A Global Conceptualization of Giftedness:

A Comparison of US and Indian Gifted Education Programs

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TABLE OF CONTENTS

ABSTRACT

This study examines the similarities and differences between the US and India in their approaches toward gifted education programs. Beginning with a look at the evolution of gifted education in America and the subsequent programs created under the *Jacob K. Javits Gifted and Talented Education Program*, American efforts to promote gifted education programs are investigated. Indian efforts at promoting gifted education programs will also follow a similar analysis. Beginning with an overview of the Indian educational system and culminating in the landmark *National Policy on Education of 1986* that sparked national interest in promoting a unique gifted education program, Indian efforts toward gifted education will also be investigated. By comparing and contrasting both country's efforts, this study attempts to uncover common global themes in gifted education which will further the equity of gifted education throughout the world.

INTRODUCTION

Random House, American Heritage, and WordNet 3.0 agree that the term *gifted* is an adjective best used to describe someone of exceptionally high intelligence, talent, or ability, especially artists, writers, and children (Gifted, n.d.). Such consistency in the definition has not always been the case. The concept of giftedness, particularly among children, has evolved over the years, and has rarely been constant, let alone consistent (Resnick & Goodman, 1994). Currently, the definition continues to undergo refinement to better include all intelligences, talents, and abilities that may fall under the classification of giftedness.

The first federal government definition in the US appears in 1972 (Gallagher, 1994). S. P. Marland's report to the Congress of the United States provides one of the most influential operational definitions of giftedness (Gallagher, 1994) that continues to inform the work of the researchers today. S. P. Marland's 1972 definition reads:

> Gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination:
>
> 1. General intellectual ability
> 2. Specific academic aptitude
> 3. Creative or productive thinking
> 4. Leadership ability
> 5. Visual and performing arts
> 6. Psychomotor ability.
>
> It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of 3 to 5 percent of the school population.

> Evidence of gifted and talented abilities may be determined by a multiplicity of ways. These procedures should include objective measures and professional evaluation measures which are essential components of identification.
>
> Professionally qualified persons include such individuals as teachers, administrators, school psychologists, counselors, curriculum specialists, artists, musicians, and others with special training who are also qualified to appraise pupils' special competencies (p. ix-x, Marland, 1972).

While the definition and identification of gifted students continues to be debated among researchers and educators, many efforts to improve educational opportunities for gifted students are greeted with skepticism because of educators' seemingly negative perceptions of giftedness (Renzulli, 2000). Resnick and Goodman (1994) identify a lasting cultural legacy of ambivalence toward gifted students throughout American history. They claim that this ambivalence is compounded by America's preoccupation with the mean, or the norm, so gifted students, existing at the far edges of the normative curve, are viewed as academic deviants (Resnick & Goodman, 1994). Although great efforts on the part of educators and legislators have been made to ensure equitable access to education for all, including the passage of the Elementary and Secondary Education Act in 1965 and the No Child Left Behind Act in 2001, ambivalence toward gifted education programs and negative perceptions of giftedness continue to limit gifted students' access to equitable academic instruction.

One of the lasting negative impressions of gifted education programs is the public's perception that they are elitist. Specifically, many programs demonstrate a lack of inclusion of underserved and underrepresented populations such as students of color, Native American students, students with learning disabilities, and English language learners to name a few. Because of this underrepresentation, much of the recent research

has been directed toward expanding the definition of giftedness as well as ensuring ways to increase access to gifted education programs for all students. In particular, the US has decided to focus the emphasis of the *Jacob K. Javits Gifted and Talented Education Program* toward reducing the achievement gap between economically disadvantaged, limited English proficient, and disabled students at the highest level of achievement (U.S. Department of Education, 2008).

The direction of government efforts toward reducing the disparity in achievement between disadvantaged groups and the normative population through gifted and talented education programs is not a uniquely American phenomenon. In fact, in 1986 the Indian government envisioned gifted education programs as one way to improve the education of their most disadvantaged groups, scheduled tribes, *Adivasi*, and scheduled castes, *Dalit*. The program was conceived as a vital means toward improving rural education, and, thereby, improving India's overall education achievement (Government of India, 1986).

Both government initiatives, US and India, have had varying rates of success. In addition, both programs have struggled to make their mark on the overall educational system of their respective countries, and their critiques have been pointed. In the US, the criticism has often focused on equity and effectiveness. Similarly, in India, the criticism has focused on relevance to India's dynamic, multicultural population as well as effectiveness in fostering gifted behaviors such as creativity and divergent thinking.

On the other hand, both government initiatives demonstrate unique approaches and programs toward serving underrepresented populations. And, despite criticism, they offer insight into possible ways to cultivate gifted education programs in the future,

particularly in the quickly evolving global educational community that the world is becoming.

Statement of Problem

A review of the previous literature reveals that much of the emphasis among US research in the field of gifted education narrowly focuses on domestic programs with little regard for the insights of research and programs in other countries. While some of this myopic focus may be attributed to the tenuous fact that gifted education programs may have initially taken root more quickly in the US than elsewhere in the world, it is hard to deny the great loss of perspective in not taking a more global perspective. The US is far from being the only multilingual, multicultural country in the world. And, it is not alone in its struggle to include underserved and disadvantaged populations in its education system. In fact, by choosing to ignore the successes and failures of other multilingual, multicultural countries and their efforts to promote more equitable gifted education programs, the US may be overlooking key clues and insights to help it unlock the secrets of promoting more equal representation of economically disadvantaged, disabled, and immigrant populations in its own promotion of academic excellence. Just as narrowly confined identification measures, particularly IQ tests, have been questioned as insufficiently recognizing the full spectrum of giftedness, narrowly confining gifted research to one's own country also limits the full spectrum of solutions available toward ensuring that all children benefit from gifted education programs. In the spirit of excellence through equity, it is imperative to consider other perspectives in gifted education programs and uncover commonalities that will further the research on gifted education programs throughout the world.

Purpose Statement

The purpose of this investigation is to explore the common themes that emerge when two multilingual, multicultural countries attempt to increase the number of disadvantaged and underserved students in government promoted gifted education programs. The two countries in question are the US and India. Both countries promoted the implementation of gifted education programs through government efforts at roughly the same time. The US formed the *Jacob K. Javits Gifted and Talented Education Program* in 1989 and India formed the *Navodaya Vidyalaya Scheme* (*NVS*) authorized by the *National Policy on Education of 1986*.

Research Question

Due to the cross-cultural nature of this study, it is necessary to define a few key terms in order to avoid confusion and set parameters before stating the research question driving the investigation. As mentioned earlier, the identification of giftedness is continually undergoing refinement, yet it is possible at this point to adequately define gifted education programs as those programs with the explicit intent to serve the academic needs of students identified as gifted. Ideally, these gifted education programs are equitable in the sense that all students have access to being identified and served without discrimination based on race, gender, class, or ethnicity. Equity is and continues to be a point of contention, and, therefore, is a critical component to an effective program. Effectiveness, then, is determined to be a program that strives for equity. But, there is more. A gifted education program is effective only when it produces positive academic growth and development for the student, the school, and the community. Effectiveness, therefore, is a measurable impact that positively improves all stakeholders—the student, the school, and the community. Finally, as this investigation

includes a comparison between India and the US, it is also necessary to ensure that the educational themes uncovered by this investigation are effective in furthering positive growth and development of gifted education programs throughout the world. This international scope is the rationale behind the terms global and worldwide. With these points clarified, it is now possible to ask: What are the common issues and themes that emerge from a comparison of gifted education programs in the US and India that will help further global conceptualizations of giftedness and the effective implementation of equitable gifted education programs worldwide?

THEORETICAL RATIONALE

The present state of research in the field of gifted education has evolved far beyond definitions and identifications based solely on IQ tests. Although still a major force in defining giftedness and identifying gifted students (Clark, 2006), the notion that there is more to being gifted than scoring well on an IQ test is evident as early as 1972 with Marland's definition of giftedness for the US government. Among the six categories he proposes, only one is related to general intellectual ability. Furthermore, he strongly recommends that evidence of gifted behavior must be determined through a variety of measures (Marland, 1972). Since 1972, Marland's definition has been modified, refined, stretched, and reworked by many researchers in hopes of better defining and better identifying giftedness.

For the purpose of this investigation, Renzulli's (2000) three-ring conception of giftedness will be used as the theoretical rationale for defining, identifying, and serving gifted students. Renzulli (2000) is a particularly vocal advocate for a very specific type of giftedness—creative-productive giftedness. He claims that history remembers those people that have produced knowledge, "the reconstructionists of thought in all areas of human endeavor", rather than those who merely learned their lessons well (p. 98, Renzulli, 2000). Creative-productive giftedness is something that can be cultivated within students because of its unique manifestation as the intersection between above-average ability, creativity, and task commitment. This intersection is the three-ring conception of giftedness with above-average ability, creativity, and task commitment

each representing one of the three rings (Renzulli, 2000). Renzulli's (2000) own definition is as follows:

> Gifted behavior consists of behaviors that reflect an interaction among three basic clusters of human traits—these clusters being above average general and/or specific abilities, high levels of task commitment, and high levels of creativity. Gifted and talented children are those possessing or capable of developing this composite set of traits and applying them to any potentially valuable area of human performance. Children who manifest or are capable of developing an interaction among these three clusters require a wide variety of educational opportunities and services that are not ordinarily provided through regular instructional programs (p. 104, Renzulli, 2000).

Critical to Renzulli's (2000) three-ring conception of giftedness is the fact that it can be cultivated and emerges at different times and under different circumstances. Also, creative-productive giftedness is more likely to be found in approximately 20% of the population rather than Marland's estimate of 3-5% of the population (Renzulli, 2000). These two points are especially important for this investigation because "without such an approach there would be no hope whatsoever of identifying bright underachievers, students from disadvantaged backgrounds, or any other special population that is not easily identified through traditional testing procedures" (p. 98, Renzulli, 2000). Although not explicitly stated by Renzulli (2000), this statement also has important implications for broadening the search for gifted students. It stands to reason that all of the world's students are indeed capable of developing gifted behaviors as defined by Renzulli and, therefore, capable of contributing to valuable human endeavors regardless of race, class, gender, ethnicity, or, for that matter, country of origin.

Assumptions

The assumptions carried into this investigation of gifted education programs in the US and India stem systemically from the biases developed by my previous

interactions with each dimension of this project—my participation in gifted education programs during elementary school, previous research in India on the *Adivasi*, and my own personal outlook on the nature of cross-cultural relations.

I still remember the castle I built in the fourth grade in Mrs. Campagna's Gifted and Talented Education (GATE) class. The daily excitement of leaving my regular classroom to work on enrichment projects in her class is still fresh in my mind. The journey from my regular classroom to the GATE classroom was a magical journey toward inspiring hands-on discoveries and exciting computer activities.

Research suggests that powerful motivation to excel often occurs prior to the age of twelve (Bloom & Sosniak, 1981), so I often wonder how my educational trajectory would have progressed without the GATE program at my elementary school. I believe that I would never have been as excited about school, nor would I have believed that learning could be meaningful and exciting, had I not been given the opportunity to be in the GATE class. And, most likely, when the trials and tribulations of my middle school years began, I would have used this lack of meaning and excitement as an excuse to finally not care about school. As it was, the belief that school could be stimulating and fun, cultivated long ago in Mrs. Campagna's classroom, helped me overcome the emotional hurdles of my teenage years to succeed in high school and later college. Eventually, this love of learning culminated in my becoming a teacher. Therefore, it goes without saying that I possess a strong personal bias toward gifted education programs and their effectiveness in cultivating lifelong contributors to society.

In addition, although far from being an expert in such matters, I also have experience in conducting research on issues concerning disadvantaged populations in

India. Researching the effect of the Narmada Dam Project on the *Adivasi* population of Maharashtra from 1996 to 1997, I have cultivated a disposition toward ensuring the voices of disadvantaged populations such as the *Adivasi* are heard. Also, having seen one example of the type of educational opportunities available to *Adivasi* youth, I am keenly interested in ensuring that opportunities are extended to them by the larger, normative society of India. Therefore, I also possess a strong personal bias toward investigating whether the NVS is indeed an effective means toward including *Adivasi* culture into the larger Indian society.

Finally, it should be stated that I am a bicultural, biracial researcher with experience teaching in both the US as well as abroad. Therefore, the unique cross-cultural issues contained in this investigation resonate with my own personal views that education is quickly becoming a global affair—one that many countries, populations, cultures, and peoples have an increasing influence on. Education can no longer be an issue isolated within a country's borders because in the 21st century it is intimately influenced by developments, programs, and thinking throughout the world.

Background and Need

The world is evolving beyond cultural pluralism, where each unique culture is validated and celebrated, to an egalitarian society, where the diverse gifts and talents of students are actualized in addressing world problems (Eriksson, 2006). With new technologies and improved means of transportation, the process of globalization is fostering interaction between people of all cultural backgrounds (Hernandez de Hahn, 2000). This diversity has produced deep changes in today's society as well as in gifted education.

Hernandez de Hahn (2000) notes that researchers must address the identification of culturally diverse students, the creation of effective services, and intervention strategies that address their needs and, ultimately, aids in their retention in gifted programs throughout the world. It is critically important, however, to recognize that time and space often determine the gifts and talents that any given society nurtures as well as the way it chooses to identify gifted individuals. In other words, the way giftedness is interpreted depends on the values and worldviews of each culture (Hernandez de Hahn, 2000). The concept of giftedness, therefore, has to be defined culturally, to reflect the values and norms of the gifted students' heritage, and internationally, as it relates to the standards of achievement and educational objectives of the relevant country.

Furthermore, as culture plays such an important role in human performance, it makes sense to emphasize the development of policies geared toward eliminating the disadvantages suffered by some groups in the field of gifted education because throughout the world, children from minority or indigenous cultures have had to conform to colonized systems of education (Eriksson, 2006). Therefore, in examining gifted education policies and practices around the world, the stresses of assimilating marginalized gifted students must be addressed (Eriksson, 2006).

Finally, it is important to stress that great care is necessary in cross-cultural studies in gifted education because it is a relatively recent endeavor (Hernandez de Hahn, 2000).

OVERVIEW OF GIFTED EDUCATION IN THE US AND INDIA

In order to understand the present state of gifted education programs, one must first investigate the past because how gifted students are defined, how they are educated, and how society views them, varies considerably across time and across differing cultures. Put another way, the values and conceptualizations from previous generations strongly influence present day educators and decision-makers (Gallagher, 1994). This is true in both the US as well as India.

This section is therefore intended to acquaint the reader with the unique historical and cultural contexts under which the Jacob K. Javits program in the US and the Navodaya Vidyalaya Scheme in India were conceived and implemented. The comparative strengths and weaknesses of these specific gifted education programs will be considered later. In the meantime, the broad historical and cultural overview of this section will begin with the evolution of gifted education programs in the US before proceeding to a similar overview of India. The overview of the US will culminate with a brief explanation and discussion of the Jacob K. Javits program while the overview of India will culminate with a brief explanation and discussion of the Navodaya Vidyalaya Scheme.

US: Education and Gifted Education

Roots of Gifted Education Programs in Western Civilization

Tannenbaum (2000) argues that Western society has generally looked to Ancient Greek and Judeo-Christian traditions for sources of its own cultural legacy. In particular,

modern Western conceptions of giftedness and gifted education programs stem from early Greek, Jewish, and Christian influences.

Athenian tradition highlights the need to nurture human excellence for the betterment of society (Tannenbaum, 2000). For example, Plato believed that citizens should be trained to maximize their potentialities. He insisted that young men with unusual mental ability be separated from those of average intelligence and be given specialized education. Those who excelled formed a pool of future leaders of the state. Plato felt that Athenian democracy would remain great only as long as it provided the best educational opportunities for the children destined to become its future leaders (Tannenbaum, 2000).

The Jewish people have often been called “children of the book”, signifying a tradition of studying, creating, interpreting, teaching, and disseminating ideas. Tannenbaum (2000) notes that the rare student who gains intimate familiarity with Talmudic thought yet can also create original interpretations is highly regarded in the culture. This gifted individual is an intellectual elite rewarded with the highest honors. The devotion to Talmudic study was later shifted to secular learning, with far-reaching consequences for society (Tannenbaum, 2000).

The Protestant Reformation, on the other hand, ushered in a movement toward widespread literacy. The scope of the new enthusiasm for learning widened rapidly, eventually advancing the sciences for a better understanding of the laws of nature and the universe (Tannenbaum, 2000). The subsequent Renaissance and post-Renaissance period further shaped approaches toward talent development with the apprentice model used extensively in art, music, and dance. The sponsorship of talented persons, such as

Mozart, by the crown or by noblemen was a standard source of support and encouragement (Gallagher, 1994).

Early American Experiences with Gifted Education

Although rare, the recognition of gifted students in the early American public school system did occur. According to Resnick & Goodman (1994), there were sporadic bursts of interest among public school administrators, particularly in regard to the growth of the student population due to immigration. For example, in the 1860s in St. Louis, Superintendent William Harris initiated a rapid promotion schedule for "bright pupils," a program widely emulated elsewhere because large influxes of immigrants between 1890 and WWI caused the country's population to grow from 63 million to over 100 million and acceleration for the gifted was seen as a way to streamline overpopulated schools (Resnick & Goodman, 1994). Also in the 1860s, the Regents of the state of New York introduced subject area examinations for entrance into academies (Resnick & Goodman, 1994). However, it was only in the 1920s, when pencil and paper intelligence tests were first introduced for grade and program placement, did states and districts begin to define giftedness in the narrower terms of the verbal and mathematical aptitudes emphasized by the tests (Resnick & Goodman, 1994). Although evidence of concern can be found for special educational programs in the late 19th and early 20th century, the first widespread attention to the special needs of gifted students in public schools began in the Sputnik era of the late 1950s (Gallagher, 1994).

Post World War II and Increasing Federal Involvement in Gifted Education

According to Tannenbaum (2000), the greatest swings between America's devotion to excellence and to egalitarianism occurred between the late 1950s and the

early 1970s. The five years following the launch of Sputnik in 1957 and the last half-decade of the 1970s were the twin peak periods of interest in gifted children. It is relevant to note that the paradigm for the identification of the gifted by intelligence tests was solidified during this same time period (Resnick & Goodman, 1994).

The period after WWII introduced Americans to a competitive world environment in which school success was linked with national strength and economic competitiveness (Resnick & Goodman, 1994, Spring, 2005). Following the launch of Sputnik and the resulting national fear of falling behind the Russians, the first major allocation of federal funding for the gifted came with the National Defense Education Act of 1958 (Resnick & Goodman, 1994).

The emphasis on the education of gifted students went into a slump from the mid 1960s to 1970s when public attention shifted to issues of student equity (Gallagher, 1994; Tannenbaum, 2000). American education could not reconcile its interest in the gifted with its concern for the disadvantaged. Therefore, between the choice of battling for social justice and pursuing excellence, the egalitarian mood of the civil rights era prevailed (Tannenbaum, 2000). Consequently, since the 1960s, eligibility for gifted education programs broadened because of the political and legal battles over civil rights (Resnick & Goodman, 1994).

In the 1970s, school administrators became aware that one way in which to bring back the middle classes to inner-city schools was to initiate special programs for the gifted. Magnet schools offering enrichment activities in particular subjects were opened to attract students. The presence of the gifted began to make a difference in the total school atmosphere demonstrating that gifted education efforts can enhance education for

all. However, special education for the gifted has often been initiated for solving social problems rather than for the sake of those who need it (Tannenbaum, 2000).

The Push and Pull of the Equity and Excellence Debate: A Legacy

The US has lived with the conflict between equity, the promise that all children shall receive an equal opportunity for education, and excellence, that full attention and stimulation will be given to the very best students, throughout its history (Gallagher, 1994). Yet, there are particularly strong threads in America's cultural heritage inclining us toward equity. Gallagher (1994) highlights the following: 1.) many early colonists broke away from an elitist society in Europe; 2.) the Declaration of Independence and the Constitution take great pains to ensure that power will not reside in the hands of a small elitist group; and, 3.) people are loath to do anything that they believe would strengthen elitist tendencies. America's early historical inclination toward equity, therefore, resulted in a powerful cultivation of conformity. This conformity, of course, was wholeheartedly supported by the progress of mechanization and mass production. Much of the pressure for standardization came from manufacturers and leaders in the top industries of the nation, particularly the railroads (Resnick & Goodman, 1994).

Aside from early colonial notions of equity and the industrial revolution's desire for standardization, Resnick and Goodman (1994) also note the powerful influence of 19th century American culture on downplaying the values of excellence. According to de Tocqueville, Americans admired and rewarded the inventive mind that concentrated on practical application of ideas. Rarely did Americans engage in more abstract levels of human knowledge or intellectual pursuits that tended to yield intangible results in the physical world. This "middling standard for human knowledge" was tied to the

overwhelming power of popular opinion in American society (Resnick & Goodman, 1994).

The drive for excellence, in contrast to equity, seems based upon societal needs. In the modern, post-industrial, information society, the need for the education of gifted students is clearly a high priority (Gallagher, 1994). Yet, ambivalent feelings toward the gifted persist even to this day. Aside from fears of elitism in a democracy, there are suspicions that only a thin line separates genius from insanity (Tannenbaum, 2000). Consequently, opponents of gifted education regularly appear in professional journals and forums. Many objectors are skeptical about the need for providing "extras" to children who can allegedly excel without them (Renzulli, 2000; Tannenbaum, 2000). The struggle to reconcile these two important values, equity and excellence, continues within the American education system much like it did in the 1920s when giftedness was seen both as a troublesome expression of deviance and a valuable human resource (Resnick & Goodman, 1994).

The Jacob K. Javits Program

The most significant of the federal actions has been the passage of the Jacob K. Javits Gifted and Talented Education Bill in 1987. A major theme of the Javits program is the discovery and stimulation of underserved and undiscovered gifted students (Gallagher, 1994). Since its creation in 1989, the *Jacob K. Javits Gifted and Talented Students Education Program* has supported over 125 small-scale model projects and intervention strategies which have produced statistically significant increases in student academic achievement on standardized tests. The major emphasis of the program is on serving students traditionally underrepresented in gifted and talented programs,

particularly economically disadvantaged, limited English proficient, and disabled students in order to reduce the serious achievement gap among certain groups of students at the highest levels of achievement (U.S. Department of Education, 2008).

The programs and projects approved by the Jacob K. Javits program must focus on one or more of the following criteria in order to receive funding: 1.) conduct scientifically based research on methods for identifying and teaching gifted and talented students, and using these methods to serve all students; 2.) professional development for personnel involved in educating gifted and talented students; 3.) establish, implement, and operate model programs for gifted and talented students, including summer programs, mentoring, service learning, and programs involving business, industry, and education; 4.) make information on how to serve gifted and talented students available to all interested parties; and, 5.) utilize technology to provide challenging, high-level course work to students in schools that would not otherwise have the resources for such course work (U.S. Department of Education, 2008). Of course, the emphasis throughout remains on increasing the number of economically disadvantaged, English Language Learner, and disabled students identified and served in gifted education programs.

In 2005, there were 140 applications out of which 14 programs were funded for a total of $3.5 million dollars. Due to funding and appropriation issues there were no grants for 2006 or 2007. In 2008, there are currently a total of 65 applications out of which seven programs are being funded for a total of $2.6 million dollars (U.S. Department of Education, 2008). Out of the seven approved and funded programs, four target the elementary school population serving approximately 12,000 students at over 62 public elementary schools located in Virginia, Arkansas, Indiana, and Kentucky. The

average funding for each program is approximately $421,370, which is appropriated for one year. Only one of the four programs has received a previous Jacob K. Javits Program Grant. Three of the four programs focus on increasing interest in science and math careers through Project STEM (Science, Technology, Engineering, and Mathematics). One program does emphasize mathematics, but is focused on the effect of clustered learning groups as a key step toward whole school achievement. All of the programs make strong claims of increasing the identification and participation of underrepresented groups in gifted program services, training of teachers involved in gifted program services, and the dissemination of information to colleagues, neighboring school districts, and the families of the students at their respective schools. One program goes further in developing connections with the larger community by expressing a desire to cultivate business partnerships to foster understanding of the technological and scientific workplace. And, finally, only one program promotes differentiated learning through the active use of technology (U.S. Department of Education, 2008).

India: Education And Gifted Education

Overview of India and its Education System

India is the second most populous country in the world with a population of over one billion people (National Academy for Gifted and Talented Youth, 2005). India is home to 21% of the developing world's young children with approximately 170 million children under 6 years of age, making up 17.5% of India's population (Maitra, 2006). Roughly 80% of the population is Hindu, 13% is Muslim, 2% is Christian, and another 2% is Sikh. About 70% of Indians live in rural villages, which are often very remote. Currently, nearly 65% of adults are literate. Literacy remains higher among men (75%) than women (54%). Officially, 23 languages are recognized by the Constitution but over

840 dialects are spoken. Hindi and English, however, are the national languages used by the central government (National Academy for Gifted and Talented Youth, 2005).

As of 2005, there were approximately 888,000 educational institutions in India enrolling around 189.2 million students (National Academy for Gifted and Talented Youth, 2005). Although steadily improving, the majority of schools still lack the basic essentials of a classroom building, separate rooms for each class, a teacher for each class, blackboards and other teaching aids, and basic conveniences such as drinking water and toilets (Nambissan & Batra, 1989). The neglect of primary education is particularly pronounced in rural India. Poor enrollment, the large numbers of dropouts, and inadequate learning skills among children is of particular concern. The fact that the majority of children do not receive primary education, therefore, implies that there are inequalities in education as well as society (Nambissan & Batra, 1989).

A Brief History of the Indian Education System

After more than 4,000 years of history, India has not yet provided all its children with an elementary school education and its adult population is among the least literate in the world. This is due in large part to two long lasting historical legacies. The first of which is the fact that since ancient times, learning has been reserved to elite circles (Weinberg, 1997). And, the second, of course, is the effects of British colonialism.

During the last half of the 18th century, British forces defeated the French in India establishing military superiority over indigenous Indian governments. Consequently, education in the country was in disarray with many indigenous village schools abandoned. And, by 1900, indigenous village schools had all but disappeared (Weinberg, 1997).

Indians were needed by the British to staff the lower ranges of government administration as well as the expanding colonial economy. For these positions, the British mandated training in English. However, British resistance to compulsory and free primary education remained strong throughout their two-century tenure in India (Weinberg, 1997).

In colonial India, education was distributed overwhelmingly along class and caste lines. Acquisition of the English language constituted yet another widening gap between the social elite and the great mass of Indians (Weinberg, 1997). To combat this problem, the nationalist movement for Indian independence made primary schooling for all a focal issue. It would later find expression in the Constitution. Sadly, the education tradition of the colonial powers still permeates practices in India and the Westernization of the educational system has been far greater since independence than under British rule (Raina & Srivastava, 2000).

Do Conceptions of Giftedness Exist in India?

Raina and Srivastava (2000) make the argument that giftedness has indeed existed in India since ancient times, but they also argue that there is a qualitative difference in the conception of giftedness between the ancient period and since British colonization. The ancient period underlined the excellence of "being" such as felicitous speech, truthfulness, generosity, compassion, sacrifice and service for and to the society more than the excellence of "doing" characterized by post-colonial conceptions of giftedness.

A primary distinctive feature of giftedness in ancient India is the phenomenon of anonymity that attaches little importance to the individual in the creative process (Raina & Srivastava, 2000). According to ancient texts, excellence is the result of scientific

knowledge coupled with positive attitudes and deep and meditative thinking. This combination results in the power to move the world. The conception of giftedness valued in ancient India, however, is neglected precisely because it is not marketable and, more importantly, not testable by available psychometric tools (Raina & Srivastava, 2000).

The distinctiveness of the post-colonial conceptualization of giftedness lies in its being limited, restrictive, non-psychological, and oppressive. During the two-century colonial period, all ancient knowledge and values were ridiculed. Instead, a new form of Western giftedness was introduced that continues to thrive to this day. For example, people educated in elite schools based on Western concepts of excellence consider academic achievement the only criterion of giftedness. Since Indian independence, this elite group has occupied the major positions in society evolving into a superior class with deep admiration for English education often sending their children abroad for higher education. The concept of giftedness, therefore, varies greatly in India depending on the social and economic strata of people (Maitra, 2006).

Education of Gifted Students in India

India believes in "quality education for all," with special attention for the underprivileged and socioeconomically disadvantaged people. The perspective of education for the gifted in India has to be seen in this light. Concerning gifted education and development, India believes in the development of giftedness rather than calling a few individuals gifted (Wu, Cho, & Munandar, 2002). A key feature of the model of gifted and talented education in India is that it is a holistic one, uniting academic development with character formation and the development of social responsibility, and

viewing the individual as first and foremost a part of society (National Academy for Gifted and Talented Youth, 2005).

Critics on the other hand emphasize that the Indian education system is based on rote learning which may result in higher grades during examinations, but serves to numb all critical and creative faculties, especially for the gifted (Raina & Srivastava, 2000). The great majority of India's primary and secondary schools offer standardized one-size-fits-all pedagogies in their classrooms, neglecting the special needs of gifted children. Usually teachers cater to the middle and overlook those with above average ability. Lack of classroom stimulation and unchallenging curriculum atrophies the learning skills of gifted students. Within a disabling and discouraging socio-economic environment, the overwhelming majority of India's gifted children disappear into mediocre school systems that are unprepared to nurture talent or potential (Yasmeen, Raghupathi, Nehru, & Chatterjee, 1999).

Estimates on the number of gifted children in India depend greatly upon the research. The conservative estimate is roughly 13 million (Yasmeen et al., 1999) while the upper range is around 25 million (Wu, Cho, & Munandar, 2002). The numbers may be even higher with improved identification methods, particularly if one is inclined to use Renzulli's three-ring conception of giftedness that often includes roughly 20% of the student population. With numbers so large, even with conservative estimates, the education of gifted children in India is clearly a critical issue—one with tremendous impact. It is even more compelling when one considers that many *Dalit* and *Adivasi* are not included in these estimates because they are often overlooked due to their socioeconomic position in society.

The Disadvantaged Population of India: Dalit and Adivasi

Adivasi and *Dalit* have been accorded inferior educational opportunities in India beginning under British rule and continuing into the present day (Weinberg, 1997). However, under the leadership of social justice leaders, government reservations have been mandated for scheduled tribes, *Adivasi,* and scheduled castes, *Dalit* (Weinberg, 1997).

Since the 1990s, Maitra (2006) has witnessed a trend of non-*Adivasi* groups moving into traditionally indigenous areas questioning the *Adivasi* customs and ways of working. Consequently, many *Adivasi* groups have lost ownership of land, skills and traditions. Many migrate to cities in search of menial, poorly paid jobs (Maitra, 2006). Sixty four percent of *Dalit* and 50% of *Adivasi* work as laborers compared with 30% of other groups. This fact, obviously, has serious implications for their children's educational development (Maitra, 2006).

Among communities that lag behind most in both literacy and accessibility to schools are the *Dalit* and *Adivasi* (Nambissan & Batra, 1989) primarily because the quality of education and facilities in rural schools is extremely low compared to urban schools (National Academy for Gifted and Talented Youth, 2005). The number of children who have never been to school is around 100 million, and many of these children belong to economically and educationally deprived families (Maitra, 2006). However, compared with the past, children of *Dalit* and *Adivasi* now attend in much larger numbers, but, unfortunately, many are not successful because for the large majority of disadvantaged students schools remain prison houses where there is limited pursuit of academic excellence (Raina & Srivastava, 2000).

In multicultural, multilingual India, a national curriculum should yield to a curriculum driven by the community, their expertise, their needs, and their indigenous resources. Indigenous ways of learning, therefore, should be respected and should be made a part of teacher education curriculum (Maitra, 2006).

The Constitution and the Role of Education in India

A strong importance is placed on education across all social and economic strata of Indian society because it is widely viewed as the source of social and economic change. This attitude is reflected in the policies and practices of the state and central governments (National Academy for Gifted and Talented Youth, 2005). Primary school education in India, in accordance with the Constitution, Article 21A, is to be provided to all children free of cost from age 6 to age 14. Since Independence, however, educational actualities have lagged seriously behind Constitutional declaration of intention (Weinberg, 1997).

Gifted education and equity: The National Policy on Education 1986

The National Policy on Education of 1986 states clearly the government's belief that education has the powerful effect of leveling social inequalities. For example, the few key phrases that establish the Navodaya Vidyalaya Scheme (NVS) and announce the new emphasis on gifted education in rural areas for disadvantaged students make it clear that equity is achieved through this new promotion of excellence. The National Policy on Education of 1989 declares:

> 4.1 The new Policy will lay special emphasis on the removal of disparities and to equalize educational opportunity by attending to the specific needs of those who have been denied equality so far.
> 5.14 It is universally accepted that children with special talent or aptitude should be provided opportunities to proceed at a faster pace, by making

> good quality education available to them, irrespective of their capacity to pay for it.
> 5.15 Pace-setting schools intended to serve this purpose will be established in various parts of the country on a given pattern, but with full scope for innovation and experimentation. Their broad aims will be to serve the objective of excellence, coupled with equity and social justice (with reservation for Scheduled Castes and Scheduled Tribes), to promote national integration by providing opportunities to talented children largely rural, from different parts of the country to live and learn together, to develop their full potential, and, most importantly, to become catalysts of a nation-wide programme of school improvement. The schools will be residential and free of charge (Government of India, 1986).

The Navodaya Vidyalaya Scheme

The National Policy on Education of 1986 envisaged the setting up of residential schools, to be called Jawahar Navodaya Vidyalaya (JNV) in order to cultivate the best of rural talent. The Navodaya Vidyalaya Samiti (NVS) is the national body that oversees the schools, or JNVs. NVS is an autonomous organization under the Ministry of Human Resource Development, Department of Secondary & Higher Education, Government of India. The NVS is a unique experiment in gifted education. Its significance lies in the selection of talented rural children as the target group and the attempt to provide them with quality education because academically gifted children are found in all sections of society, and in all areas including the *Adivasi* and *Dalit* student populations. Rural children with special talent or aptitude should, therefore, be provided opportunities to proceed at a faster pace, by making good quality education available to them, irrespective of their capacity to pay for it. Such an approach to education would enable rural students to compete with their urban counterparts on an equal footing (Navodaya Vidyalaya Samiti, 2008).

According to the Navodaya Vidyalaya Samiti (2008), as of March 31, 2007, there were a total of 565 JNV in India enrolling over 180,000 students. During the 2005-06

academic year, 23.8% of the students were from the scheduled castes, or *Dalit*, and 15.9% from the scheduled tribes, or *Adivasi*. The majority of students were from rural areas with only 23.0% coming from urban areas (Navodaya Vidyalaya Samiti, 2008).

The NVS utilizes a strict reservation system to ensure the inclusion of rural students, *Adivasi* students, *Dalit* students, female students, and disabled students. A total of 75% of seats are reserved for rural children, a minimum of 33% of seats are reserved for girls, a minimum of 15% of seats are reserved for *Dalit*, a minimum of 7.5% of seats are reserved for *Adivasi*, and a minimum of 3% of seats are reserved for disabled students. The reservations for the *Adivasi* and *Dalit*, however, are not to exceed 50% (Navodaya Vidyalaya Samiti, 2008).

JNV are co-educational, residential schools for children from rural areas from different parts of the country to live, learn, and develop their full potential together. The program strives to impart a strong component of culture, inculcation of values, awareness of the environment, and physical education to its students. It ultimately strives for academic excellence coupled with social justice and equity through a multifaceted approach that includes academics, language instruction and migration program, personal enrichment, strengthening community bonds, and the promotion of technology (Navodaya Vidyalaya Samiti, 2008). JNV follow the standard national curriculum which includes at least two languages, general studies, work experience, physical and health education and three of the following; mathematics, physics, chemistry, biology, biotechnology, economics, political science, history, geography, business studies, accountancy, fine arts, agriculture, computer science, multimedia and web technology, sociology, psychology, philosophy, physical education, music and dance,

entrepreneurship or fashion studies. The curriculum itself is not accelerated, but students are provided with ample enrichment opportunities (National Academy for Gifted and Talented Youth, 2005).

STRENGTHS AND WEAKNESSES OF PROGRAMS

Having concluded a brief overview of the historical, social, and cultural contexts which frame the conception and implementation of both the Jacob K. Javits program and the Navodaya Vidyalaya Scheme, it is now possible to assess their relative strengths and weaknesses. Before shifting our focus to the analysis of each program's relative strength and weakness, it is important to reconsider the research question. By reconsidering this question, the strengths and weaknesses discussed below should begin to take on a global perspective. Once again, the impetus in analyzing these programs' strengths and weaknesses is: What are the common issues and themes that emerge from a comparison of gifted education programs in the US and India that will help further global conceptualizations of giftedness and the effective implementation of equitable gifted education programs worldwide?

First and foremost, it is important to note that there are many encouraging strengths demonstrated by both programs. The unique strength of the programs funded by the Jacob K. Javits program for 2008 is the focus on professional development. The unique strengths of the Navodaya Vidyalaya Scheme are enrichment activities outside of academics, the important role of community, and the use of technology. The few negative issues which prevent these programs from having their maximum impact are actually shared by both programs despite their cultural differences. Although not explicitly stated by either program, the weaknesses of both programs seem to materialize in regards to the identification of students and funding.

Strengths of the Jacob K. Javits Program

The Jacob K. Javits program does have strict requirements in its funding of programs. These five areas of focus are: 1.) conduct scientifically based research on methods for identifying and teaching gifted and talented students, and using these methods to serve all students; 2.) professional development for personnel involved in educating gifted and talented students; 3.) establish, implement, and operate model programs for gifted and talented students, including summer programs, mentoring, service learning, and programs involving business, industry, and education; 4.) make information on how to serve gifted and talented students available to all interested parties; and, 5.) utilize technology to provide challenging, high-level course work to students in schools that would not otherwise have the resources for such course work (U.S. Department of Education, 2008). Currently, out of the five areas of focus, only one, professional development, seems to be emphasized more vigorously than the other four areas. Certainly, elements of the other four focus areas are touched upon by each of the programs funded by the Jacob K. Javits program for 2008, but the emphasis seems overwhelmingly focused on professional development. Professional development, of course, would go a long way in contributing to the effective implementation of gifted education programs worldwide.

Professional Development

In reviewing the abstracts for the 2008 programs funded by the Jacob K. Javits program, one is immediately struck by the importance placed on professional development by the programs. While each program has language that addresses the need for professional development, perhaps the most salient example of the great importance reserved for professional development appears in the objectives for an elementary school

in Virginia. Out of their five main objectives for a successful program, four out of the five objectives are devoted to professional development while only one is directly concerned with student engagement. Phrases such as “intensive professional development”, “develop teachers’ capacity”, “increase teachers’ knowledge”, “increase teachers’ ability”, and “develop a teacher leadership cadre” are used by this particular school (U.S. Department of Education, 2008). Another school in Arkansas has as their main goals a summit to bring educators, science experts, and state policy makers together for collaboration as well as sustained professional development and support in the form of one-to-one peer coaching and evaluation teams (U.S. Department of Education, 2008).

Strengths of the Navodaya Vidyalaya Scheme

While not restricted to five specific areas of focus like the Jacob K. Javits program, the Navodaya Vidyalaya Scheme does have it own objectives to ensure that underserved and underrepresented students are identified and served. While little is mentioned about professional development, other than the fact that previous JNV students be encouraged to apply as teachers (Navodaya Vidyalaya Samiti, 2008), NVS does go into great detail about the need for developing character through extracurricular enrichment, strengthening community bonds, and incorporating technology into the students’ lives as well as the life of the community (Navodaya Vidyalaya Samiti, 2008). Relating back to the notion upheld by the Indian Constitution and the National Policy on Education of 1986, education, especially of the gifted, is seen as a means toward social and economic change and improvement. This may help to explain some of the outward, community oriented focus of the NVS, particularly in terms of fostering community relations between school and community through technology. This emphasis on

community involvement is no doubt an important asset for effective gifted education programs worldwide because of the immediate positive impact for stakeholders—the student, the school, and the broader community.

Enrichment Activities

The thrust on academic excellence in the classroom is accompanied by the effort to build up the JNV as institutions that give importance to the all around development of the child. The House System, for example, functions as an effective instrument for the development of the personality of the students. It also creates team spirit by involving students in a variety of enrichment activities helping students to groom themselves into self-confident individuals. Teachers, as House Masters or House Mistress, establish close rapport with students and provide them needed support (Navodaya Vidyalaya Samiti, 2008).

In addition to the House system, a wide range of activities is also offered to students. For example, the NVS head office organizes regional and national sports meetings that provide an extended community for JNV students. And, the Art in Education program provides students the opportunity to share and learn traditional skills and art with the help of renowned traditional artists (Navodaya Vidyalaya Samiti, 2008). Finally, other extracurricular activities include Boy Scouts and Girl Guides, debating clubs, traditional dance, speech and song competitions, and a youth parliament (National Academy for Gifted and Talented Youth, 2005).

The Role of Community

Great importance is placed on community involvement, social responsibility, and social concern. For example, the walls of the JNV have phrases such as ‘I promise to be a

good citizen' painted on them and students show an awareness of social issues (National Academy for Gifted and Talented Youth, 2005). As "pace setting" schools with the express goal of raising the overall quality of rural education, JNV provide opportunities for children of neighboring schools through the sharing of their facilities. Interaction of staff and students with their counterparts in neighboring schools, participation in joint community efforts, and adoption of villages for awareness programs are some of the pace setting activities undertaken by NVS (Intel, 2008a; Navodaya Vidyalaya Samiti, 2008). JNV further support their local communities by providing free access to their libraries, by allowing local teachers to participate in the workshops and seminars organised by NVS, and also by providing health and hygiene services to local residents. JNV students are encouraged to contribute to their local communities and to search for ways in which they could help those less fortunate (Intel, 2008a). One pertinent example of enriching the community is the "Smart Schools" computer literacy program. They have taken on the responsibility of providing computer training to students at local schools benefitting over 9000 rural students (Intel, 2008b; National Academy for Gifted and Talented Youth, 2005).

Technology

NVS gives utmost importance to technology. Each school has a computer lab to which all students have access and all students take computer classes. In addition there is at least one NVS 'Smart School' in each state with additional IT resources and expertise including teacher training for the staff of other schools (Singh, 2008; National Academy for Gifted and Talented Youth, 2005).

Intel also collaborates with NVS. The Intel Learn Program curriculum has been chosen for the Ministry of Human Resource Development, Government of India's Pace Setting Program. Currently, 115 JNV conduct the 'Pace Setting Program' as a part of providing quality education to children with little or no access to technology to children from nearby villages (Intel, 2008b). The program is running successfully across 15 States and 1 Union Territory having touched more than 56,000 learners from underprivileged backgrounds (Intel, 2008b).

Weaknesses of Both Programs

As mentioned earlier, both the Jacob K. Javits program and the Navodaya Vidyalaya Scheme have weaknesses that must be overcome in order to truly be effective, sustainable, and impactful programs for the 21st century. Despite both of the programs' explicit emphasis on identifying and serving underserved and underrepresented populations, the culture clash between the non-normative and normative population remains a source of tension, conflict, and dissatisfaction. Furthermore, the funding of both of these programs is woefully inadequate adding to the tension, conflict, and dissatisfaction among critics.

Since there is limited space to delve into the issue of student identification with both programs, the weaknesses surrounding the Navodaya Vidyalaya Scheme's identification process will be considered. First, the official procedure for admission will be outlined prior to examining the critiques of this process. After examining identification issues, a brief explanation of the inherent weaknesses with funding will take place.

The Selection Process

According to the NVS, admissions to JNV take place on the basis of a selection test designed and conducted by the Central Board of Secondary Education. The test, called the Navodaya Vidyalaya Samiti Selection Test (NVSST), is in 21 languages and is largely non-verbal, class neutral, and objective in nature and is designed so that talented children from rural areas do not suffer a disadvantage (Navodaya Vidyalaya Samiti, 2008). All the children who have studied in and passed from Class V from any recognized school of that district and are between 9 to 13 years of age are eligible to take the exam. A maximum of 80 students can be admitted per year. No mistake should be made regarding the stakes of the test. It is indeed a high stakes taken at a very young age, and no candidate is allowed to appear in the selection test for the second time under any circumstances (Navodaya Vidyalaya Samiti, 2008).

Improper Identification Methods: A Critique

Due to the high number of dropouts prior to Class V, the eligibility criteria for the NVSST ensures that the majority of children entering rural schools are "objectively" eliminated well before the actual selection takes place (Nambissan & Batra, 1989). The NVS also proposes that the achievement of both excellence and equity is possible through selection procedures that are free of bias and inclined towards the weaker sections of society. Scrutiny of the selection test reveals that it incorporates assumptions and features not very different from those of standardized intelligence (IQ) tests (Maitra, 2006; Nambissan & Batra, 1989), which are, therefore, neither "culture neutral" nor "class neutral" as claimed. Therefore, what is reflected in the test results is largely previous formal learning experiences (Nambissan & Batra, 1989). The way in which the NVS program has been conceived, the stage at which it is to be implemented, and the

manner in which children are selected ensures that the more privileged strata in rural India benefits (Nambissan & Batra, 1989) because the concept of excellence and the tools used for selection are based on a very narrow conceptualization and the facilities provided under the scheme are available to only a few while a large number continue to suffer from acute disadvantages (Raina & Srivastava, 2000). Therefore, JNV are likely to widen rather than reduce inequities in education. In fact, the children selected for JNV are not necessarily "innately superior" or more "talented" than the majority. Rather, they are the few who have had better schooling conditions and a home environment conducive to formal learning. The rural JNV student, therefore, tends to come from a literate and relatively well-off background with roughly 60% of JNV student families above the poverty line and 57% of mothers having attained primary education (Nambissan & Batra, 1989).

It should be noted, however, that in a 2000 survey of seventeen countries both developed and developing conducted by the World Council for Gifted Children showed that the overwhelming majority of countries reported using standardized achievement tests such as the Stanford-Binet Intelligence scales in identifying gifted students (Clark, 2006).

Clash of Cultures: A Critique from Another Perspective

The rapid decline in enrollment beginning from Class I suggests that a majority of children leave school before completing Class V. Among *Dalit* and *Adivasi* students, the phenomenon is particularly pronounced (Nambissan & Batra, 1989). It is so pronounced that it is entirely plausible that *Adivasi* and *Dalit* children themselves reject the schooling system since it is alien to their culture (Maitra, 2006). Children in indigenous cultures

often perceive the world from perspectives different from the normative culture and learn skills that are adapted to their own context, environment, and motivations (Eriksson, 2006). Each *Adivasi* community possesses their own ways of knowledge acquisition and way of life (Maitra, 2006). For example, *Adivasi* students place greater emphasis on independence and autonomy, are highly skilled in differentiation tasks, and learn a wide range of skills contextually from observation and practice (Maitra, 2006). Understandably, there exists a conflict between the *Adivasi* knowledge system and formal schooling whose practice and curriculum presume a literate tradition where knowledge is decontextually presented in texts and normative children are already socialized to accept teacher authority. The NVS emphasis on incorporating indigenous knowledge into the school curriculum is, therefore, highly questionable (Sarangapani, 2003).

Particularly troubling is the fact that *Dalit* and *Adivasi* students not allowed to learn through their own language (Maitra, 2006). JNV primarily use regional language, and a child's inability to speak a Constitutionally recognized language is usually considered as a lack of mental ability (Maitra, 2006). Therefore, in classroom transaction, an *Adivasi* or *Dalit* student has no home language link with the curriculum.

An Issue of Funding

While the implementation of better identification methods will likely require drawing upon research such as Renzulli and the subsequent design of better identification instruments, an issue that may be addressed immediately and more directly by the stakeholders involved in gifted education programs in the US and India is the need for adequate funding. Without adequate and consistent funding of these programs, there is little reason to believe that they will be effective. In particular, the sporadic funding and

appropriation issues that plague the Jacob K. Javits program makes it highly unlikely that it will effectively impact the course of gifted education in the US for the long term. For example, between 2005 and 2008, awards to programs by the Jacob K. Javits program only occurred in 2005 and 2008. For 2006 and 2007 the Jacob K. Javits program offers the explanation that appropriations for those years were cut substantially and new awards are contingent upon future funding (U.S. Department of Education, 2008). Similarly, critiques of funding issues for the NVS claim that while other nations devote roughly 5-7% of their GDP to education, India only devotes roughly 3-3.5% of its GDP toward education (Yasmeen et al., 1999). Obviously, this allocation of resources has ramifications for all educational programs, but it stands to reason that an ambitious, residential, rural educational effort would benefit greatly from a substantial increase in funding.

GLOBAL CONTEXT

As outlined above, professional development, enrichment activities, relationships with the community, and the use and promotion of technology are important dimensions of the Jacob K. Javits program and Navodaya Vidyalaya Scheme. These strengths provide an important cross-cultural foundation from which the international educational community may draw upon when considering the effective implementation of gifted education programs.

While the strengths of these two programs provide much to build upon, they also contain weaknesses that must be addressed and improved upon in the future. In particular, the considerable challenge of effectively identifying gifted students from all backgrounds must be addressed by future research. Additionally, these new identification methods must specifically include the breadth of cultures and languages present in multicultural and multilingual societies like the US and India. Also, if the true intent of these programs is to create a sustainable educational legacy, the issue of funding must be resolved. These programs must find ways to increase their share of scarce government resources.

The solutions for these shortcomings may very well lie in harnessing both of the programs' unique strengths—professional development, community support and involvement, and, perhaps most importantly, the use of technology, both as a means for reducing cost as well as increasing funding. Addressing and resolving these issues will provide profound leadership toward improving equity and effectiveness in global gifted education programs.

While the consideration of strengths and weaknesses of the Jacob K. Javits and Navodaya Vidyalaya Scheme are indeed important in furthering the effective implementation of equitable gifted education programs, recent events have significantly altered the urgency in improving gifted education programs worldwide. While 2008 has seen positive developments like the election of the first African American president in the US, it has also been the year of many negative events such as global financial turmoil and brutal terrorist attacks in Mumbai, India. The dour global economy and the recent knowledge that no country in the world is safe from terror have placed greater importance on cultivating a cooperative, inclusive, and caring global community. Certainly, the onus of this cultivation rests squarely on the shoulders of the gifted and talented. With both Marland (1972) and Renzulli (2000) echoing the Government of India's clarion call for bettering society through the promotion of gifted education, it is clear that gifted education programs must flourish so that new economic theories propogate in order to make all nations more prosperous, novel theories relating to international relations develop in order to help make the world safer for all nations and all peoples, and, finally, that fresh social and political leadership from new, inspired individuals may once again rejuvenate and reinvigorate society.

In conclusion, the global context of gifted education in the 21st century relies heavily upon creative and productive resolutions to our most pressing concerns. And, these concerns may only be properly addressed and overcome when the creativity and productivity is generated by, harnessed by, and shared by all gifted world citizens, especially those whose perspectives have seldom been sought. In expanding our search to include as many perspectives as possible, solutions to present dilemmas may come

more readily, become more applicable, and be more sustainable. This is as true in addressing the world's current political, social, and economic crises as it is in guiding future research in the effective implementation of equitable gifted education programs worldwide. Put another way, the great Indian sage, Patanjali, remarks: "When a gifted team dedicates itself to unselfish trust and combines instinct with boldness and effort, it is ready to climb" (Thinkexist.com, 2006).

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