giftedness among a middle school student cohort. As part of the Yale University (PACE Center) Transitions in the Development of Giftedness evaluation plan, qualitative data were collected via a semistructured interview protocol. The qualitative interview protocols were structured in a manner in which the initial questions were more generic in nature, "to get people talking and to help people feel comfortable" (Krueger & Casey, 2000, p. 44). These data allowed the research investigators to add to the "thick description" (Geertz, 1973) of the various contexts in which the Transitions project was implemented.

A total of 63 sixth-grade students enrolled in a middle school in Connecticut were interviewed. The school included grades 6–8, with a total enrollment of approximately 915 students with a racial and ethnic breakdown of 18% African American, 3% Asian, 11% Hispanic, and 67% White. Roughly 37% of the students received free or reduced-price lunch.

Audio-taped interviews of the students yielded 338 pages of transcript. Transcript data were indexed in order to make the analysis process more manageable for interpretation. According to Coffey, Holbrook, and Atkinson (1999), indexing allows components of data to be aggregated in ways that are relevant to a specific theme, topic, or hypothesis.

Index codes were assigned to various paragraphs and sections of the data that proved to be salient. Through the process of analytic induction, a number of themes were uncovered. The process of analytic induction is a means

to derive explanatory hypotheses that apply to all the data available of a particular phenomena or problem (Bloor, Frankland, Thomas, & Robson, 1999). The themes that emerged from the data and the analytic induction process included localizing the locus of control and deconstructing the definition of giftedness.

Findings

Interview data collected across the 63 student respondents were aggregated and will be discussed in the following sections. Six of the key questions included in the interview protocol are used to facilitate discussion.

What are the three most important factors contributing to success?

Several factors were identified across interview data as being the most important contributors to the respondents' success: self-confidence, intelligence, and determination. The students invariably cited the interconnectedness among these factors as facilitating their success. Self-confidence was viewed as playing a vital role in not only their academic experiences, but also their nonacademic encounters. well. as Students employed self-confidence in the classroom in order to be successful in completing assignments, mastering course content, and developing new skills. Outside of the classroom, students used self-confidence to engage in a range of extracurricular pursuits such as music and sports. The following are quotes from several of the respondents:

You will have to have like faith in yourself and you have

to believe that you can do it to be able to be successful.

If you can't believe in yourself, then you probably will not be able to achieve it.

You have to believe in yourself to do something . . .

Everyone needs self-confidence when it comes to taking a test or answering questions because, if you do not think you can succeed, you probably won't.

Always believing in yourself, that you can do many things and not always bringing yourself down and saying "I am not good at this," instead of saying that, you should say that I can do this and probably just try.

Several students equated self-confidence with having a sense of respect for self. As one student asserted, "Because you have self-confidence in yourself, you respect yourself."

Intelligence and determination also served as important factors in success. Students viewed intelligence as a core variable in their academic pursuits. Often cited in combination with determination, intelligence viewed as a necessary factor to assist them in negotiating the educational terrain. According to one respondent, "When you are doing jobs, when you are working toward success, you need to be able to learn and reason." Another student commented, "You know, if you make a mistake in school, you need intelligence to realize that you made that mistake and figure out what you can do to avoid doing that again and to reason with others."

Determination was perceived to be a necessary condition to attain success by several respondents:

> If you are not determined to do anything at all, then you are not going to do anything at all. It is like a ladder to success. If you are 100% determined, you can give 100%.

If you are determined, it drives you to do more . . .

A lot of things in your life can happen if you are determined.

What are the three least important factors contributing to success?

Students were quite outspoken in their responses to the question that required them to identify the factors they perceived to be the least important contributors to their success. Overwhelmingly, three factors were cited: luck, money, and physical attractiveness.

Luck was often cited as being transitory and fleeting, a factor that was arbitrarily experienced by individuals through no predetermined or orderly set of patterns or circumstances. Myriad responses regarding luck were cited across interview data:

> I guess luck is really not important; it is only like a belief.

> Because if you set yourself out to a good job . . . you don't really need luck to guide you . . .

Luck really only happens a few times, so you can't really depend on that.

It is not a success factor and you are not giving anything to get it or accomplish it.

Money was viewed as a plausible means of achieving some form of life satisfaction, but not as a critical component in achieving success. According to several of the responses provided in the interview data:

> We do not always need money to be successful. . . . For example, passing classes: You do not need money to succeed and get good grades.

Money does not always buy you happiness; but, if you are working hard and trying your best, then you will probably be happier than if you were just passing off all the time and you just had money.

Because if you are working and can achieve your goals, like sentimental goals, you do not need money for that.

Physical attractiveness was also seen as a factor of diminished importance when identifying necessary and sufficient components to ensure success. Much like the views expressed concerning the arbitrary and capricious realizations of luck, many respondents commented on the random and subjective qualities associated with physical attractiveness. Some of the comments taken from interview data include:

> It really does not matter how you look.

> People don't get good grades because they are good looking.

I see guys who are successful, but no offense, they don't particularly look that great. Their appearance is not appealing. They do great. They are millionaires. I don't see why physical attractiveness has anything to do with success.

It really does not matter how you look; what matters is how you work.

Again, much was shared through the commentary provided by the respondents regarding the factors they viewed as least likely contributors to their success. Most of the factors selected were external factors, factors that had no true connections to the respondents' motivation and drive. Although the frequency of responses for these three factors was significantly greater than the other factors identified as possible contributors, connections and risk taking were also factors that warrant mentioning. Respondents provided these statements in reference to these factors:

If you have connections, you do not know your real true potential because you are always leaning on someone else.

I only go for goals that I feel I will be successful at, not something that I can obtain by chance and if I blow that chance then I have to start all over again to achieve another goal.

What factors did you use to be successful?

Factors identified most frequently across the interview tran-

scripts among respondents regarding their attainment of past successes were self-confidence, learning from mistakes, intelligence, determination, and creativity.

Self-confidence, much like the discussion in the previous section highlighting the three most important factors used for success, was viewed as a primary ingredient in these students' academic experiences. Many also spoke of their use of self-confidence in extracurricular events or activities outside of the school setting.

Oftentimes, expressed concomitantly was their discussion of learning from mistakes. Just as these students used their self-confidence to engage in various academic and nonacademic pursuits, they were also quite aware of when they needed to step back and evaluate the outcomes of these pursuits; if they proved to be unfavorable, it was important to learn from these experiences. The following statements in relation to self-confidence and learning from mistakes were provided:

The homework, I did not understand it, and then my mom sat with me. She gave me this long talk and got my self-confidence up, and then I was able to get it.

Last year, I won the spelling bee for my school and I had to study and have a lot of self-confidence.

I feel if you have self-confidence, you can give comfort to yourself or other friends . . .

If you want to be successful in dance, if you do something wrong one time in your routine, the next time you would not do that thing.

Because if you make mistakes in any of your classes, then you go back and see what's wrong, why you did it, or how you correct it.

Intelligence, determination, and creativity were also cited as factors the respondents used to accomplish academic and nonacademic goals. Again, much like the discussion included above highlighting the most important factors these students perceived necessary for success, intelligence and determination received virtually the same number of responses, with creativity not far behind. A number of salient quotes related to these three factors include:

I have to go with intelligence, because in elementary school I had a reputation of being the, well, the smartest kid in the class and people looked up to me when they could not figure out something and I usually helped them.

I used intelligence to use what I knew and what I was trying to figure out.

I used determination. I believed in myself to try to get the answers right and to know that, if I got one wrong, I would not make a big deal and I just got it, worked my hardest to try to figure out what was right and wrong.

Like I had to use my determination to study harder. . . .

There was a test and I needed to study harder and use this determination.

I use my creativity to write my books and my stories and whatever I am doing. I can think about it and, whenever I have a story to write in school and whenever I feel like writing at home, I just think and write things down.

What factors did you not use to be successful?

There were two predominate factors cited by students that they could have employed to be successful in a particular situation, but did not for various reasons: self-confidence learning from mistakes. Ironically, these factors had been cited earlier as being critically important to success. Just as respondents saw the benefits of using selfconfidence and learning from mistakes to achieve noted success, they also saw how they missed many opportunities by not employing these very same factors at critical personal junctures:

> When I get home and have to study, I don't like to just give up if I don't get it right. And for self-confidence, if I get something wrong, I would like think it over and then I fix it up . . .

If we said something wrong the first time, you go back and understand why I did it that way and so next time you would not do it like that.

One time I twisted my ankle

really bad and I thought I could still play. So, I got up and then I started running and then I twisted it even more. . . . I had to go on crutches for a week.

What success factors would you add or remove from the list?

A number of success factors were added and removed from the list. Factors added to the list were varied, including responsibility, generosity, imagination, happiness, and making friends. Factors removed from the list were typically taken from the existing list provided to the respondents during the interview. The factors most frequently cited to be excised were money, physical attractiveness, and connections.

A cursory glance at the factors added to and deleted from the list reveal an important pattern: These factors mirror the choices respondents made regarding the most and least important contributors to success. The factors that were added to the list seem to be derived from some individualized, internal, self-constructed notion of success-happiness, imagination, generosity. On the other hand, the factors the respondents slated for deletion from the list-money, physical attractiveness, and luck-appear to be more collective, external, and socially constructed in nature.

Conclusions/ **Interpretations**

Two emergent themes were identified through the data analysis process. Both themes, localizing the locus of control and deconstructing the definition of giftedness, are discussed in the following section.

Localizing the Locus of Control

Perhaps one of the most salient themes that emerged across the transcript data involved the respondents' connections to locus of control. According to Rotter (1966), the locus of control is how an individual interprets outcomes based on his or her perception of internal versus external factors. This research evaluation affirms the notion that gifted students tend to possess positive levels of self-perception and tend to have internal locus of control (Yong, 1994). In addition, the research is resolute in identifying the intrinsic motivational tendencies of gifted and talented students (Skollingsberg, 2003).

Interview data revealed that students consistently selected self-confidence, determination, intelligence, and learning from mistakes as the most important factors as having contributed to their success. According to Yong (1994), students with an internal locus of control are better able to recognize their special abilities and have the motivation to strive for higher goals. By using the factors previously listed, each of which emanates from an internal core, students were able to experience success within and outside various educational contexts.

The factors students perceived to be least likely to contribute to success were luck, money, and physical attractiveness. These factors differ from the factors chosen as necessary for success in that they are extrinsic motivators and elicit external locus of control. In addition, these factors were cited most frequently for needed deletion from the list of factors contributing to success. Factors falling beyond the control of the respondents-factors they perceived to be out of their sphere of influence (e.g.,

luck, money, and physical attractiveness)—were not seen as being important contributors nor essential elements in their perceived opportunities for success.

Deconstructing the Definition of Giftedness

A question included in the interview protocol required students to define giftedness and subsequently to define success. Although definitions ranged in length and complexity, students provided quite similar commentary. In providing definitions for giftedness, most responses recapitulated the same terms and statements that identified giftedness as a "special gift," a "gift from God," or possessing "something that not everyone else has." A review of the literature reveals that the definitions these students constructed were not new, but were instead reminiscent of traditional definitions of giftedness.

Although the field of gifted education has evolved in terms of how giftedness is identified and operationalized in various contexts, these students still adhered to a more mainstream definition of giftedness. Renzulli (1986) has referred to this giftedness as schoolhouse giftedness, "the kind most easily measured by IQ or other cognitive ability tests" (p. 57). Many responses were even reminiscent of the age-old controversy surrounding the "g" factor conceptualizations of intelligence; namely, that giftedness is "that certain something that is genetic, 'a gift" (p. 23).

When asked to define the term success or to explain what it meant to be successful, responses typically centered on the realization of some predetermined goal or the acquisition of capital (i.e., material wealth or sta-

tus). Counter to the views expressed by the students regarding giftedness as a quality that was inborn or bestowed upon a select few individuals, success was viewed as a phenomenon that could be experienced by anyone who was willing to work toward a goal. Factors such as ambition, determination, self-confidence, and wisdom were often cited as prerequisites for achieving success. Hence, giftedness was viewed as being more static and absolute and was inversely related to success, which was viewed as being more fluid and uncertain.

Recommendations

Because this research investigation included only a small number of participants, it is difficult to provide an exhaustive list of recommendations. However, it is certainly possible for the reader to take information gleaned from this article and the ensuing recommendations (programmatic and research) and use it in similar educational contexts.

Programmatic Recommendations

The developmental needs of gifted students within and outside of the educational context must be considered. Endemic to the experiences of gifted children in schools is the fallacy that they will somehow "make it on their own." Casey (2000) posited, "A serious developmental penalty may be imposed when gifted children are deemed to need less and are given less, an all too common occurrence" (p. 229). Emotional and affective needs, as well as the career aspirations of these students, must be met. The literature suggests mentoring as

but one way to deal with these issues.

- The middle school curriculum should be assessed to determine if gifted students are being appropriately challenged. According to Tomlinson (1994), "Gifted middle school learners are at a special risk in the absence of appropriately challenging instruction. . . . To delay presentation of complex and demanding ideas and to defer development of habits of scholarship for highly able learners until high school may result diminished potential to develop their capacities as producers of knowledge" (p. 179). To properly assess the relevance of the middle school curriculum for this age cohort will enhance the chances for success in the transition of their giftedness.
- Careful consideration of the major issues that impact gifted minority students must be considered. A host of issues, although prevalent to some degree among nonminority students, impacts the educational experiences of gifted minority students. Teacher nominations, standardized testing, peer group influences, environmental influences, self-efficacy and selfesteem, and family support (Bonner, 2000) must be considered in developing programs aimed at assisting students in the transition of their giftedness. An important consideration must be how giftedness is realized and operationalized within cultural contexts: "Our most intelligent individuals might come out much less intelligent in another culture, and some of our less intelligent individuals might come out more intelligent"

- (Sternberg & Davidson, 1986, p. 235).
- Evaluation procedures for gifted students must be tied to their interests and motivations. Data uncovered in this investigation reveals the primacy of factors associated with an internal locus of control. Therefore, homework assignments and tests should be constructed in a manner that recognizes and supports their motivations. According to Sternberg (1982), exceptional intelligence is best measured by tasks that are "nonentrenched," meaning they do not require individuals to process information outside of their ordinary experiences. For gifted students, the incongruence between their areas of expertise and the selected evaluation procedures to assess these areas are often problematic. To ensure students' successful transition of their giftedness, a closer alignment of evaluation processes and areas of interest and expertise must be maintained.

Classroom Action Research Recommendations

- Teachers may conduct informal assessments to determine how middle school students conceptualize the term gifted and how they see it fitting into their daily lived experiences in both academic and nonacademic contexts. These assessments should be tracked along ethnic/racial and gender dimensions.
- Teachers may explore both themes uncovered in this evaluation: (a) localizing the locus of control and (b) deconstructing the definition of giftedness.

- Develop questions that elicit feedback regarding students' perceived locus of control, giftedness, and levels of success.
- Teachers may conduct focus groups with respondents to acquire critical information that is unique to this form of investigation. Focus groups would be primarily used in this context to explore the range of ideas, understand differences in perspective, capture meaningful language, and understand factors of influence (Krueger & Casey, 2000).
- Teachers may investigate ways to integrate the best practices in middle school education with the best practices in gifted education operationalized through content, instruction, and delivery systems (Chance, 1998). GCT

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