ENRICHMENT VERSUS ACCELERATION: AN EXAMINATION OF THE LITERATURE

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ABSTRACT

This paper reviews the current research regarding enrichment and acceleration. It provides a comparative and contrasting look at these two types of gifted education delivery models. Popular models are analyzed, and reviewed.

Keywords: *Enrichment, acceleration, gifted education*

Gifted students deserve an education based upon their abilities and unique needs. Overall, the societal benefits are great in helping gifted students become the leaders of tomorrow. According to the New Mexico Gifted Technical Assistance manual, giftedness is defined as:

> *A gifted student is defined as a school age person whose intellectual ability paired with subject matter aptitude/achievement, creativity/ divergent thinking, and/or problem solving/critical thinking meets the eligibility criteria in this Section and for whom a properly constituted IEP team determines that special education services are required to meet the student's educational needs. New Mexico Public Education Department. (2008).*

Early identification and the determination of gifted student characteristics is of utmost importance. Some characteristics of gifted students might include: creativity, early and rapid learning, inquisitiveness, motivated, independent learner, insightfulness, efficient memory, complex/abstract thinking, and utilizes high level thinking skills. Identification of gifted students is quite varied based upon individual school districts. Multidimensional criteria and assessment appear to be the most effective means of identification Davis, Rimm, and Siegle (2011).

Gifted students require differentiated instruction based upon their individual needs. As Davis et al. (2011) stated, programming for gifted and talented students should include choice, challenge, enjoyment, interest, and personal meaning. In more recent years, with the emphasis on the expansion of gifted education and particular service delivery models, programming has evolved into enrichment versus acceleration considerations.

One gifted service delivery model is enrichment. According to the Technical Assistance Manual for Gifted Education in New Mexico, enrichment is defined as:

> In depth learning experiences that provide interactions with new ideas, skills, and topics not ordinarily included in planned courses of study for general education students of the same age. These experiences are based upon individual student strengths, interests, and needs. New Mexico Public Education Department. (2008).

Alternatively, The Technical Assistance Manual for Gifted Education in New Mexico acceleration is defined as:

Access to higher level learning activities and skill development than would be provided in general education to students of the same age. For gifted students, pacing, complexity, and depth in planned coursework must be accommodated or modified as indicated by individual needs. Acceleration is not a synonym for grade skipping. It can be single subject or full grade. Acceleration may also be provided through a planned course, compacting/telescoping, specially designed instruction, credit by examination performance, interdisciplinary planned courses, distance learning courses, higher education level courses, and independent self-directed study. New Mexico Public Education Department. (2008).

Both enrichment and acceleration offer benefits to the gifted learner. For example, enrichment and acceleration lead to greater knowledge and skills. Additionally, creativity and thinking skills are developed under both delivery models. Enrichment and acceleration also provide for the individual needs and high abilities of gifted students.

To appropriately provide for gifted student's needs, enrichment and or acceleration must be considered. Both offer benefits to the gifted learner; however, school districts control funding which can potentially provide numerous choices or limited offerings. As Shaughnessy and Waggoner (year) states, "not all teachers are keen on providing quality enrichment when there are so many students needing remediation and assistance. Further, not all schools have adequate supplies and materials to investigate any single topic in depth" (Shaughnessy and Waggoner, year, p. 3). This paper will synthesize the current research regarding enrichment and acceleration; presenting an unbiased perspective. Readers will be able to make their own judgments in the enrichment versus acceleration conundrum.

There are many ways to group gifted students to meet their differentiated educational needs. Homogenous groupings may include: private schools, magnet schools, and special classes within an elementary school. Heterogeneous groupings may include: groups of gifted students in classrooms with regular education students and individualizing heterogeneous classes. Part-time or temporary groups could include: resource classes, enrichment clusters, groupings for reading and math, and special interest clubs or groups. Davis et al. (2011). Differentiation allows for more effective teaching since all students are engaged in some type of meaningful learning.

First, enrichment as a gifted delivery option will be considered. As Davis et al. (2011) discussed, Reis's four principles of enrichment teaching and learning which include:

Each student is different, learning is more effective when students enjoy what they do, learning is more meaningful when students learn content and process while solving a real problem, and whereas some formal instruction is necessary a major goal is promoting knowledge and thinking skills via the application of what students have learned; they construct their own meaningfulness (Davis et al., 2011, p. 153).

So, there is much more to enrichment than some researchers may have thought many years ago.

Enrichment programming activities should always be planned with higher order thinking skills objectives in mind. The focus needs to be on process and content. Process goals might include developing critical thinking skills, creative thinking, problem solving, and scientific thinking to name a few. Content is the subject matter itself, activities, and projects which the processes are developed. Davis et al. (2011). An important note: all students can benefit from enrichment programming not just gifted students. There are varied enrichment strategies such as: field trips, independent projects, learning centers, summer programs, and after school programs. Also, there are some well-known enrichment activities found across the United States such as: Odyssey of the Mind, Destination ImagiNation, Junior Great Books, and various academic competitions.

A protégé of Renzulli's, E. Jean Gubbins, noted Renzulli's 1979 definition of giftedness: "giftedness consists of an interaction among three basic clusters of human traits-these clusters being above average general abilities, high levels of task commitment, and high levels of creativity" (Gubbins, 2010, p. 159). This definition of giftedness became the three ring model that many in gifted education reference today. Each of the three rings is interacting with the other characteristics promoting creativity and productive outcomes. As Gubbins (2010) and his classmates noted in their work with Renzulli, a theoretical model of enrichment needed to be created to aid in the development of programming practical, organizational, and curricular needs. Thus, the Renzulli Enrichment Triad Model was created. The initial purposes of the Enrichment Triad model have not changed thirty years later. Gubbins (2010) mentioned the following program objectives of the Enrichment Triad Model:

For the majority of time spent in gifted programs, students will have the opportunity to pursue their own interests to whatever depth and extent they so desire; and they will be allowed to pursue their interests in a manner that is consistent with their own preferred styles of learning. The primary role of each teacher in the program for the gifted and talented students will be to provide each student with assistance in 1) identifying and structuring realistic solvable problems that are consistent with a student's interests, 2) acquiring the necessary methodological resources and investigative skills that are necessary for solving these particular problems, and 3) finding appropriate outlets for student products (Gubbins, 2010, p. 167).

In the Enrichment Triad Model, Type I activities offer a general exploratory sampling. Type I enrichment activities might include: occupations, hobbies, places, people, events, and topics. In school settings, Type I activities require a team of teachers, parents, and students to plan and organize speakers, workshops, demonstrations, and performances. Renzulli and Renzulli (2010) stated, "Type I enrichment is mainly designed to stimulate new interests leading to Type II or III follow-up on the parts of students who become motivated by Type I experiences" (Renzulli and Renzulli, 2010, p. 144).

Type II enrichment activities involve group training activities. They are designed to promote development of feeling and thinking processes. The training activities might include development of creative thinking, problem solving, and critical thinking processes. Also, there may be a focus on how-to-learn skills and

use of advanced level reference type materials. Oral, written, and visual communication skills could be developed at the Type II level.

Type III enrichment activities involve not only individual but small group investigations of real problems. Students at this level commit to process training and advanced content acquisition playing the role of inquirer. Type III activities provides many opportunities for applying knowledge, creative ideas, applying interests, and certainly task commitment to a student selected area of study or problem. Renzulli and Renzulli (2010) stated,

When students do Type III studies, they develop authentic products with impacts upon specified audiences as well as self-directed learning skills in planning, organization, resource utilization, time management, decision making, and self-evaluation. Perhaps most importantly they develop task commitment, self-confidence, and feelings of creative accomplishment. (Renzulli and Renzulli, 2010, p. 145).

As the three ring model of giftedness and the Enrichment Triad Model evolved, there was a growing concern about students who were not identified to participate in the programs. Some students were excluded from the programs because they did not score in the top 1-3% on intelligence tests or achievement tests. Renzulli and Renzulli (2010). Teachers felt that these excluded students would excel if given the opportunity to be involved in high levels of creative productive type work. Renzulli and Renzulli (2010) stated,

Research by Reis (1981) found that when a broader pool of students (15% of the general population identified as the talent pool) participated in Types I and II enrichment experiences, they completed Type III products that were of equal or higher quality as those of students who were traditionally identified as gifted because they scored in the top 3-5% in aptitude. (Renzulli and Renzulli, 2010, p. 146).

Warwick (2001) noted based on Gagne's 1985 research, "Renzulli's model is inapplicable to underachievers because of the presence of motivation as an essential component of giftedness" (Warwick, 2001, p. 34). Many researchers tend to believe Renzulli excluded children who did not display the required abilities.

Renzulli developed the Enrichment Triad Model to serve as the curricular and theoretical basis for the Schoolwide Enrichment Model or (SEM). The SEM has been implemented in gifted programs, charter schools, magnet schools, and enrichment programs. The SEM talent pool is approximately 10-15% of above average high ability students identified by various measures. (Renzulli and Renzulli, 2010). SEM identification measures might include: teacher nominations, achievement tests, creativity and task commitment, self-nomination, and parent nomination. If a student scores in the high range for IQ or achievement tests, then the student is automatically placed in the talent pool allowing for underachieving students to be included.

There are three major goals Renzulli and Renzulli (2010) designed the SEM to address: 1) expand and maintain services to challenge students with high level of performance in school and extracurricular activities; 2) broaden general education programming that will challenge all students thereby allowing teachers to determine which students might need access to extended opportunities 3)

ensure gifted education specialists will carry out the major goals. Within the SEM there are three service delivery components: The Total Talent Portfolio, Curriculum ModificationTechniques, and Enrichment Learning and Teaching. Needed school structures in the SEM include: the regular curriculum, enrichment clusters, and the continuum of special services.

The SEM has been a successful model in finding and addressing underachievers as well as creative students who need innovation opportunities at school. Renzulli and Renzulli (2010) stated,

The SEM provides the opportunity for students to develop their gifts and talents and to begin the process of life-long learning, culminating, that we hope, will result in higher levels of creative and innovative work in their areas of interest and passion as adults. (Renzulli and Renzulli, 2010, p. 155).

Renzulli and Reis (2012) have stated,

Our ultimate goal is the development of a total school enrichment program that benefits all students and concentrates on making schools places for talent development for all young people. We believe that *a rising tide lifts all ships*! Every student benefits, from our highest achievers to struggling learners, when schools create an atmosphere that respects individuality and diversity and when opportunities, resources and encouragement are made available to maximize the strengths of all students (Renzuli and Reis, 2012, p. 22).

School principals are a critical link in the development and ongoing process of the Schoolwide Enrichment Model. Friedman (2010) states, "administrators who implement the SEM believe in their students' potential to achieve and believe in developing the talents of all students, not just a select few" (Friedman, 2010, p. 202). Involving all stakeholders, offering professional development, and capitalizing on student interests are all important pieces of the SEM. A key component in the SEM process is obtaining funding through grants, fundraising initiatives, and state/district funding sources. As Friedman (2010) suggests, "arranging for students to participate in escalating levels of enrichment is fundamental to helping them develop their individual potentials in creative and productive ways" (Friedman, 2010, p. 217).

Many schools have implemented the SEM. This paper will analyze the effects of the SEM with high risk populations, diverse student populations, students who had participated in younger years, and a comprehensive meta-analysis.

The first school borders a large city; it could be defined as a high risk population school. Students were performing at approximately the 30th percentile in writing, math, and reading on summative assessments. Expressive language and written language abilities were weak. The diverse student population represented 75% cultural and linguistic diversity. Improving student achievement was elusive for this diverse school. As Beecher (2010) stated, "The educators were aware that poverty continued to be one of the most persistent factors that negatively impacted student achievement" (Beecher, 2010, p. 178). Many factors were quite challenging for this school such as: the quality of the teachers, the safety of the learning environment, rigor of the curriculum, and class sizes. School improvement recommendations centered around: data based decision making, professional development, standardized and coherent curriculum, and family engagement.

This high risk population school involved all of their school stakeholders and created an action plan for improvement. Beecher (2010) noted: "The team embraced the concept of focusing on student strengths, promoting enrichment teaching and learning, and creating a stimulating learning environment throughout the school" (Beecher, 2010, p. 179). Their mission was to implement the Schoolwide Enrichment Model (SEM) and explore a global studies curriculum. Over several years, more opportunities and differentiated curriculum allowed for additional students to enter the program. Type I, II, and III, activities were developed to meet diverse learners needs. An example of innovation involved students who participated in Type III activities in their classroom during the school day had their regular curriculum compacted.

Many positive effects at this high risk population school were evident. Expressive language development improved and receptive vocabulary allowed students to be more active learners. Beecher (2010). The global studies curriculum allowed opportunities for all students in regular classrooms to participate that were previously meant for gifted students. The achievement gaps among the diverse student population decreased from 63% to 10%. Beecher (2010) stated, "The data also demonstrated that the achievement gap in writing was reduced to 9%, in mathematics to 7%, and in reading to 30%" (Beecher, 2010, p. 189). The data provides powerful support for enrichment teaching and learning as well as curriculum differentiation using the SEM.

The second example, involved diverse student populations in Brazil who implemented the SEM at Gifted Centers. Type I activities included speakers, workshops, field trips, and debates. Type II activities centered around: problem solving using creative skills, developing skills analyzing and organizing data, and learning observational techniques. Type III activities focused on product development and in depth learning. Many successful outcomes were discussed. De Souza Fleith and Soriano de Alencar (2010), mentioned the positive impact on students' academic performance, interpersonal skills, and self-esteem. Another positive point is that gifted students seemed to be better adjusted to their regular classrooms since they had found peers with similar interests. Some challenges of SEM were noted by De Souza Fleith and Soriano de Alencar (2010): 1) itinerant teachers lacked integration with the Center and regular school 2) many misconceptions about gifted students prevailed 3) due to the misconceptions about giftedness there was a negative impact on student identification 4) lack of physical support and updated resources 5) limited access to advanced type technology.

The next example provides an illustration of Renzulli's Schoolwide Enrichment Model of students who had been in enrichment programs in their younger elementary years following them to the secondary level. This cluster design example derived its inspiration from Renzulli's Schoolwide Enrichment Model with a focus on motivation, authentic methodology, intellectual challenge, interdisciplinary learning, creativity, higher order thinking, and meaningful evaluation. One underlying theme of the negative aspects of both primary and secondary education was that of insufficient challenge. An opportunity mentioned was meeting likeminded people at the secondary level. This research concurred

with Gibbons and Telhaj findings from 2006 which suggested that higher ability students have strong incentives to seek out their higher ability peers (Houghton 2014). High challenge and engagement was critical to this cluster design model. The positive outcomes demonstrated the opportunities for personalized learning and effective student teacher relationships are essential (Houghton, 2014).

The final example presents a meta-analysis perspective on the effects of enrichment programs on gifted students. Kim (2016) mentions the value of enrichment programs: "enrichment programs promote higher levels of thinking and creativity in a subject area and allow students to explore that subject in depth" (Kim, 2016, p. 103). It is mentioned that enrichment programs nurture social and behavioral skills as well as academic skills. Some of the discussion about the meta-analysis involved the effectiveness of enrichment programs differed depending on whether the students' outcome is socioemotional or academic achievement based. Kim (2016) stated, "the findings from this study also support the belief that enrichment programs can have positive effects on the achievement of gifted students" (Kim, 2016, p. 103). One negative aspect about this study is the lack of a common definition for enrichment programs. The analysis showed that high school students', who participated in academic enrichment programming, influenced their future academic achievement. Middle school students showed the most growth from enrichment programs in the area of socioemotional development. Kim (2016) stated, "summer residential programs demonstrated the highest impact on gifted students' academic achievement as well as on socioemotional development" (Kim, 2016, p. 113). Summer enrichment programming provides more diverse type activities and more diverse interactions among like-minded peers. In conclusion, Kim (2016) mentions the results of the study need to focus attention on continuous interventions throughout the school year as necessary for gifted students' academic achievement.

This part of the research paper will examine acceleration from a historical perspective then moving to the needs of precocious children. Early admission to Kindergarten and First grade will be explored next. Additional research on acceleration of children in early grades and their high school and college outcomes will be explored. Academic acceleration for gifted minority students will be presented as well as concurrent enrollment for high achievers. Also, a perspective considering rural teachers attitudes toward acceleration will be presented. Finally, a meta-analysis of the effects of acceleration on high ability learners will conclude the acceleration topic.

The second gifted delivery option is acceleration. McClarty (2015) stated the following: "meta-analyses summarizing nearly 80 years of research reveal a remarkably consistent pattern: accelerated students outperform comparable nonaccelerated peers on both K-12 and postsecondary achievement outcomes" (McClarty, 2015, p. 4). Acceleration is considered an intervention that moves high-ability students through academic content via specific educational programming at a faster pace than usual or even at a younger age. There are numerous types of acceleration: early admission to Kindergarten or first grade, grade skipping, subject matter acceleration, combined classes, curriculum compacting, telescoping curriculum, extracurricular programs, correspondence courses, early graduation,

concurrent or dual enrollment, advanced placement, credit by examination, acceleration in college, and early entrance into middle school/high school/college. Davis et al. (2011). Parents as well as educators must consider a student's academic needs and socioemotional needs before and during any accelerative programming.

Colangelo, Assouline, and Gross (2004) of the *Nation Deceived Report Volume I* state: "America's school system keeps bright students in line by forcing them to learn in a lock-step manner with their classmates. Teachers and principals disregard students' desires to learn more-much more-than they are being taught" (Colangelo et al., 2004, p. 1). Many studies reveal that bright kids are bored in the classroom due to a lack of challenge. As a country, we have become complacent and apathetic regarding academic excellence. Colangelo et al. (2004) of the *Nation Deceived Report Volume I* state: "When we say no to acceleration, we are quietly and, ironically with good intentions, lowering our national standards from excellence to baseline competence. Excellence is simply disregard." (Colangelo et al., 2004, p. 3). The cost of saying yes to acceleration is quite minimal compared to the benefits students' receive.

Historically, acceleration was present in early agrarian society one room school houses. Students received their individualized instruction. As our nation grew in population, industrialization became the norm. Schools were then organized by keeping same age peers together. "What was lost was an appreciation for individual differences" (Colangelo et al., 2004, p. 11). During times of war, such as World War II and the Korean War, universities and colleges accepted early enrollees as a way to encourage getting through college faster. Colangelo et al. (2004).

Precocious children have the ability and motivation to get far ahead of what is considered normal for their ages and grade levels. Feldhusen (2003) stated, "The best way then to meet the educational needs of precocious kids in school is to give them access to higher level and more challenging instructional material" (Fedhusen, 2003, p. 55). Feldhusen (2003) discusses the fact that research evidence over many years supports grade advancement for children who are socially and academically ready for it. Additionally, Feldhusen (2003) mentions the potential need for counseling services for precocious children who might need personal or social development. Mentors may also be an option to support high-ability children. According to Feldhusen (2003), "Grouping precocious students in special classes and using advanced curriculum and a faster instructional pace can be ideal teaching methodology" (Feldhusen, 2003, p. 56). Pull-out accelerated programs can provide challenge from their peers and it can give recognition that others have similar social and personal characteristics. Finally, Feldhusen (2003) states, "Thus, we advocate that they be given a choice and / or a tryout in the accelerated experience with the option to go back to their regular classroom if they wish" (Feldhusen, 2003, p. 57).

One of the more common but not as frequently used options is early admission to Kindergarten or First grade. Early admission is a natural time for children to be accelerated due to their curiosity, high energy, and their need to investigate. Davis et al. (2011). Davis et al. (2011) states, "Also, early admission is

the least administratively disruptive option for gifted children; it avoids discontinuities in the curriculum, and it presents a relatively easy way to match the child to the system" (Davis et al., 2011, p. 128). Unfortunately, there are many concerns regarding early admission such as: social immaturity, excessive stress due to academic demands, missing leadership experiences, and parents who are pushing their children into early entrance. However, research shows the concerns are unfounded. Elementary school early entrants performed better academically than their older grade level classmates. Davis et al. (2011). Davis et al. (2011) mentioned research by Hobson from the late 1970's which states, "Hobson confirmed that their superiority continued through high school, they participated in more extracurricular activities, they earned significantly more graduation awards, and they were more likely to be admitted to college" (Davis et al., 2011, p. 129).

McClarty (2015) studied the effects of grade skipping and the subsequent educational opportunities. The study used a nationally representative data set spanning several decades. Students who skipped at least one grade prior to eighth grade were compared with their older eighth grade classmates on later high school and college achievement outcomes. McClarty's (2015) research revealed consistent results with other studies regarding the positive academic achievement for students in high school and college. According to McClarty's (2015) research, highly able students out perform their matched peers over time due to: 1) high ability students have processing skills in the top 2%-5% 2) show academic proficiency two or more grade levels ahead 3) prefer fast paced and challenging learning 4) self-motivated learners with a desire to acquire new knowledge. McClarty (2015) further stated, "in addition acceleration implies rapid progress, and once students skip a grade, their speeded academic pace does not slow. In fact, advanced ability tends to maintain its rapid pace of development" (McClarty, 2015, p. 11). "Accelerated students who reached the same level of eighth grade achievement in less time may have higher general ability, which could facilitate higher levels of later achievement" (McClarty, 2015, p. 11). McClarty (2015) concluded her study discussing the effects of acceleration may motivate a students' involvement in other challenging educational opportunities. McClarty (2015) noted, "this finding supports and extends other work which showed accelerated students taking Advanced Placement courses in high school fared better in college and gifted students participating in Advanced Placement were more likely to earn advanced degrees" (McClarty, 2015, p. 11). McClarty's (2015) summary stated, "highly able learners should not only be allowed to accelerate but should also be provided multiple avenues for advanced study; across outcomes and over time, these opportunities boost gifted learners' odds of further success" (McClarty, 2015, p. 12).

The next study for examination by (Young-Lee, Olszewski-Kubilius, and Peternel 2010) supported the use of acceleration for gifted minority students in math. Acceleration was considered from the perspectives of teachers and students beliefs, obstacles, and perceptions of the impact of acceleration on students' social and academic lives. Approximately thirty students in grades 4-9 and seven teachers participated in the study. Accelerated students believed that being

accelerated would help them be better prepared for high school and college. (Young-Lee et al. 2010). Two benefits mentioned were increased academic confidence and stronger personal self-image. Students considered themselves as smart gifted students. A few students felt that by taking advanced math it could help with college entrance as well as higher education goals. Students mentioned other perceived benefits as stated by Young-Lee et al. (2010), "other benefits, according to the students, were working harder, having higher expectations for high school, and gaining critical thinking skills" (Young-Lee et al., 2010, p. 199). The students revealed, "it was striking that many of the students felt bored at school; they were looking for challenges that made them excited and stimulated and that also put them ahead of others in high school" (Young-Lee et al., 2010, p. 202). The teachers involved in the study supported acceleration for gifted students because it provides the necessary challenges for academic talent development. The teachers emphasized, "they made it clear that the way acceleration is implemented must vary by individual" (Young-Lee et al., 2010, p. 201). The teachers cited several factors necessary for successful acceleration to include: good study skills, hard work, passion for learning, and interest in the particular subject area. (Young-Lee et al., 2010). A misconception about minority gifted students was revealed, "Teachers did not believe that acceleration was particularly needed for minority students, nor aware that minority students are underserved in accelerated classes" (Young-Lee et al., 2010, p. 203).

Dare and Nowicki (2015) studied twenty one high ability grade eleven and twelve students who were concurrently enrolled in university courses with university students. The study participants were actively working toward university credit while working toward their high school diploma by earning separate credits at each level (Dare and Nowicki, 2015). Deci and Ryan's 1985 model of self-determination was utilized for this study; intrinsic and extrinsic motivation was analyzed. "Through the analyses, we identified seven key concepts among participants' reasons for engaging in concurrent enrollment as follows: (a) prepare for university, (b) demonstrate initiative, (c) get ahead, (d) love to learn, (e) self-fulfillment, (f) seek challenge, and (g) socializing" (Dare and Nowicki, 2015, p. 258). Study participants expressed several benefits of concurrent enrollment to include: exposure to challenging curriculum, exposure to university life, pursuit of academic areas of interest, and exposure to a wide range of academic courses. "Secondary school teachers can support senior students in this transition by being aware of concurrent enrollment opportunities and the benefits of concurrent enrollment" (Dare and Nowicki, 2015, p. 261).

The study by Olthouse (2015) examined rural teachers' attitudes towards acceleration. Olthouse's (2015) findings indicated acceleration as an intervention is underused. There are many reasons for this. First, declining rural populations along with a strong accountability environment has placed undue pressure on rural schools which in turn has negative effects on gifted services such as acceleration. Next, with declining rural populations, per pupil funding has also decreased. Funding has been spent on the low achieving students rather than the high achieving students. Rural schools generally do not offer AP courses. Finally,

since rural teachers tend to use more traditional instructional methods, possibly due to lack of gifted education training, there is reluctance to accelerate students.

Olthouse (2015) conducted a small study of one of her online classes; all teachers were in-service, serving rural school districts. Throughout the semester data was collected from assignments and surveys. When students were asked to rank acceleration, enrichment, and differentiation as an intervention, the students chose acceleration as their least favorite model. Olthouse's (2015) study revealed strong attitudes against acceleration in rural schools. "Students' objections to acceleration are connected in part with their backgrounds and settings. Most of these students have not known many people who accelerated especially in elementary school" (Olthouse, 2015, p. 159). Olthouse (2015) concluded her study with the following thoughts: 1) teachers require and need experience with acceleration and administrative support 2) advocating for gifted students' needs is necessary 3) gifted students could increase their academic achievement if (1) and (2) were followed.

Steenbergen-Hu and Moon (2011) conducted a meta-analysis on the effects of acceleration on high ability learners. The studies spanned from the mid 1980's to 2008. "The findings from this meta-analysis generally confirm the positive influences of acceleration on high-ability learners, in terms of academic achievement and social emotional development" (Steenbergen-Hu and Moon 2011, p. 51). Steenbergen-Hu and Moon (2011) mention students' and parents' concerns about acceleration being related to not only short term but long term influences on gifted students' social emotional development and academic achievement. "Often, through their personal experience, students and parents can understand and appreciate the short-term benefits of acceleration. However, they remain unsure or unconvinced about the long-term impact of their acceleration decisions" (Steenbergen-Hu and Moon, 2011, p. 50). Accelerated students tend to surpass non-accelerated peers in self-confidence, social relationships, and self-concept (Steenbergen-Hu and Moon, 2011).

Lynch (2009) addressed high ability students need for grade advancement or other academic acceleration options. As Lynch (2009) mentioned, if a student is advanced in knowledge and intellectual level beyond their same age peer group, then acceleration is quite realistic. Lynch (2009) discussed grade skipping, advanced course work and even tutoring as ways to provide for high ability students' needs. Failure to provide for high ability students' needs has high costs. "It may result in boredom and daydreaming, poor study habits, behavior problems, or school avoidance" (Lynch, 2009, p. 1). As Lynch (2009) further states, "Accelerated students also report heightened interest in and enthusiasm for school" (Lynch, 2009, p. 1). Educators are concerned about the emotional and social development of accelerated gifted students. Lynch (2009) concludes her paper about the decision making steps to accelerate a high ability student. Key decision makers to accelerate a student include: the student, parents, principal, gifted coordinator, and classroom teacher. A child's academic potential and social emotional adjustment are crucial factors in determining accelerated placement.

A Nation Deceived Report: How Schools Hold Back America's Brightest Students volume 1 discussed the weaker alternatives to acceleration.

Some of the better known approaches include ability grouping, enrichment activities, pull-out resource rooms, classroom differentiation, independent projects, and cooperative learning. Schools also look to special-topic projects, field trips, chess, and competitions to enhance the learning opportunities for students. All of these approaches have their place and their advocates (Colangelo, et al., 2004, p. 21). Further, (Colangelo et al. 2004) stated, "anything that helps students is a plus" (Colangelo et al., 2004, p. 21). Colangelo et al. (2004) firmly stated, "However, for high ability students none of these approaches has produced the compelling research evidence earned by accelerative options" (Colangelo et al., 2004, p. 21).

There are some final thoughts to ponder regarding enrichment and acceleration decisions. As Shaughnessy and Waggoner (year) stated, "Granted any enrichment is better than no enrichment, but if anything is worth doing, it is probably worth doing well, although in this age of expediency, this is not always the case" (Shaughnessy and Waggoner, 2015, p. 8).

McClarty (2015) stated,

In sum, acceleration is an effective strategy for gifted learners, and accelerated students receive additional benefit from instructional programs tailored to their abilities. Accelerated students who continue to receive and take advantage of these specialized opportunities should realize benefits that persist beyond K-12 schooling (McClarty, 2015, p. 12).

This paper has compared and contrasted the strengths and weaknesses concerning enrichment versus acceleration decisions for gifted students. It has reviewed the current research addressing enrichment and acceleration issues and concerns. In summary, this paper presented a comprehensive review of the literature by which the reader can make their own conclusions about enrichment and acceleration.

REFERENCES

1) Beecher, M. (2010). Schoolwide enrichment model: Challenging all children to excel. *Gifted Education International, 26*(2-3), 177-191.
2) Colangelo, N., Assouline, S., & Gross, M. *A Nation Deceived: How Schools Hold Back America's Brightest Students* Rep. No. I at 1-67 (2004).
3) Dare, L., & Nowicki, E. (2015, October). Conceptualizing concurrent enrollment: Why high-achieving students go for it. *Gifted Child Quarterly, 59*(4), 249-264. doi:10.1177/0016986215597749
4) Davis, G.A., Rimm, S. B., & Siegle, D. (2011). Education of the gifted and talented. Upper Saddle River, NJ: Pearson.
5) De Souza Fleith, D., & Soriano de Alencar, E. M. (2010). Implementing the schoolwide enrichment model in Brazil. *Gifted Education International, 26*(2-3), 169-177.
6) Feldhusen, J.F. (2003). Precocity and acceleration. *Gifted Education International, 17*(1), 55-58.

7) Friedman, N. (2010). Where the rubber meets the road: A principal's perspective on the schoolwide enrichment model. *Gifted Education International, 26*(2-3), 201-218.
8) Gubbins, E.J. (2010). Three rings, three enrichment activities, three decades earlier. *Gifted Education International, 26*(2-3), 157-168.
9) Houghton, C. (2014, January). Capturing the pupil voice of secondary gifted and talented students who had attended an enrichment programme in their infant school. *Gifted Education International, 30*(1), 33-46. doi:10.1177/0261429413480421
10) Kim, M. (2016, April). A meta-analysis of the effects of enrichment programs on gifted students. *Gifted Child Quarterly, 60*(2), 102-116. doi:10.1177/0016986216630607
11) Lynch, S.J. (2009). Should gifted students be grade-advanced.
12) McClarty, K.L. (2015, January). Life in the fast lane: Effects of early grade acceleration on high school and college outcomes. *Gifted Child Quarterly, 59*(1), 3-13. doi:10.1177/0016986214559595
13) Olthouse, J.M. (2015, May). Improving rural teachers' attitudes towards acceleration. *Gifted Education International, 31*(2), 154-161. doi:10.1177/0261429413507177
14) Shaughnessy, M.F., & Waggoner, C. (2015). How rich is your enrichment program? Creative Education, 6,663-668.
15) Steenbergen-Hu, S., & Moon, S.M. (2011, January). The effects of acceleration on high-ability learners: A meta-analysis. *Gifted Child Quarterly, 55*(1), 39-53. doi:10.1177/0016986210383155
16) Technical Assistance Manual for Gifted Education in New Mexico. Doc. at 11-130 (2008).
17) Renzulli, J.S., & Reis, S.M. (2012, January). A virtual learning application of the schoolwide enrichment model and high-end learning theory. *Gifted Education International, 28*(1), 19-40. doi:10.1177/0261429411424382
18) Renzulli, J.S., & Renzulli, S.R. (2010). The schoolwide enrichment model: A focus on student strengths and interests. *Gifted Education International, 26*(2-3), 140-157.
19) Warwick, I. (2001). Providing for under-achieving students using Renzulli's type III enrichment activities: Gifted and talented video projects at Holland Park comprehensive school. *Gifted Education International, 16*(1), 29-42.
20) Young-Lee, S., Olszewski-Kubilius, P., & Peternel, G. (2010, July). The efficacy of academic acceleration for gifted minority students. *Gifted Child Quarterly, 54*(3), 189-208. doi:10.1177/0016986210369256