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Common Core State Standards: Beware The Trojan Horse

Yee Han Chu

COMMON CORE STATE STANDARDS: BEWARE THE TROJAN HORSE

by

Yee Han Chu
Bachelor of Arts and Science in Psychology and Genetics,
University of California, Davis, 1991
Master of Science in Social Work, Columbia University, 1995

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This dissertation, submitted by Yee Han Chu in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

Jodi Bergland Holen

Meghan Salyers

Samuel Rocha

Kenneth Flanagan

This dissertation is being submitted by the appointed advisory committee as having met all of the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.

Wayne Swisher
Dean of the School of Graduate Studies

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Date

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Yee Han Chu
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ACKNOWLEDGMENTS

Achieving at a high level requires a willingness to be vulnerable. I have had to expose my ideas for critique. I have had to let go of my false friend, perfectionism, so I can hear this critique completely. I have experienced exhaustion editing my work once more. Yet, only through these experiences was I able to learn how to craft a product that, I believe, is meaningful.

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To Annika and Thomas

All My Love

ABSTRACT

The Common Core State Standards (CCSS) represent a promise by general education that all students can be college and career ready through the acquisition of essential knowledge, skills, and abilities. These essential elements will be rigorous, supporting the higher-order and independent thinking skills typically associated with the achievement of excellence. CCSS, in short, promises excellence in all students. The needs of those students who demonstrate high ability do not receive any separate mention: (1) how has the concept of excellence been incorporated into the CCSS; and (2) what is the potential impact on high ability students?

These questions are examined using the theory of cultural appropriation. Proving cultural appropriation requires establishing a community of insiders and a community of outsiders; cultural property belonging to the outsiders; the actual taking of that cultural property by the insiders, and the transformation of cultural objects in a way that harms the community of outsiders. Critical discourse analysis (CDA) is used to show the transformation of higher-order concepts through the CCSS. This analysis reveals how the CCSS authors have been able to create the pretense of excellence by infusing the standards with words and phrases popular in gifted education, while cloaking the primacy of equity.

The tension between equity and excellence has long dominated the relationship between gifted education and general education. The CCSS function like a Trojan Horse; lulling the gifted education community into a false belief of ideological acceptance. An

ideological framework of closing the achievement gap in the CCSS is hidden in the standards. CCSS is just an extension of general education's historical commitment to equality through equity.

These CCSS are potentially harmful to high ability students. High ability students will not be able to receive acceleration in the early grades as advised under the CCSS. They will not be able to skip content and perhaps graduate early. They will not be able to experience "real creativity." The gifted education community must approach the CCSS with caution and reestablish their claim over gifted education concepts so that high ability students will be served. The CCSS do not provide excellence for all.

CHAPTER I

INTRODUCTION

At its peak, 45 states and four territories had adopted the Common Core State Standards (CCSS) for their K-12 public school students. Three states (Indiana, South Carolina, and Oklahoma) have since withdrawn and several states are actively considering withdrawing. States that still adopt the CCSS continue to believe these standards are the key to improving student achievement. Not only do the CCSS promise knowledge, skills, and goals essential for educational success, but also the rigor that will provide students with the high-order skills and independent thinking needed in both the workplace and institutions of higher learning. In short, CCSS promises to promote excellence in all students.

While the specialized needs of students with disabilities and English language learners have been recognized under the CCSS, the needs of those students who demonstrate high ability do not receive any separate mention. Can the CCSS as originally conceived deliver its promise of excellence to these high ability students? While a cursory review indicates that the answer is yes because of the similarity of language used in CCSS and in gifted education, a closer examination yields strong differences between the meaning of excellence under the CCSS and in gifted education. Only a comparison of how general education and gifted education interpret CCSS concepts will reveal if gifted education and general education are talking at cross purposes in the pursuit of excellence (e.g., whether transformation of words has

occurred), whether high ability students will be served, and if educators of gifted students need to think more deeply about the political implications of the CCSS and their future role within the general education community.

A Social Worker and Parent of High Ability Students

I am a social worker who follows an ethical mandate to serve vulnerable populations that face economic and social injustice. My work has taken me into the areas of forensic child abuse assessment, mental health treatment, and substance abuse treatment. Advocating for high ability students does not appear to easily fit within the sphere of a social worker's mission. The field of social work does not spotlight the needs of high ability students, perhaps lulled by the popular misperception that high ability students face few challenges. I, too, had a similar blind spot until I had children of my own who showed some quickness in intellectual ability at a young age and whose vulnerabilities emerged when they entered school. Now that I see these vulnerabilities, I advocate for their protection as would any parent, but bring to that advocacy the insights received from working with other vulnerable populations.

I also believe in public education. I attended public school throughout my formative years and graduated from a public university. I believe in public access and am indebted to my 7th grade English teacher who saw enough potential in this immigrant student to recommend her for placement into a college bound "track." I resist placing my children in private school, because of my gratitude to public education. However, I have learned that public education's service to high ability students is inconsistent at best and harmful at its worst. My children's continued attendance in public school represents my personal investment in making the public school system work. For me, there is no other option: public schools cannot fail.

At first blush, the CCSS shines like a beacon of hope. It was during one of the National Association for Gifted Children (NAGC) Conferences when I first heard of the CCSS. I joined NAGC four years ago and consider myself a member of the gifted education community. Many at the conference seem hopeful that the CCSS will bring change and a renewed emphasis on high ability and those students who show them. It is with that same hopefulness that I, too, first looked upon the CCSS. What follows is my analysis of the CCSS and the relationship between general education and gifted education that backgrounds the standards. While naming general education and gifted education as communities may be uncommon, this naming will allow me to compare and contrast the ideologies that differentiate them. This naming is not intended to communicate that every member of either "community" shares a common perspective.

Research Questions and Theoretical Framework

The overarching questions guiding my analysis are: (1) how has the concept of excellence been incorporated into the CCSS; and (2) what is the potential impact on high ability students? I will examine these questions using the theory of cultural appropriation. Cultural appropriation occurs when the cultural objects of a community of outsiders is transformed by a group of insiders. The cultural objects in this case are the principles of excellence that support higher-order, critical, and creative ways of thinking. The communities involved are gifted education, that historically emphasized these principles, and general education, that has formally adopted these principles through the CCSS. In this analysis, gifted education will be described as a community of outsiders, while general education will be described as a community of insiders. What truly distinguishes cultural appropriation from other forms of cultural sharing, however, is that

the transformation of the cultural object by the insiders must change it in a way that is fundamentally different and harmful to the outsiders (Young, 2010; Ziff & Rao, 1997).

After explaining the theoretical framework of cultural appropriation, I will apply the theory to the relationship between gifted and general education and the adoption of the CCSS. I will begin with the most fundamental aspects of cultural appropriation theory: the taking of the cultural property of gifted education by general education through the adoption of the CCSS and the transformation of that cultural property in a way that harms gifted education. I will give context to the CCSS as a continuation of prior educational reform movements that have dealt with the inherent conflict between the pursuit of equity and the pursuit of excellence and situate the CCSS as a referendum for excellence with a hidden ideology for equity.

I will examine the possible transformation of the concepts for excellence within the CCSS using critical discourse analysis (CDA), a process of examining textual information to reveal power structures and hidden ideology (Machin & Mayr, 2012). Fundamentally, CDA aims to identify and remedy problems of social inequality that result from ideological control (van Dijk, 1995). The application of CDA will clearly indicate whether general education has transformed core concepts of gifted education by changing the intended audience of these concepts from high ability students to typical students thereby rendering the use of these concepts harmful to high ability students and the gifted education community.

In addition to transformation, the existence of the other elements of cultural appropriation must be demonstrated. Gifted education must have all the attributes of a community in historical and ideological aspects and, more significantly, must exist

separate from and in contrast to the community of general education. In addition to identifying gifted education as a community, cultural appropriation requires that gifted education appropriately considers itself an outsider compared to the insiders in general education. This will be demonstrated by showing how the gifted education community has experienced prejudice, discrimination, and neglect, both intentionally and unintentionally, at the hands of general education. As an outsider community, gifted education must also have cultural objects to which it can claim "authorship." I will discuss authorship broadly to describe the history of gifted education and how its development and shared perspectives on excellence through talent development tie the community together as a culture. It is this very nature of these shared experiences and beliefs that allow gifted education to claim authorship over them.

If my hypotheses are correct, this modern educational reform movement will be shown as a reinstatement of prior reform movements battling the same issues between equity and excellence. High ability learners will not be better served under the CCSS than under previous educational reform movements. In fact, the CCSS will be shown as a mechanism for appropriating concepts from gifted education into general education. Like the Trojan Horse, the CCSS will have the capacity of pacifying the gifted education community into a false sense of shared purpose with general education. With the Trojan Horse now within its city walls, as these CCSS are implemented, the gifted education community will soon discover that the CCSS, armed with general education ideology, intends to domesticate high ability students and gifted education concepts. The gifted education community will need to be wary of the CCSS and reclaim their role within the public schools as the principle protector and educator of high ability students.

CHAPTER II

THE TWO FACES OF CULTURAL APPROPRIATION

The theory of cultural appropriation needs to be carefully distinguished from other types of cultural sharing, integration and development, which can often be viewed positively by the group from whom the items are adopted. Such a positive view of sharing has even been seen between gifted education and general education. Ann Robinson, in her 2010 NAGC presidential speech, alluded to general education historically appropriating core concepts taught in gifted education. "We have seen significant sectors of the gifted education landscape appropriated by other constituencies in education. Higher-order and critical thinking, for example, have long been adopted as expected outcomes by general education" (Robinson, 2012a, p. 1). These positive, or at least benign, forms of cultural interaction and development can be collectively termed "cultural sharing."

Cultural appropriation is a complex construct that borrows from critical theory, anthropology, and the law of intellectual property (Ziff & Rao, 1997). At its core, cultural appropriation involves "the taking—from a culture that is not one's own—of intellectual property, cultural expressions or artifacts, history and ways of knowledge" (Ziff & Rao, 1997, p.1). Although similar to cultural sharing, cultural appropriation is perceived very differently by the cultural source communities. Because cultural appropriation can be viewed so differently from other forms of cultural sharing, it is important to make sure all the elements of cultural appropriation exist in applying the

theory. Cultural appropriation requires: the transformation of that property in a way that harms the community of outsiders; a community of insiders and a community of outsiders; cultural property belonging to the outsiders; and the actual taking of that cultural property by the insiders.

Fundamental to all processes of cultural sharing, whether perceived as beneficial or harmful, is transformation. When perceived positively, transformation makes meaning of the cultural object, a "process of internalizing what we have learned, to resonate to it and to the works offered for our attention, and then to effect" (Greene, 2001, p. 70). Transformation drives the creative process. When perceived negatively, however, transformation changes the original meaning or representation of the appropriated object. Transformation would not support creativity in this light by stripping the cultural "setting" from the product. This occurs by, first, interpreting that object from a different cultural lens and, second, accommodating that object into a different cultural structure (Ziff & Rao, 1997). "Aesthetic attraction produces a dissonance that must be resolved through interpretation or incorporation of the attraction in ways consistent with the social construction of …hierarchy" (Hall, 1997, p. 34).

From the outsider perspective, transformation can present concern. It is seen as dangerous if preservation of the cultural product in its original form is important (Ziff & Rao, 1997). This original form, as I am using it, does not mean a static representation of the object, but a historical representation that communicates the intent of the creator. For a transformation to become a cultural appropriation, it must cause harm to the outsider or source community. Harm that results from cultural appropriation can occur in any number of ways. Ziff and Rao (1997) summarized the following possible experiences:

(1) the appropriated object will become transformed or damaged; (2) the appropriated community will be harmed through some form of misrepresentation; (3) some communities will be wrongly allowed to benefit from the appropriated material, while not others (described as expressing and perpetuating inequality by Beck, 2003); and (4) diversity will be threatened. According to Merriam, Caffarella, and Baumgartner (2007), appropriation can go as far as leaving a nihilistic effect of colonizing a lifeworld. Habermas (1987) described a lifeworld as everyday actions and beliefs of a cultural group drawn from unspoken understanding of shared meanings.

For cultural appropriation to occur there must be an act of "taking between a community of insiders and outsiders" (Ziff & Rao, 1997, p. 3). Insiders share a sense of belonging, while outsiders feel a sense of exclusion or irrelevance for being different in some way (Schaefer, 2005). Cultural appropriation has two faces. It will be perceived differently through the lens of either the insider community, sometimes called the general community, or the outsider community, sometimes called source community (Scafidi, 2005). From the insider perspective, cultural appropriation is seen as natural and fluid development of ideas and resources (Scafidi, 2005) that drives the development of all cultural practices (Ziff & Rao, 1997). For instance, cultural appropriation in art is perceived as an act of artistic freedom in the quest for aesthetic achievement (Young, 2010). "The unregulated freedom to engage in cultural appropriation may be as powerful a stimulus to creativity as the promise of protected economic rewards" (Scafidi, 2005, p. xii). Dewey (1958) believed that meanings in art do not have a "monopolistic jurisdiction. Poetic meanings, moral meanings, a large part of the goods of life are matters of richness and freedom of meanings, rather than of truth" (p. 411). When

perceived as a necessary condition for creative production, cultural appropriation naturally becomes a matter of course (Ziff & Rao, 1997).

From the outsider perspective, however, cultural appropriation can also be seen as theft when the process fails to recognize its sovereign claims (Ziff & Rao, 1997). "Cultural appropriation occurs when a member of one culture takes a cultural practice or theory of a member of another culture as if it were his or her own or as if the right of possession should not be questioned or contested" (Hart, 1997, p. 138). The ability of the insider community to claim the property of the outsiders is explained by both communities' actual or perceived "deficiency" (Beck, 2003, p. 8). According to Beck (2003), the insider group feels it lacks an "authentic life" in terms of "traditions and history, location, artistic production, narratives of success, or struggle" (p. 8). This deficiency precipitates the act of taking. The outsider group "lacks ways to express resistance" (p. 8) and lacks a sense of agency within the institutions that constitute the insider culture. This deficiency prevents the outsiders from fighting the act of taking.

That which is taken must be a cultural object of the outsiders. Cultural objects show how a group of people make meaning of their world and represent what they consider to be most important. These objects can be described as psychological, social, and environmental supports that bind individuals together with a sense of community. Of particular importance for cultural objects is the concept of setting. Cultural setting is the context that names the creators and intended recipients of the cultural product. Dewey (1994) described this context as "conditions of origin" (p. 204) that facilitates the artistic experience. The meaning of cultural products, therefore, is inextricably linked to the context of the people who create it, use it and ascribe meaning to it. Otherwise, the

product reduces to a “thing” or a “part of a machine” that would invariably have a changed meaning (Themindislimitless, 2013).

A setting can be used to describe either a material or immaterial cultural product (Young, 2010). A change in cultural setting of a material object is akin to examining an ancient artifact that was originally found in Pompeii, for instance, in an artificial setting like the Smithsonian (Ziff & Rao, 1997). A change in cultural setting of an immaterial object is described by Hall (1997) who examined the adoption of African American music by white America. He expressed concern that:

> the pattern of separating the art from the people leads to an appropriation of aesthetic innovation that not only ‘exploits’ Black cultural forms, commercially and otherwise, but also nullifies the cultural meaning those forms provide for African Americans. The appropriated forms become ineffective as expressions and affirmations of the unique cultural experiences from which they arise. (Hall, 1997, p. 32)

Making sure that the cultural product, whether material or immaterial, can be associated with the people who created and have used that product is important to ensure understanding of the primordial meaning associated with that cultural product. Claiming suggests that cultural appropriation has lines of authorship that can link a product to a source group. Authorship, however, is often hard to establish, because of the constant exchange of cultural ideas. The concept of authorship presumes a linear development of ideas, which may or may not be true as “the future becomes the past and the past (becomes) the future in a present that is never quite present” (Hart, 1997, p. 145).

In summary, cultural appropriation is a critical theoretical framework for understanding how and why communities take cultural objects from one another. According to Ziff & Rao (1997), in the modern era of socially constructing meaning, care must be taken to ensure sensitivity and respect for the original authors who have intended meanings and purposes to preserve a diversity of ideas. While freedom of imagination and expression is valued, responsibility and accountability must be applied.

CHAPTER III

TRANSFORMATION OF GIFTED EDUCATION CONCEPTS

The heart of cultural appropriation theory is the transformation of concepts that leads to harm. Transformation of gifted education concepts by the CCSS can be shown through the application of critical discourse analysis (CDA). CDA is a strategy to reveal how the meaning of concepts can be changed by changing words and images associated with these concepts. These words and images in CDA are called text (Fairclough, 2003, 2010).

CDA has origins in critical linguistics that examines how language can be used to shape ideology (Machin & Mayr, 2012). CDA, therefore, is more than a descriptive analysis of text and grammar in language, but examines this "text grammar" (van Dijk, 2004, para. 1) critically for themes of power and control that structure and shape textual meaning (Tenorio, 2011). Power is believed to be an imposing and integral force that affects all discourse. However, forms of power that lead to "abuse, dominance, and inequality" (van Dijk, 2001, p. 352) are of particular concern to CDA that strives to expose these patterns by examining explicit or implicit text (Machin & Mayr, 2012). Gramsci calls this enactment of power hegemony, which is a way dominant groups persuade subordinate groups to accept their political ideology (Gramsci, Forgacs, & Hobsbawn, 2000).

According to Machin and Mayr (2012), CDA has faced a number of criticisms: (1) its purpose to achieve social change results in subjective approaches; (2) its

approach, therefore, is not analytical, but interpretive; (3) this interpretation is applied to just one or two texts selected for their political importance; (4) the communication of power through discourse is assumed; and (5) its methods and theories do not adequately show the relationship between language, power, and ideology. In response, CDA researchers recognize limitations to their "qualitative" approaches (p. 215). Objectivity is not an intended outcome, because discourse structures are believed to be mediated on a personal and social cognition level. Making meaning of text is seen as a social construction. Therefore, data descriptions should be not been seen as faithful reproductions of an objective reality. However, CDA methods can be more valid by supplementing the researcher's analysis with ethnographic approaches, for instance, that directly solicit motivations of those who produce the text and reactions from the intended audience who read the text.

Applying critical discourse analysis to the CCSS is particularly challenging, because of the ever-changing language in the standards. These standards are posted on a website. Since the start of my analysis, the text has changed in multiple ways. The authors or individuals who control the website have removed sections from the standards or entire supporting documents from the website. For instance, sections that discuss the mission statement and greater focus and coherence in mathematics have been deleted. The supporting document, "Breaking through the Jargon: Common Core State Standards Glossary of Terms," that gives greater clarity to the terms in the standards have also been removed from the website.

In addition to removing sections or documents, the authors make subtler changes by changing features of the text such as section headings and key words. For instance,

descriptions of the standards that were once called “The Standards” have been changed to “About the Standards.” What was once called “Key Points in English Language Arts” is now called “Key Shifts in English Language Arts.” These subtler changes give the impression that the text that follows these section headings are the same when they are not. Particular metaphors have also been changed, while the rest of the explanatory text is kept the same. What was once described as “building blocks” is now described as “roadmaps.” Much of the original language persists, however, in materials produced by the various adopting states that used it in the creation of their own explanatory documents. In this chapter I will make reference to publications that have the original language, while noting that it has been adopted from the CCSS website.

These constant changes give the impression the CCSS are less an objective document and more a political and ideological one. In some ways, this characteristic strengthens the argument for a political analysis of the standards. Therefore, while CDA may be criticized for lack of objectivity, the very nature of the subject matter is not an objective phenomenon with clear and consistent features that lends its self easily to objective measurement.

CDA, therefore, will be applied to the examination of CCSS text to show what and how gifted education concepts and practices are transformed into different forms or meanings through enactments of power. Because the processing of text occurs on the “subconscious” level (Machin & Mayr, 2012, p. 153), I will use CDA strategies that look beyond the expressed meaning of words and images and into their implied meanings, such as connotations and assumptions, in order to reveal the intent of the CCSS authors.

CDA begins with a look at how social actors are represented. The CCSS authors have constructed the social identities of key social actors within the CCSS discourse by positioning themselves as voices of authority, positioning the general population of students as subordinate, and concealing the presence of high ability students. Controlling the perception and identity of the social actors is the first step in controlling the analysis of ideas.

CDA then looks at the way authors use language to carefully push their own ideology into the background while bringing features of objectivity to the fore. The CCSS authors use conventional metaphors to ascribe meaning and value to their standards as being scientific and progressive, when they are, in fact, ideological. The very use of "common" and "core" in the title of the CCSS creates an impression the standards communicate a "common sense" understanding of essential information that is shared by most educators rather than a reflection of the ideological underpinnings of a select group of educators.

CDA will finally demonstrate how concepts used in gifted education have been not only transformed, but transformed in a way that harms the gifted education community. The presence of transformation confirms an act of cultural appropriation. According to Fairclough (2010), transformation should be seen as "an appropriation/colonisation dialectic: a matter of an opening to a potentially colonising external presence which is however potentially appropriated and 'domesticated'" (p. 76). Appropriated gifted education concepts and practices have particularly important social value to general education. According to Gee (2011), concepts and ideas that are taken are "social goods" that a social group deems worth having (p. 118). Through the CCSS

text, general education has created particular viewpoints about the value of these social goods and how they should be distributed. The CCSS authors use transformations as a strategy to domesticate gifted concepts and approaches in order to make them useful for the general population of students. These gifted concepts will be changed in such a way as to yield a diminished opportunity for high ability students, placing them at risk for underachievement and becoming objects of transformation as domesticated students. I will use the term "high ability students" to describe those who perform or have the potential to perform at the upper end of an achievement continuum.

Social Actors

The social actors of the CCSS are the CCSS authors, the general population of students, and high ability students. The CCSS authors position themselves as voices of authority. This position allows control of important discourse that can influence the ways individuals think and act (van Dijk, 2001). This position is created through a number of strategies. The authors of the CCSS represent themselves as whole institutions such as the National Governor's Association (NGA), Common Core State Standards Officers (CCSSO), and "lead authors," rather than specific individuals like David Coleman, Sue Pimentel, Bill McCallum, and Jason Zimba who are referenced in CCSS ancillary websites as helping to write the standards (Council of Chief State School Officers & James B. Hunt Institute, 2013). This use of functional honorifics, representation by official roles such as governors, officers, and lead authors, elicits respect from an audience (Machin & Mayr, 2012).

The authors, the National Governors Association Center for Best Practices, Council of Chief State School Officers (NGACBP & CCSSO), write standards using directives. Directives create a mood of necessity (Machin & Mayr, 2012). For example,

the key ideas and details for third grade English Language Arts (ELA) standards for reading specify: (1) "Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers" (NGACBP & CCSSO, 2010i, para. 1); (2) "Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text" (NGACBP & CCSSO, 2010j, para. 2); and (3) "Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events" (NGACBP & CCSSO, 2010k, para. 3). A highly directive modality is used to sway people (Machin & Mayr, 2012).

The authors also write the standards using relational and material processes that privilege those who write them. Relational processes describe states of being that identify what something is (Machin & Mayr, 2012). In the instructions of how to read the standards, these standards "define what students should understand and be able to do" (NGACBP & CCSSO, 2010x, para. 1). In the discussion of ELA-Literacy, "The CCR and grade-specific standards are necessary complements—the former providing broad standards, the latter providing additional specificity—that together define the skills and understandings that all students must demonstrate" (NGACBP & CCSSO, 2010s, para. 1). Those in authority positions are privileged with the power to define the meaning of conditions or states. According to van Dijk (2001), defining meaning of a state is an act of control. "Action is controlled by our minds. So, if we are able to influence people's minds, e.g. their knowledge or opinions, we indirectly may control (some of) their actions, as we know from persuasion and manipulation" (van Dijk, 2001, p. 355). While

persuasion may be necessary to change a fixed mindset, persuasion without informing the audience of choices and its consequences is manipulation.

The authors of the CCSS also use material processes to communicate its ability to act upon an object. Material processes describe processes of doing (Machin & Mayr, 2012). When describing how the standards provide guidance to teachers, the CCSS authors state, "The standards establish what students need to learn, but they do not dictate how teachers should teach" (NGACBP & CCSSO, 2010t, para. 7). When describing the meaning of the standards to students, the CCSS authors state, "the Common Core establishes a set of clear, consistent guidelines for what students should know and be able to do at each grade level in math and English language arts" (NGACBP & CCSSO), 2010t, para. 18). This ability to act upon a situation or group of people shows social agency. According to Machin and Mayr (2012), CDA presumes that when authors use material processes in their text, they reveal their social agency. Collectively, these approaches help position the authors of the CCSS as powerful social actors.

In contrast, students are positioned as passive recipients of services relative to the standards. "The English language arts standards require certain critical content for all students" (NGACBP & CCSSO, 2010ee, para. 8). Information that is placed in the main clause, the English language arts standards in this sentence is foregrounded (Gee, 2011). Foregrounded information identifies what is important or what the authors want the audience to focus on at the moment (Gee, 2011). By placing students within a prepositional phrase that supports the verb, "require," (Gee, 2011) and by placing this prepositional phrase at the end of the sentence, the authors are downplaying the role of students (Machin & Mayr, 2012).

The CCSS additionally diminish the role of students by portraying them as a homogenized, monolithic group. The CCSS consistently refer to them as "all students." In the description of the standards, the authors write, "The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live" (NGACBP & CCSSO, 2010a, para. 2). When dispelling myths about the CCSS, the authors write, "The standards are designed to build upon the most advanced current thinking about preparing all students for success in college, career, and life" (NGACBP & CCSSO, 2010ee, para. 3).

Using the group depiction of "students," the authors subtly begin to create a representation of students as being more alike than different. These images serve to "collectivise and generically represent people who may have many complex and different reasons for being there" (Machin & Mayr, 2012, pp. 100-101). This "essentialized" picture of students hides massive variations and differences among them (Machin & Mayr, 2012, p. 153). For instance, this group description of students implies that high ability students are no different from other students even though researchers in gifted education such as Winebrenner (2001) assert that high ability students "should spend most of their learning time on tasks that are more complex and abstract than those their age peers could handle" (p. 5). Therefore, by describing students as a group, the CCSS authors create the impression that students have more commonality than variability. While emphasizing a common identity may help establish baseline standards, overlooking differences among students disregards unique interpretations of and responses to these standards thus compromising their utility.

This homogenized representation of students is reinforced through the adjective, "all." "All" functions as a presupposition. Presuppositions are assumptions about a topic that allows a speaker to discuss a topic without needing to detail all the conditions of that topic. While presuppositions have functional value toward facilitating communication, they also embed the author's ideological framework. According to Machin and Mayr (2012), "What is presented as a given, as not requiring definition, is deeply ideological." This ideology in the CCSS pertains to equity. Ideologies contribute to "establishing, maintaining and changing social relations of power, domination and exploitation" (Fairclough, 2003, p. 9). "The standards promote equity by ensuring all students, no matter where they live, are well prepared with the skills and knowledge necessary to collaborate and compete with their peers in the United States and abroad…" (NGACBP & CCSSO, 2010t, para.6). This equity ideology, hidden as a presupposition, is protected from critique.

By creating an assumption that students are "all" the same, discourse moves from an analysis of assumptions to an application of assumptions. In the case of the CCSS, an assumption that all students are the same lays the foundation for a logical argument that standards should, therefore, be the same for all students (Machin & Mayr, 2012). As stated in their discussion of how teachers should make mathematics available to students, the authors state, "At the same time, all students must have the opportunity to learn and meet the same high standards if they are to access the knowledge and skills necessary in their post-school lives" (Brevard Public Schools, 2012, p.5—quoted in the NGACBP & CCSSO, 2010ss). While an essentialist presupposition gives the authors justification to ignore student populations that are different, the authors use other strategies to ensure

they are concealed. The following descriptions allude to high ability students who are ready to take advanced mathematics. According to the CCSS for mathematics, "Based on a variety of inputs and factors, some students may decide at an early age that they want to take Calculus or other college level courses in high school. These students would need to begin the study of high school content in the middle school, which would lead to Precalculus or Advanced Statistics as a junior and Calculus, Advanced Statistics or other college level options as a senior" (NGACBP & CCSSO, 2010hh, p.3). In this case, high ability students are referred to as "some students." They are described as "some students" in another passage. In the mathematics standards, "There are some students who are able to move through the mathematics quickly. These students may choose to take high school mathematics beginning in eighth grade or earlier so they can take college-level mathematics in high school. Students who are capable of moving more quickly deserve thoughtful attention, both to ensure that they are challenged and that they are mastering a full range of mathematical content and skills—without omitting critical concepts and topics" (NGACBP & CCSSO, 2010w, p.80).

"Some," meaning "something that is similar to something else" (Merriam-Webster Dictionary, n.d.-b) is an approximation of a known entity. According to Machin and Mayr (2012), using approximations allow speakers to "conceal" and "distance themselves from the commitment" (p. 194). This use of "some" reveals the CCSS authors' lack of commitment to high ability students. In another section of their math standards, the CCSS authors discuss how they do not define the nature of support for high ability students. "The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or

well above grade-level expectations" (Brevard County Public Schools, 2012, p.5—quoted in the NGACBP & CCSSO, 2010ss). Furthermore, "the Common Core State Standards will not prevent different levels of achievement among students, but they will ensure more consistent exposure to materials and learning experiences through curriculum, instruction, and teacher preparation among other supports for student learning" (Chicago Public Schools O'Hare Elementary Network, 2011, p.—quoted in the NGACBP & CCSSO, 2010v). By stating that the CCSS "will not prevent different levels of achievement," the authors are also saying they will not formally support them. Therefore, while there is language that recognizes there are "some" students who can do advanced work, the authors detail no commitment to serving these students. Therefore, high ability students are also underrepresented students. Underrepresented individuals are "categories of people (who) are not represented in pictures of settings where they are in fact present" (Machin & Mayr, 2012, p. 102).

This underrepresentation is further seen in the lack of benchmarks that can assess for their differential or high abilities. The CCSS authors created educational benchmarks that differentiate between those who meet the benchmark from those who do not. As described in the CCSS ELA Appendix, scores show whether students meet benchmark or better or do not meet benchmark (NGACBP & CCSSO, 2010tt). The scores of those who do "better" are combined with those who "meet benchmark." What matters, therefore, is meeting benchmarks, not exceeding benchmarks.

While the CCSS authors do not provide any differentiation for those exceeding benchmarks, they identify differential strategies to support students with special needs who fall below them. The authors write, "The Common Core State Standards give states

the opportunity to share experiences and best practices, which can lead to an improved ability to serve young people with disabilities and English language learners. Additionally, the standards include information on application for these groups of students" (NGACBP & CCSSO, 2010t, para. 16). Differential support is given to those students who "progress more slowly" (NGACBP & CCSSO, 2010hh, p. 4). This support can be in the form of a school-wide community that supports them in particular, a 'math support' class during the school day, after-school tutoring, extended class time (or blocking of classes) in mathematics; and additional instruction during the summer (NGACBP & CCSSO, 2010hh, p. 4).

Two state-led consortia, the Smarter Balanced Assessment Consortium (Smarter Balanced) and the Partnership for the Assessment of Readiness for College and Careers (PARCC), are developing alternative CCSS assessment tools through Dynamic Learning Maps and the National Center for State Collaborative to help students with significant cognitive disabilities, estimated at 1% of the student population (Council of Chief State School Officers, 2013). These alternative approaches are guided by the belief that "all students should have access to challenging grade-level content" (Dynamic Learning Maps, n.d., para. 1).

While the CCSS authors show differential care for students who perform below grade level, they do not extend this care to students who perform well above grade level. In the ELA standards, the authors convey this support only in terms of recognition, "Students reading well above and well below grade-band level need additional support. Students for whom text within their text complexity grade band (or even from the next higher band) present insufficient challenge must be given the attention and resources

necessary to develop their reading ability at an appropriately advanced pace" (NGACBP & CCSSO, 2010aa, p. 9). This statement lacks specificity as afforded students who show delayed performance. Students who demonstrate high task commitment and creativity similarly, representing 1% of the student population, "cannot, …, be assessed through typical testing procedures" (Renzulli, Reis, & Thomson, 2009, p. 18) just like some ELL students or students with disabilities.

The CCSS authors use multiple strategies to distance themselves from promising actual support to high ability students. They use suppression by not including important information (Machin & Mayr, 2012). While they recognize there are students who read well above grade level and learn at an advanced pace, they do not identify who will be responsible for their instruction, what needs to be taught, and how this will be done. They have used the word "support" in the form of a noun and not a verb. Changing a verb into a noun is called nomilisation. "This is where a verb process is transformed into a noun construction, creating further ambiguity, which can be intentional" (Machin & Mayr, 2012). Nomilisation allows the authors to hide responsible agents and actions (Machin & Mayr, 2012). Finally, they are abstracting the nature of the support by saying these students should be "given the attention and resources" which suggest something will be done, but nothing specific is noted. In sum, the CCSS authors do not appear to recognize high ability students as other special needs students who need differentiated instruction.

Educators who serve high ability students assert that any student whose learning needs are "not average" should have the right to differentiated instruction. While there are high ability students who "progress more slowly" such as those who underachieve,

have concurrent mental health vulnerabilities, or struggle in the traditional step-wise classroom, there are other high ability students who progress more quickly. High ability students represent a range of students who may struggle in the classroom that is normed for the average student. According to Winebrenner (2001), high ability students need "special treatment" "not because they are gifted, but because they are not average…The level, pacing, amount, and type of learning activities that benefit average learners are inappropriate for them" (p. 3).

When social actors are "deleted," one must ask why (Machin & Mayr, 2012). A CCSS supporting document reveals the attitudes toward high ability students.

> Some might argue that it is enough to produce the next generation of elite "rocket scientists" who can invent new technologies and spur innovation. There is a widespread belief that providing America's top students with a world-class education is the single most important way to boost economic growth. This notion is often paired with a conviction that focusing on educational equity for all sacrifices excellence for the few who are already advanced. But these are myths. Our national commitment to closing achievement gaps is not only compatible with a global competitiveness agenda, it is essential for realizing that agenda. (National Governors Association, Council of Chief State School Officers, & Achieve, 2008, p. 12)

By using the adjective, "elite, the authors in this document, who are the same as those who wrote the CCSS, appear to create a connotation of elitism. "Elitism" means "selectivity of the elite" and connotes snobbery and superiority (Merriam-Webster Dictionary, n.d.-a). Connotations create "associated identities, values and likely

sequences of action" (Machin & Mayr, 2012, p. 32). Through an elitist connotation, high ability students are subtly maligned.

By describing high ability students as "already advanced," the authors reveal their assumption that advancement can be sustained without external support. Educators in gifted education assert that high ability students need external support from teachers like any other student population to learn task commitment when facing challenging tasks, otherwise what emerges as natural gifts will not develop into meaningful talent, because the development of talent requires external support.

The CCSS, through the use of language, has divided the world of education into that of a benevolent all-knowing authority, a population of beneficiaries of that authority, and a small group of "others," who have no need of gifts from that authority and who should be prevented from interfering with the education of those recognized as beneficiaries. Placing all of the social actors in the proper place sets the stage for the discussion of how educational institutions should be constructed. It clearly identifies who should be making decisions and who those decisions should benefit.

Reconstructing Reality

As the CCSS authors position the social actors by constructing their social identities, they ascribe meaning and value to their standards by using conventional metaphors. Metaphors shape reality. They have the power "to persuade, reason, evaluate, explain, theorize, [and] offer new conceptualizations of reality" (Semino, 2008, p. 31). The use of metaphors creates desired connotations for a topic, while protecting the author from making specific the strategies for developing that topic. According to Machin and Mayr (2012), metaphors simplify ideas, which obscure what is done and who is accountable. "What exactly will be done is not specified, so no one can in fact be held

accountable" (Machin & Mayr, 2012, p. 167). Conventional metaphors are particularly effective at shrouding intent. "When particular uses of metaphor become the dominant way of talking about a particular discourse, they may be extremely difficult to perceive and challenge, since they come to represent the 'commonsense' or 'natural' view of things" (Semino, 2008, p. 33).

One of the conventional metaphors the CCSS authors use is that of a path or journey. When discussing greater focus and coherence in the standards, the authors say, "No set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom. However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students" (Illinois State Board of Education, 2013, para. 16—quoting the NGACBP & CCSSO, 2010ss). These signposts suggest a path. The authors explicitly describe their three strategies to develop math proficiencies (e.g., traditional, integrated, and compact) as "pathways." A path or journey metaphor suggests that goals become destinations and success is reaching that destination (Semino, 2008). Thus, while the CCSS are the starting point for curriculum development, they also represent the end goals or destination for student learning. Journey metaphors help achieve "internal coherence" that sequence starting points, destinations, a connecting path, and direction (Semino, 2008). According to Machin and Mayr (2012), journey metaphors also create a shared experience that strengthens the relationship between author and audience.

While this path is being created through CCSS, the authors use the building metaphor to suggest this path represents progress. Building metaphors are often found in political speeches as a way to convey a sense of progress through the process of building

a structure without having to give details about what that structure might look like (Machin & Mayr, 2012). When describing the nature of the CCSS, the authors write, "Building on the excellent foundation of standards states have laid, the Common Core State Standards are the first step in providing our young people with a high-quality education" (NGACBP & CCSSO, 2010bb, para. 1). These first steps are also "building blocks" as described in the authors' description of the key points in English Language Arts. "Because the standards are building blocks for successful classrooms, but recognize that teachers, school districts and states need to decide on appropriate curriculum, they intentionally do not offer a reading list" (Polanco, 2012, para. 6—quoting the NGACBP & CCSSO, 2010bb). The standards also function as staircases that lead to increasing text complexity when the authors describe CCSS resources. "The Common Core State Standards create a staircase of increasing text complexity, so that students are expected to both develop their skills and apply them to more and more complex texts" (NGACBP & CCSSO, 2010t, para. 2).

The authors assert these standards not only create structure that leads to progress, these standards also adhere to scientific principles. The authors use language that gives the impression they are applying principles of empirical science, in particular. In their description of the standards, the authors write,

> The standards should provide sufficient guidance and clarity so that they are teachable, learnable, and measurable. The standards will also be clear and understandable to the general public. Quality standards are precise and provide sufficient detail to convey the level of performance expected without being overly

> prescriptive. (the 'what' not the 'how'). [*sic*] The standards should maintain a relatively consistent level of grain size. (NGACBP & CCSSO, 2010r, para. 11)

Precision, clarity, and measurability are hallmark features of the scientific method.

This connotation of empirical science is reinforced through the names of its organizational structure. The organization of the CCSS is different for ELA and mathematical proficiency. ELA standards are organized into strands (reading, writing, listening and speaking, and language) that broadly categorize topics and then numerical standards. Meanwhile, math standards are organized into conceptual categories that broadly categorize domains, units or critical areas, clusters, and the numerical standards. Both content areas use language germane to genetics. The ELA standards use the term, "strand." In genetics, a strand describes a sequence of DNA that is copied during transcription (Hartl, Freifelder, & Snyder, 1988). The math standards use the term, "cluster." A gene cluster is a group of two or more functionally related genes that code for a similar product (Overbeek, Founstein, D'Souza, Pusch, & Maltzev, 1999). Across both content areas, the basic level of organization is the standard. Standards are numbered statements that prescribe what students need to learn and what skills they need to acquire. Like a DNA sequence that templates biological protein, standards template educational curriculum. Using a genetic metaphor creates connotations of empirical science. This gives the impression the CCSS are essential, universal, measurable, and testable truths, when in fact the standards have strong ideological or authoritative underpinnings (Merriam & Simpson, 2000).

Connotations of empirical science give the CCSS text the appearance of objectivity, when in fact they are grounded in opinions. When describing the standards, the CCSS authors state,

> The standards are research- and evidence-based; clear, understandable, and consistent; aligned with college and career expectations; based on rigorous content and application of knowledge through higher-order thinking skills; built upon the strengths and lessons of current state standards; and informed by other top performing countries in order to prepare all students for success in our global economy and society. (NGACBP & CCSSO, 2010a, para. 6)

These features of the standards are linked by the word, "are." "To be" verbs are used in relational processes that "allow us to present as facts what could be classified as opinions" (Machin & Mayr, 2012, p. 110).

Opinions are subjective statements that may not be substantiated. For instance, the authors assert that "the college and career ready line has been based on evidence from a number of sources, including international benchmarking, surveys of postsecondary faculty and employers, reviews of state standards, and expert opinions" (NGACBP & CCSSO, 2010w, p. 147). The authors further define college and career readiness as "measured by the level of knowledge, skills and academic preparation needed to enroll and succeed in introductory college credit-bearing courses within an associate or baccalaureate degree without need for remediation" (NGACBP & CCSSO, 2010f, para.11). However, colleges that offer an associate or baccalaureate degree have variable admission standards and expectations for their students. This generalization of colleges conceals differences among colleges.

Only by examining supporting documents is there a glimpse into further delineation of terms. According to *The Condition of College & Career Readiness in North Dakota*, the CCSS authors adopted the ACT's definition of college and career readiness to validate use of extensive research by using ACT's College Readiness Standards (ACT, 2012). When ACT's standards are further examined, these standards say,

> The Benchmarks represent a summary across many colleges and many students. The standards for each individual college may vary depending on the material covered in the course and the grading practices within that course. Therefore, the Benchmarks represent a criterion for success for a *typical* student at a *typical* college. (ACT, 2013, p. 2)

Typical students should be well-prepared for introductory mathematics courses in 2- and 4-year colleges" (NGACBP & CCSSO, 2010w, p. 147) that include English Composition, College Algebra, and Biology that are "most commonly taken by first-year college students" (ACT, 2013, p. 1). Prioritizing typical students is consistent with institutional practices. According to Winebrenner (2001), "When we teach a class of students, we usually plan content, pacing, amount, and activities based on what we know about typical students at that age" (p. 2).

However, by suppressing the nature of the intended audience (e.g. typical students), the authors are misleading the audience by making general claims of inclusion. Standards that are aligned with college and career expectations for "typical" students would not support high ability students, for instance, who may have taken Algebra in middle school. Therefore, the claim that "the standards are designed to build upon the

most advanced current thinking about preparing all students for success in college, career, and life" (NGACBP & CCSSO, 2010ee, para. 3) is not true if "all students" is meant to include high ability students.

Ideology

Foregrounding terms that connote empirical science helps the CCSS authors background their ideology that, by definition, is not empirical. While the CCSS authors do not explicitly state their ideology in the standards, they state more explicitly their ideology in their supporting document, *Benchmarking for Success* (2008). In this document the CCSS authors discuss the importance of educational equity. "State leaders also should tackle 'the equity imperative' by creating strategies for closing the achievement gap between students from different racial and socioeconomic backgrounds in each of the action steps above. Reducing inequality in education is not only socially just, it's essential for ensuring that the United States retain a competitive edge" (National Governors Association, Council of Chief State School Officers, & Achieve, 2008, p. 6). "States that plan to grow their economies *must* find ways to close their achievement gaps" (National Governors Association, Council of Chief State School Officers, & Achieve, 2008, p. 14).

Closing a gap, to me, requires bringing the two sides of the gap together. Closing an achievement gap, therefore, means shrinking the variance in student academic performance, which suggests similar outcomes. Achievement of similar outcomes with respect to the standards requires three conditions: (1) bringing at-risk students up to grade standards; (2) keeping students who are already making grade standards at grade standards, and (3) bringing students who are scoring above grade standards down to grade standards. This would explain explicit, differential support for students who

"progress more slowly" (NGACBP & CCSSO, 2010hh, p. 4) and the emphasis on achieving student proficiency. According to the *Building Blocks for Change: What it Means to be Career Ready* written by the Career Readiness Partner Council, "A career-ready person is proficient in the core academic subjects, as well as in technical topics….It also includes a level of technical-skill proficiency aligned to a chosen career field and pathway." Proficiency means "mastery or ability to do something at grade level" (NGACBP & CCSSO, 2010f, para. 24).

Another way of expressing similar outcome is common outcome. In their standards for mathematics, the CCSS authors cite Cooney and Bottoms (2002) who ask, "Why aren't all eighth-grade students enrolled in either pre-algebra or Algebra I? Why aren't all students who studied algebra in the middle grades enrolled in ninth-grade college-preparatory mathematics classes?" (p. 4). Cooney and Bottoms (2002) further ask, "Why aren't all eighth-grade students reading a significant number of fiction and non-fiction books in preparation for the reading demands of high school?" (p. 5). The CCSS authors seek a common outcome by stating in their ELA standards, for instance, "All students should be reading at the college and career readiness level by no later than the end of high school" (NGACBP & CCSSO, 2010rr, p. 8).

A common outcome is best achieved through a common process. Standardizing goals and educational practice satisfies the conditions for achieving common student outcomes. While the CCSS authors primarily foreground standards as goals, they also background them as processes that standardize what is taught and when it is taught. In the discussion of mathematical standards, the authors state, "One of the hallmarks of the Common Core Standards for Mathematics is the specification of content that all students

must study in order to be college and career ready" (NGACBP & CCSSO, 2010qq, p. 4). "Care must be taken to ensure that students master and fully understand all important topics in the mathematics curriculum, and that the continuity of the mathematics learning progression is not disrupted" (NGACBP & CCSSO, 2010w, p. 81). The authors explicitly state that all topics in math must be taught to maintain a coherent, progression of ideas. This systematic approach should also be applied to following the ELA standards so that all ELA topics are learned. "Building knowledge systematically in English language arts is like giving children various pieces of a puzzle in each grade that, over time, will form one big picture. At a curricular or instructional level, texts—within and across grade levels—need to be selected around topics or themes that systematically develop the knowledge base of students" (NGACBP & CCSSO, 2010pp, para 1). To ensure students complete their puzzles, they must have all the pieces.

Standardization of pacing is reflected in the standards' emphasis on grade based learning. When responding to frequently asked questions, the CCSS authors state, "Educational standards are the learning goals for what students should know and be able to do at each grade level (NGACBP & CCSSO, 2010u, para. 1). For mathematics, "The goal should be to provide support so that all students can reach the college and career ready line by the end of the eleventh grade, ending their high school career with one of several high-quality mathematical courses" (NGACBP & CCSSO, 2010qq, p. 5). For ELA, to develop ELA proficiencies, students "in the first year(s) of a given (grade) band are expected by the end of the year to read and comprehend proficiently within the band" (NGACBP & CCSSO, 2010*ll*, p. 10). Collectively, standardization of content and pacing is reflected in the image the authors have posted on their website to explain the standards.

This picture shows a hand drawing of students running up a set of steps, stopping at a platform, before running up another set of steps. This picture shows a lock-step learning approach directing students along a singular set of stairs.

Therefore, when standardization as a process is desired, its structural opposite, differentiation, is not. Structural opposites are opposing concepts (Machin & Mayr, 2012). According to Machin and Mayr (2012), words are embedded in a network of meaning. Some words have inherent opposites such as young or slow. So, if one opposite is described, one can infer meaning about its opposite. Therefore, if standardization is prized, differentiation that is the framework for individualized instruction is not. Differentiation is a strategy to individualize instruction so that different learning needs in the classroom can be met at the same time (Tomlinson, 2000). This approach has historically been used to support high ability students (VanTassel Baska, 2004, p. xxix). According to Winebrenner (2001), differentiation is "providing high ability students with different tasks and activities than their age peers—tasks that lead to real learning for them" (p. 5). Differentiation is achieved by modifying content to bring depth and complexity, modifying processes to support creative production, giving students choices about how to present their work, modifying assessment approaches that establish students' prior knowledge, and creating an environment that supports individual differences. Standardization of product and process inhibits many of these key features of differentiated instruction.

However, according to the CCSS authors, they use differentiated instruction, which they call individualized or customized instruction, to support students' diverse needs (NGACBP & CCSSO, 2010f). "The standards clearly communicate what is

expected of students at each grade level. This will allow our teachers to be better equipped to know exactly what they need to help students learn and establish individualized benchmarks for them" (NGACBP & CCSSO, 2010jj, para.1). However, while the authors express a relationship between standards and individualized instruction, they do not explain the nature of this relationship. Teachers, not standards, bear the primary responsibility for individualized instruction as expressed in their comment, "Teachers will devise their own lesson plans and curriculum, and tailor their instruction to the individual needs of the students in their classrooms" (NGACBP & CCSSO, 2010u, para.8).

Teachers, however, are not mandated to receive training on how to individualize instruction. The authors recognize that individualizing approaches demands specialized knowledge and abilities. Individual assessment requires knowledge of the student's "cognitive capabilities (attention, memory, critical analytic ability, inferencing, visualization); motivation (a purpose for reading, interest in the content, self-efficacy as a reader); knowledge (vocabulary) and topic knowledge, linguistic and discourse knowledge, knowledge of comprehension strategies); and experiences"(NGACBP & CCSSO, 2010kk, pp. 7-8). Successful compacting of curriculum will require specialized training. According to Reis and Renzulli (2005), while a majority of teachers can implement curriculum compacting, many were frustrated by lack of knowledge of what to substitute, limited planning time, and the logistics of teaching different topics to different groups of students. A supportive school environment needs "administrative support and encouragement, availability of materials and resources for substitution of the regular curriculum, the availability of guided practice and coaching, and teachers'

increased ease and reflections about how to fit compacting into their professional practices" (p. 35).

While the authors compromise the chances for successful differentiation by suppressing teacher training, they also marginalize its value by connoting differentiation devices like tracking as racist and classist. In a supporting document, the CCSS authors state,

> For too many years, high school graduates throughout the United States faced a fork in the road. One path led to a four-year college, the other to an entry-level job. Some students chose for themselves, while others were tracked based on aptitude and, all too often, on race and income….In today's 21st century global economy, the choices are much more complex and interconnected, and the fork in the road has been replaced by numerous paths, all of which require a rigorous and rich high school experience that prepares all students—not just some—for college and a career. (Career Readiness Partner Council, n.d., p. 4)

In lieu of multiple paths that differentiate instruction, there is a singular path for "all students."

Meanwhile, acceleration that changes the pacing of learning is seen as harmful. As stated in their standards for mathematics, the authors write, "Decisions to accelerate students into the Common Core State Standards for high school mathematics before ninth grade should not be rushed. Placing students into tracks too early should be avoided at all costs" (NGACBP & CCSSO, 2010w, p. 81). The authors use of the words "should not" and "should be avoided at all costs" show their commitment to making sure students before their ninth grade are not accelerated (Machin & Mayr, 2012).

The authors reconstruct reality by converting opinions into facts, devaluing alternate choices, and presenting possibilities inconsistent with core requirements of the CCSS. After this reconstruction, the last element necessary to bring gifted students under the CCSS umbrella is to convince gifted educators, students and parents that their needs will still be met. This is done by taking the hallmarks of gifted education and transforming them into elements of the new reality.

Transformations

When the CCSS authors adapt instructional approaches that traditionally serve high ability students for the general population of students, they have decontextualized that approach by changing the intended audience. This is a form of transformation. Transformation occurs in a number of ways. One strategy is to put new meanings into words called "recontexualising" (Fairclough, 2010, p. 76). Another strategy is to take meanings out of their contexts called "decontexualisation" (Fairclough, 2010, p. 76). Whether by changing, replacing, removing, or simplifying original elements (Gee, 2011), the transformation of gifted education concepts and practices will show how general education, through the CCSS, is colonizing and domesticating the discipline of gifted education.

Acceleration and Compacting

Acceleration is a prized modality in gifted education to support differentiated instruction (Coil, 2008).

> As an educational intervention, acceleration is decidedly effective for high-ability students….Both grade-based and content-based acceleration are effective interventions in academic and social-emotional domains for high-ability students. Grade-accelerated students generally outperform their chronologically older

> classmates academically, and both groups show approximately equal levels of social and emotional adjustment…Such students are typically among the top 10% in a class, and they should be expected to remain in the top 10% throughout their academic careers. To be clear, there is no evidence that acceleration has a negative effect on a student's social-emotional development. (Colangelo et al., 2010, p. 181)

In their position paper, The NAGC summarizes the field's support of acceleration, "Educational acceleration is one of the cornerstones of exemplary gifted education practices, with more research supporting this intervention than any other in the literature on gifted individuals" (NAGC, 2004).

Acceleration is a group of approaches that allows students to "progress through an educational program at rates faster or at ages younger than conventional" (Pressey as cited in Colangelo et al., 2010, p. 182). According to Colangelo et al. (2010), there are two types of acceleration: a student can be accelerated in terms of either content or time. Content-based acceleration allows students to learn advanced content earlier in the grade based sequence, while they remain in the same classroom, with the same peers, and in the same grade. In this approach, the student remains in the K-12 classrooms for the typical number of years. Grade-based acceleration is an alternative form where students are allowed to reduce the time in the K-12 system either by skipping a grade, entering school early (reducing preschool time), compacting several year's curriculum into a few, or entering college early.

Curriculum compacting is one type of content based acceleration (Colangelo et al., 2010). Compacting is condensing a semester or year of learning into a shorter time

period (Winebrenner, 2001). Joseph Renzulli and Linda Smith are credited with introducing the compacting approach in 1978 (Coil, 2008; Winebrenner, 2001). Renzulli, director of the National Research Center on the Gifted and Talented, devised the "The Compactor," a way for teachers to organize their compacting activities by recording their student's strengths, recording assessment tools, and the degree of students' prior knowledge of curriculum content, and recording modifications to the curriculum through acceleration or enrichment alternative strategies (Reis & Renzulli, 2005). Reis and Renzulli (2005) asserted that an ideal time to start compacting was as soon as the student started school. Students at an early age can learn how to use their time appropriately by choosing apt enrichment activities. Moreover, primary school teachers were better positioned to assess their students' capacities than secondary school teachers, because they had more time with them. Compacting is easiest for subjects such as math with "highly sequential curricular organization" (p. 43).

While acceleration and compacting are embraced in gifted education, they are suspect—and in some cases discouraged—in the CCSS. Within the CCSS for mathematics,

> decisions to accelerate students into the Common Core State Standards for high school mathematics before ninth grade should not be rushed. Placing students into tracks too early should be avoided at all costs. It is not recommended to compact the standards before grade seven. In this document, compaction begins in seventh grade for both the traditional and integrated (international) sequences. (NGACBP & CCSSO, 2010w, p. 81)

Acceleration through compacting curriculum is not supported in the early grades, contradicting best practices for high ability students.

This change in scope is buttressed by a change in audience. While compacting originally targeted high ability students, the CCSS authors use compacting to target another student population. This population is hard to discern at first as the authors again address a generic representation of "students." However, the authors make their intended audience known when they defend their position about taking caution with acceleration. "There are cautionary tales of pushing underprepared students into the first course of high school mathematics in the eighth grade" (NGACBP & CCSSO, 2010w, p. 80). The authors cite a Cooney and Bottoms (2002) article that refers to the Southern Regional Education Board Report that found students who scored in the lowest quartile on achievement tests performed below grade level in more demanding classes such as Algebra 1. In this Cooney and Bottoms (2002) article, however, while it is noted that students in the lowest quartile struggled, their struggle was only "slightly higher" in the higher-level courses compared to lower-level courses (p. 9). Underprepared students who took college-preparatory mathematics failed at 47%, while those who took lower-level mathematics failed at 42%. Therefore, unprepared students who score in the lowest quartile would struggle in any level of math class. The CCSS authors, however, omit this discussion of degree and generalize concern toward acceleration for all students predicated upon the performance of unprepared students in college-preparatory mathematics. Acceleration by design is not intended for students who are not ready for advanced content or pacing (Colangelo et al., 2010).

In their statement of caution against acceleration, the CCSS authors fail to discuss actions required before acceleration, the assessment of student readiness and interest. As stated in the Cooney and Bottoms (2002) article, "Middle grades schools can place struggling students in an accelerated curriculum with the best teachers" (p. 10) as if teachers alone make for a successful acceleration experience. When instructors of gifted education consider acceleration, they predicate this decision upon an assessment. "School districts are expected to conduct a fair, objective, and systematic assessment of the student using the appropriate instruments for the type of acceleration being considered for the student. When assessing English language learners, appropriate instruments may include those in the student's heritage language" (Colangelo et al., 2010, p. 196). Concluding that underprepared students do not succeed in acceleration is a tautology. Properly implemented acceleration programs would exclude underprepared students from participation precisely because their chances for success are so low. The underperformance of unprepared students does not argue for the elimination of acceleration, only for its proper implementation.

By limiting acceleration to compacting, the CCSS authors have also restricted the form of acceleration to content based approaches. "To prepare students for high school mathematics in eighth grade, districts are encouraged to have a well-crafted sequence of compacted courses. The term 'compacted' means to compress content, which requires a faster pace to complete, as opposed to skipping content" (NGACBP & CCSSO, 2010w, p. 80). However, by opposing content skipping, the authors are discouraging age grade acceleration that would allow students to graduate from the K-12 system early. And, while compacting is a resource to differentiate instruction, the CCSS authors do not

propose other forms of content based acceleration such as single-subject acceleration, dual enrollment, or credit by examination.

In sum, the CCSS authors have transformed acceleration in terms of audience, process, scope, and type. The CCSS authors target a generic form of students when they speak of acceleration. In doing so, they eliminate the need for assessment as they believe every student can be accelerated. To protect their most underprepared students, the authors have restricted the use of acceleration to just the middle school years. Because they want all the students to move along the pathway at the same rate, they only support the content based version of acceleration.

This transformation harms high ability students. While avoiding acceleration in the early grades protects underperforming students, high ability students who show mastery of the curriculum at an early age will be denied access to instruction at their developmental readiness level. This is, yet, another demonstration of what Finn and Petrilli (2008) call "benign neglect" as the achievements of underperforming students is prioritized (p. 10), while priming high ability students for academic underachievement.

Failure to provide acceleration to high ability students causes them to perform poorly in the classroom. In the Cooney and Bottoms (2002) article the CCSS authors cited, ninth grade students who scored on the highest quartile performed more poorly when placed in lower-level mathematics than similar high ability students placed in college-preparatory mathematics. In this article, all ninth graders who scored on the highest quartile performed more poorly when placed in lower-level math (16%), English (8%), or science (8%) courses than those placed in college preparatory math (9%), English (4%), or science (5%). Therefore, while they still outperform students scoring at

lower quartiles, some high ability students show evidence of deficit learning by not scoring as high as other high ability students when they do not receive similar, accelerated, educational support.

Higher-Order Thinking and Creativity

Additional concepts that have been transformed are higher-order thinking and creativity. In the field of gifted education, Bloom's Revised Taxonomy is often applied as a framework to identify and develop higher-order thinking skills (NAGC, 2008c). In the revised Bloom's taxonomy, the progression of thinking skills from the most basic to the most complex are remembering, understanding, applying, analyzing, evaluating, and creating. Creativity, therefore, is the highest order form of thinking (Coffey, n.d.). Creativity has other names. In Bloom's original taxonomy, creativity was called synthesis (Coffey, n.d.). The terms synthesis and creativity have been used quite interchangeably in the field of gifted education. "Synthesis requires students to create a novel or original thought, idea, or product. All of the activities we call 'creative thinking' give students experience with synthesis" (Winebrenner, 2001, p. 130). Researchers who study creativity in high ability students have taken great care to define creativity as the capacity to produce an idea or product that is both new and useful (Colangelo & Davis, 2003; Martindale, 1999). Creativity is believed to be intrinsically motivated, and the attempts made by the CCSS to foster creativity through extrinsic motivation could actually diminish it (Collins & Amabile, 1999).

The CCSS authors have similarly used Bloom's Taxonomy to structure their standards. In their description of Anchor Standards for Speaking and Listening, for instance, they state,

> To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains. (NGACBP & CCSSO, 2010b, para. 8)

The authors communicate they understand there are several forms of thinking as described by Bloom, which students should demonstrate to show evidence of speaking and listening. But the CCSS authors very rarely use the term creativity in their description of higher-order thinking. This term is absent in their documents related to the standard's mission, nature, key shifts in ELA, key points in ELA, key shifts in mathematics, key points in mathematics, developmental process, myths and facts, greater focus and coherence in mathematics, understanding of mathematics, mathematical practice applicability, and reading the grade level criteria. The standards do not clearly reflect support of thinking skills at the highest order.

The authors do allude to creativity through related words conveying demands for higher-order thinking. In the ELA standards, for instance, the CCSS authors encourage students to read more "complex texts."

> A pedagogy focused only on "higher-order" or "critical" thinking was insufficient to ensure that students were ready for college and careers: what students could read, in terms of its complexity, was *at least as important* as what they could do with what they read. (NGACBP & CCSSO, 2010tt, p. 2)

Complex texts require readers to decipher multiple meanings, structures, purposes, structures and decode unfamiliar language, domain specific vocabulary, and assumptions (NGACBP & CCSSO, 2010ii). While deciphering multiple meanings shows demonstration of comprehension, this demonstration is not creative. Students are not asked to go beyond comprehension by synthesizing these multiple structures and meanings into a new and useful product or idea. Even in their math standards, the CCSS authors describe creativity not as a new product, but as a "coherent representation" of the product "at hand." When describing quantitative reasoning, the authors say this process "entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects (NGACBP & CCSSO, 2010mm, para 1). A coherent representation is an understanding that applies rules of logic and reasoning. Again, while understanding is necessary for creativity, it is still not creativity by itself.

The authors have used the word, "synthesis." In the ELA standards for Science and Technical Subjects for grades 11-12, students are asked to "synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible" (NGACBP & CCSSO, 2010n, para. 9). In the ELA standards for Writing for grades 9-10, students are asked to

> conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject,

demonstrating understanding of the subject under investigation. (NGACBP & CCSSO, 2010o, para. 24)

While both uses of the word "synthesis" ask students to combine multiple sources of information, the intent is to create understanding, not to develop a new and useful idea. Synthesis as described by the CCSS authors reflects a lower level of creativity by combining multiple pieces of information in order to achieve understanding, but it is not descriptive of a higher level of creativity as described by gifted education that applies this understanding toward creating a new product that will be helpful in a real world situation. This distinction mirrors Subotnik et al.'s (2011) differentiation between "little c" and "Big C" ideas. Gifted education seeks to cultivate "Big C" ideas among students that will revolutionize a field, not "little c" ideas that will be practical for personal use. The CCSS authors, therefore, have changed the purpose of the word, "synthesis."

The authors more frequently use the synonym, "integration," to describe combining multiple ideas. Both the literature and informational text topics in the reading strand of the ELA standards use "integration of knowledge and ideas" as a heading to organize the standards. However, the literature standards for grades 11-12 never ask students to "integrate" information. Instead, students are asked to analyze, evaluate, and demonstrate (NGACBP & CCSSO, 2010*l*; NGACBP & CCSSO, 2010n). While these actions are forms of thinking, they are not integrative. In fact, no literature standard from grades K-12 asks students to integrate knowledge under the integration of knowledge header.

The informational text standards do ask students to begin integrating knowledge in grade 5. Students are asked to "integrate information from several texts on the same

topic in order to write or speak about the subject knowledgeably" (NGACBP & CCSSO, 2010g, para. 9). Students are not asked to integrate information again until they are in grades 11-12. Students are to "integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem" (NGACBP & CCSSO, 2010*l*, para. 8). In grade 5, students use integration to enhance knowledge. In grade 11-12, they use integration to solve problems.

Enhancing knowledge is not creating something new and useful. While solving a problem may require discovering a creative solution (e.g., creative problem solving), problem solving in general does not necessarily require innovation. The authors paired problem solving with "addressing a question" which does not imply a new and useful vantage point. In sum, the CCSS authors have changed the purpose of synthesizing or creating information from discovery to understanding and problem solving. While these skills are important, they are at best foundational skills that prepare students to eventually think creatively for original and useful solutions.

The CCSS authors have explicitly paired the word "high" as in high-level with "rigorous." When describing the standards as rigorous, they define rigorous as, "high-level cognitive demands by asking students to demonstrate deep conceptual understanding through the application of content knowledge and skills to new situations….High level cognitive demand includes reasoning, justification, synthesis, analysis, and problem solving" (NGACBP & CCSSO, 2010r, para. 9 and para. 10). In another definition of rigor while discussing key shifts in mathematics, the authors infer the presence of "high-level cognitive demands." Rigor is "conceptual understanding,

procedural skills and fluency, and application with equal intensity…. Rigor refers to deep, authentic command of mathematical concepts, not making math harder or introducing topics at earlier grades" (NGACBP & CCSSO, 2010cc, para. 6). According to Machin and Mayr (2012), both definitions are overlexications. Overlexications are expressions replete with

> repetitious, quasi-synonymous terms woven into the fabric of news discourse, giving rise to a sense of overcompleteness that gives a sense of over-persuasion and is normally evidence that something is problematic or of ideological contention. (p. 37)

"In this case, the aim is to connote a sense of vibrant activity where in fact little is being done at all to combat the structural problems" (Machin & Mayr, 2012, p. 38). The CCSS authors, therefore, are trying to persuade the audience to believe the standards are high level and rigorous, when they may not be.

Examining when the CCSS authors frequently use the word "high" reveals its intended meaning. This word is often used to describe end of the year expectations for students at each grade band (NGACBP & CCSSO, 2010*ll*, p. 10). In the progression of reading standard 10, for instance, the authors state that "by the end of the year," with the exception of kindergarten and first grade, students will complete some type of task "at the high end" of the range.

High end achievement, therefore, is performing tasks at the end of each grade band, not necessarily demonstrating higher-order thinking skills. Upon completing such tasks at the end of each grade band, therefore, students will have demonstrated high achievement and have become high ability learners. This change in meaning of the word

"high" and, thus, "higher-order" is transformational. While gifted education instructors use the term to describe the quality of instruction applying levels of complexity, the CCSS authors use the term to describe the status of instruction applying a sense of time.

Harm

Identifying the consequence of harm is very important to establishing cultural appropriation. According to Young (2010), what differentiates benign taking from maligned taking is the consequence of harm. "Appropriation…is wrong only when members of a culture are harmed by the act of appropriation" (Young, 2010, p. 95). "An action is harmful if it is a direct setback to someone's interest" (Young, 2010, p. 26). Harm will be discussed in terms of its impact on high ability students, the concepts themselves, and the gifted education community.

High Ability Students

The consequence of transforming higher-order concepts like compacting causes harm to high ability students. By redefining compacting as experiences that should only begin in the middle school years, for instance, general education is not validating the differential needs of early school age, high ability students during a critical time when they need to experience pride in their special accomplishments. Compacting, that requires assessment, would reveal to the child what the child has already mastered, and give the child the opportunity to explore and master other tasks. Erikson describes the critical developmental task of this age as industry vs. inferiority. Through support, all children should begin to feel a sense of pride in their abilities, including pride in their "special abilities" (industry). If they do not experience support, they begin to doubt their ability to be successful (inferiority) (Feldman, 2010). According to The Center for Talented Youth, Ireland webpage (n.d.), without school support, these students will not

get the appropriate challenge they need in the classroom, will not feel valued by their educational system, will not find a suitable peer group, and will not be feel accepted as a special individuals. By the time attention is given to "special abilities" in middle school, it may be too late for some who have not cultivated these traits through lack of early support as discussed above. These students may experience additional pressures to comport to common peer group norms over cultivating their own individual abilities. Gross (1989) calls this the "forced-choice dilemma" when high ability students feel they must choose between attaining the social goal of intimacy with age peers or satisfying their drive for intellectual excellence. These factors place the high ability student at-risk for underachievement (Siegle & McCoach, 2009), which is a discrepancy between a student's actual achievement and some index of cognitive potential (Davis & Rimm, 2004).

Concepts

Appropriation can cause harm to the concepts themselves. Changed meanings render original meanings as "ineffective as expressions and affirmations of the unique cultural experience from which they arise" (Hall, 1997, p. 32). By normalizing the meaning of compacting, acceleration, creativity, higher-order, and individualism, these terms will no longer convey the complexity and exceptionality in which they were intended. They will be reduced to a mechanistic element.

These concepts will be further misrepresented by the general education teachers who lack training on how to develop higher-order thinking. According to Young (2010), in order to reproduce a cultural object faithfully, insiders who have taken these objects need "cultural experiences" (p. 34) that avail them to the experiences of outsiders. In this case, general education teachers need to understand what gifted educators do. Without

this cultural experience, insiders will be "bound to produce works or performances of a poor aesthetic quality" (Young, 2010, pp. 35-36). Without training on higher order thinking approaches, general education teachers will not be able to assess or cultivate higher ability among their students. The CCSS do not specify a need for general education teachers to receive specialized training on how to teach these higher-order approaches nor do they direct general educators to gifted education specialists for consultation, either of which might help reduce the level of misrepresentation.

Misrepresentation of the Gifted Education Community

Finally, appropriation causes harm to the gifted education community through misrepresentation. Misrepresentation is more "complex and potentially serious" than just taking property (Young, 2010, p. 24). Cultural appropriation of this kind can threaten the "viability" of the people (Young, 2010, p. 24). Within the CCSS, general education teachers will be the principal implementers of the standards. They have the power to define the meaning of higher-order, determine who has higher-order abilities, and decide how higher-order skills will be supported. Without knowing the history of these cultural objects and their creators, general education teachers not only risk misrepresenting higher-order approaches, but they also risk misrepresenting those who created them through stereotyped beliefs (Young, 2010). In this case, general education teachers are at risk for misrepresenting the gifted education community and their approaches as elitist. This distortion can lead to further discrimination toward the gifted education community who are already labeled elitist and further marginalize their political voice. Misrepresentation through stereotyped labels deprives a community of an "audience" (Young, 2010, p. 25). Without an audience, gifted education risks becoming obsolete and assimilated into the general education community. To summarize, appropriation of

higher-order approaches through changing word meanings can damage high ability students, the concepts themselves, and the long term viability of the gifted education community.

While standards may create an educated workforce (National Governors Association, Council of Chief State School Officers, & Achieve, 2008) among typical and at-risk students, they still do not adequately support the intellectual needs of high ability students to develop expertise in their chosen field. By requiring high ability students to follow a set of standards that are paced by age, normed for typical students, and set to teach "foundational knowledge" (Career Readiness Partner Council, n.d., p. 2), the CCSS authors are limiting the intellectual growth of high ability students. General education through the CCSS has created an intellectual ceiling that caps intellectual growth to proficiency levels. As expressed by Renzulli (2004), advanced levels of analysis or creativity require advanced levels of knowledge and comprehension.

Like wild stallions that are broken, high ability students under the CCSS will no longer be quick and creative. While the standards may be "rigorous" for the typical student by articulating end goals, these standards will not be rigorous and flexible enough for high ability students who thrive on accelerated and creative processes. These standards will have as much appeal and meaning to these high ability students as did the expectations set during Prosser's life adjustment movement in the 1940s and 1950s that similarly prioritized vocational training for the typical student population. Unless differentiated instruction is supported within the standards applying acceleration and creativity as originally crafted for high ability students, the CCSS may actually describe a modern anti-intellectual movement.

For the gifted education community, transformation that forgets its purpose for high ability students risks changing the meaning of very important disciplinary concepts. Stanley (1976), for instance, expressed concern that although some general education teachers may purport to use enrichment activities in their classrooms, they may use a variant form that harms high ability students if they do not have understanding of the activities' original intent. Stanley identified four types of enrichment: (1) busy work, giving the student the same type of tasks to complete, but in greater amounts; (2) irrelevant academic, giving the student a special project to complete even though it does not attend to the student's talent; (3) cultural, exposing the student to cultural experiences that are irrelevant to the academic needs; and (4) relevant, giving the student advanced materials in the area of the student's talent. According to Stanley, general education teachers need to understand the nature of high ability students who will receive these enrichment services. For enrichment to be relevant, high ability students need to work on enriching tasks that target their areas of talent, not to complete more work they already know how to do. More recently, in a panel discussion titled, "Past, Present, and Future: Defining Moments in Gifted Education and What Lies Ahead for the Field," at the 2013 NAGC Annual Conference, when asked about the biggest concepts "coopted" by general education, former NAGC president Richard Olenchak expressed concern that general educators have differentiated the curriculum for all students except high ability students (R. Olenchak, personal communication, November, 10, 2013). Differentiated instruction is foundational to gifted education to meet the individual learning needs of high ability students (Winebrenner, 2001). However, if this approach is applied in the general classroom without assisting the high ability student, this approach has been transformed

in a way that misrepresents the goals of the gifted education community. Changing the original and historical meanings of these concepts damages and misrepresents the gifted education community and limits their ability to advocate for implementation of their original concepts.

CHAPTER IV

THE GIFTED EDUCATION COMMUNITY

In order for the CCSS to have engaged in cultural appropriation, gifted education must have all of the attributes of a community in the ideological and historical aspects and, more significantly, must exist separate from and in contrast to general education as a community. According to Gutek (2004), ideology is a set of ideas within a system of beliefs and values belonging to a particular group. Ideology is the basis of group identity and is expressed through the group's interpretation of its past, present, and future. Shared knowledge of temporally arranged events, situations, and people creates a group's collective heritage. This chapter will describe and compare the ideology and collective heritage between gifted education and general education.

Gifted Education and Humanistic Ideology

Gifted education, as a specialized form of education, supports individual and vocational aims (Tanner & Tanner, 2007). These aims converge in the form of talent development. Talent development recognizes individual differences in terms of interests, motivation, and abilities. The primary purpose of gifted education is to help students develop their talents within a disciplinary framework toward increasing levels of eminence (Subotnik, Olszewski-Kubilius, & Worrell, 2011). Gifted education, therefore, seeks to cultivate individual experiences and critical thinking through differentiation and intellectual freedom (Robinson, Shore, & Enersen, 2007).

The "bedrock issue" in designing curriculum for high ability students is differentiation (Van Tassel-Baska, 2004, p. xxix). Differentiating a student's learning experience requires tailoring instruction to meet the student' s individual needs by changing some aspect of the content, process, product, and/or learning environment (Tomlinson, 2000). Differentiation has both quantitative and qualitative features. Quantitative features promote individual differences in terms of changing the pace of learning (e.g., acceleration) or how much is learned (e.g., compacting), while qualitative features change how information is taught (e.g., supporting discovery of knowledge to produce creative products or increasing rigor or complexity to achieve deep understanding) (Renzulli, 1982). Successful differentiation requires a synergy of student, teacher, and curricular traits and goals (Renzulli, 1982). Inherent in this process is respecting and promoting student intellectual freedom or autonomy that allows a student to articulate and pursue matters of deep personal interest and develop the skills for task commitment which is necessary to think more creatively and deeply (Robinson, Shore, & Enersen, 2007).

Teaching creative and higher-order processes toward talent development is an inefficient process. To develop their talents, students need to learn how to capitalize on multiple internal and external resources that require many years of cultivation (Subotnik, Olszewski-Kubilius, & Worrell, 2011). Ericcson, Krampe, and Tesch-Romer (1993) suggest a minimum of 10 years to move from novice to master level achievement in most disciplinary domains. The role of the teacher is not to model efficiency by using prescribed and predetermined approaches. The goal of gifted instruction is to support "real creativity," grounded on the examination of real problems that have no clear

boundaries or solutions. These problems necessitate time and diligence to solve; they reflect "situational creativity," an artifact of examining artificially contrived problems with clear boundaries and solutions that can be solved quickly and superficially (Renzulli, 1982, p. 153). This process of discovery is mediated through a close, mentoring relationship between student and teacher, not through a prescribed and impersonal one.

Gifted education ideology has origins in humanistic psychology (Gowan, 1976; Gowan, 1978) and gestalt psychology (Bruch, Langham, & Torrance, 1979). According to Gowan (1978), humanistic psychology, which can also be linked to Dewey's progressive education movement, embraces principles of individualism, intelligence, creativity, growth, development, and change. At its core, humanism respects the development of uniqueness in the individual (Bruch, Langham, & Torrance, 1979). Gestalt psychology examines holistic understanding that integrates cognitive, physical, and emotional understanding (Bruch, Langham, & Torrance, 1979). According to Bruch, Langham, and Torrance (1979), creativity is a function of gestalt thinking that can synthesize multiple types of knowledge to support human potential. Therefore, efforts to cultivate creativity in the classroom appreciate student potential and rely primarily on growth-based assessment of student learning rather than standards-based assessment.

At the core of gifted education ideology are two overarching beliefs: (1) nature has not made everyone the same, which is why the educational focus should be on the individual; and (2) there are individuals who do more than replicate knowledge, they create it, which is why intellectual goals should strive to teach to the highest order (Renzulli, 1982). This emphasis on understanding the individual is articulated also in the

NAGC's position that "education in a democracy must respect the uniqueness of all individuals, the broad range of cultural diversity present in our society, and the similarities and differences in learning characteristics that can be found within any group of students" (NAGC, 2008e). The gifted education community, therefore, has advocated for a more inclusive understanding of democracy that values both a common and individual student identity.

This emphasis on individual talent may be seen by some as undemocratic as it is contrary to the democratic ideals of general education. While general education is perceived as inclusive, gifted education is perceived as exclusive by separating students into different ability groups or tracks. According to Webb, Nemer, Chizhik, and Sugrue (1997), the placement of students into collaborative groups is an equity issue. In their study, collaborative groups benefit from having a high ability member who functions like an "expert" in the group. This criticism suggests that removing high ability students from mixed ability settings through tracking would be unfair. Tracking has also been criticized for being exclusive by privileging high ability students with early leadership opportunities (Margolin, 1996). As expressed by Margolin (1996), gifted education offers a "pupil-teaching" (p. 166) approach that uncouples the traditional power hierarchies in the classroom and primes these high ability students for their future roles as leaders. Gifted education, therefore, has been criticized for being elitist and exclusive in both its manner of teaching and in its grouping of high ability students.

Eminent contributors to the gifted child movement are Sir Francis Galton (1822-1911), known as the grandfather of gifted education (Stanley, 1976), Lewis Terman (1877-1956), the father (NAGC, 2008a), and Leta Hollingworth (1886-1939), the

"nurturing" mother (Davis & Rimm, 2004). Although the number of individuals contributing to the development of the field are many (Robinson & Jolly, 2014), this brief introduction will highlight the contributions of these three iconic individuals. While Galton formalized the study of giftedness by systematically examining its heritable traits, Terman created a measurement tool to identify high ability through the IQ test, and Hollingworth applied these findings in the classroom by teaching high ability students.

Sir Francis Galton is considered the most important person in the history of gifted education (Van Tassel-Baska, 2014). He was the first to examine high ability in a formal way by inventing statistical analyses, such as correlation and regression, to determine its heritable features. He studied the lineage of eminent individuals in the British Isles (Galton, 1892). According to Ericsson, Krampe, and Tesch-Romer (1993), he was the first scientist to examine the origins of excellence.

Lewis Terman is considered one of the most eminent educational psychologists in history (Winkler & Jolly, 2014). Terman devoted his research to measuring intelligence through his longitudinal study of high ability children using the Stanford-Binet IQ test he adapted from the Binet-Simon scale. Terman believed that one's intelligence quotient (IQ) could predict superior performance. Terman saw potential in the Stanford-Binet tool to measure intelligence efficiently that could be applied in educational settings (Winkler & Jolly, 2014). By providing a succinct numerical value to intelligence, Terman's tool caught the attention of the U.S. army many years later that needed an efficient way to identify a recruit's abilities (Winkler & Jolly, 2014). Its use in the army helped cement the popularity of the IQ test as a strategy to measure intelligence. Terman's work defined

high ability as a function of IQ, which in the modern era is seen as just one, albeit popular, definition of giftedness.

Leta Hollingworth, unlike Galton and Terman, was a school teacher. Hollingworth researched the developmental needs of high ability children. She examined their physical characteristics and dispelled popular stereotypes at the time that high ability children were physically weak and underdeveloped. She studied the emotional development of children with exceptionally high abilities noting chronic, social vulnerability when surrounded by age mates who did not share compatible intellectual interests. She noted that children with a 160 IQ or higher were particularly vulnerable because they lacked peers of similar compatibility (Hertberg-Davis, 2014). Hollingworth published in both peer reviewed psychological journals and popular magazines that brought information about the needs of high ability students to a broad range of audiences.

General Education and the Public School Ideology

While gifted education emphasizes specialized knowledge, general education emphasizes common knowledge. General education necessitates an outlook on knowledge that is essentially different from the knowledge world of gifted education. The differences in outlook on knowledge also require a different organization and treatment of knowledge for general education, as contrasted with gifted education (Tanner & Tanner, 2007).

According to Tanner and Tanner (2007), the purpose of general education is to develop the student's democratic citizenship. Democratic citizenship describes a whole education approach that prioritizes students' social responsibility to society. Students learn about common need and engage in shared or common discourse. A common

experience facilitates this social responsibility, much like the framework in the CCSS. Therefore, a common experience, begets a common understanding, and yields a common identity (Dewey, 2011).

General education adopts a public school ideology (Gutek, 2004). According to Gutek (2004), this ideology originated as a crusade against "ignorance, petty politics, special interests, and religious sectarianism" (p. 149) by establishing a democratically controlled, secular school board to educate and "assimilate" all children (p. 149). This approach was quite revolutionary at the time because this ideology supported public access to education, challenging preconceptions about who had the capacity and the right to learn (Robinson, 2010). The underlying beliefs that drive the public school ideology can be distilled this way: (1) every child is educable (Adler, 1982); (2) public education is the primary conduit for social justice or equality (Mann, 1848); and (3) social justice is measured by uniformity in the educational experience (Adler, 1982).

The Founding Fathers of the public school movement were Horace Mann (1796-1859) and Henry Barnard (1811-1900) described in educational texts as visionary leaders (Gutek, 2004; Tanner & Tanner, 2007). Barnard was superintendent of public instruction in Connecticut who saw "access and improvement as inseparable problems" (Tanner & Tanner, 2007, p. 3). Mann believed that public schooling was the primary agent of social mobility by functioning as the "great equalizer of the conditions of men,--the balance wheel of the social machinery" (Mann, 1848).

Many educational leaders since then have expounded on the public school ideology. Examining the multiple perspectives is beyond the scope of this analysis; however, two individuals will be referenced here for the purpose of bringing some clarity

to the public school emphasis on democracy. John Dewey, who wrote Democracy and Education, stated that a democratic society must provide students with an equal educational opportunity by giving children the same quantity (e.g. same number of years) and same quality of schooling (Adler, 1982). A democratic ideal, according to Dewey (2011), should foster common interests. If a group has its own interests, this will shut down dialogue with other groups. When this occurs,

> its prevailing purpose is the protection of what it has got, instead of reorganization and progress through wider relationships…The essential point is that isolation makes for rigidity and formal institutionalizing of life, for static and selfish ideals within the group. (p. 49)
>
> A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own, is equivalent to the breaking down of barriers of class, race, and national territory which kept men from perceiving the full import of their activity. (p. 50)

Dewey's emphasis on shared concerns that support the development of society aligns with Allport's (1954) Intergroup Contact Hypothesis that to reduce intergroup conflict, people must be brought together (Schaefer, 2005).

Mortimer J. Adler, in his educational manifesto, *The Paideia Proposal*, articulated a more concrete form of education to achieve Dewey's democratic ideal, a one track system of schooling. He (Adler,1982) said,

> We are a politically classless society. Our citizenry as a whole is our ruling class. We should, therefore, be an educationally classless society. We should have a one-track system of schooling, not a system with two or more tracks, only one which goes straight ahead while the others shunt the young off onto sidetracks not headed toward the goals our society opens to all. The innermost meaning of social equality is: substantially the same quality of life for all. That calls for the same quality of schooling for all. (pp. 5-6)

Equality, therefore, took the form of uniformity. Although Adler (1982) recognized differences among students, he saw these differences as superficial and inconsequential, thus, minimizing the importance of degree and effect size.

> Despite their manifold individual differences, the children are all the same in their human nature. They are human beings and their human equality consists in the fact that no child is more or less human than another. Their sameness as human beings—as members of the same species—means that every child has all the distinguishing properties common to all members of the species. They all have the same inherent tendencies, the same inherent powers, the same inherent capacities. The fact that individuals possess these common traits to different degrees is itself proof that they share a common nature at the same time they differ in degree in the many ways that make each a unique individual. Individual differences are always and only differences in degree, never differences in kind…These are the facts of sameness that justify the sameness of the objectives at which our program for basic schooling aims. (pp. 42-43)

Students, therefore, should be seen in terms of their worth as people, not in terms of particular aptitudes that can be quantified and differentiated. By emphasizing similarity in kind, while deemphasizing differences in degree, Adler (1982) justified a uniform and universal approach to teaching.

> Every child is educable up to his or her capacity. Educable—not just trainable for jobs! As John Dewey said almost a century ago, vocational training, training for particular jobs, is not the education of free men and women. True children are educable in varying degrees, but the variation in degree must be of the same kind and quality of education. If 'the best for the best is the best education for all,' failure to carry out that principle is the failure on the part of the society—a failure of parents, teachers, administrators—not the failure on the part of the children. There are no unteachable children. There are only schools and teachers and parents who fail to teach them. (pp. 7-8)

Public school ideology has received mixed reactions. Its supporters praise the ideology's inclusiveness for teaching all students regardless of socioeconomic, racial, religious or other cultural background. However, critics of the public school ideology express concern with the ideology's failure to "discriminate" in terms of recognizing student differences. Congress, for instance, adopted the Education for All Handicapped Children Act of 1975 because of specific findings that public schools were not meeting the educational needs of students with disabilities (Millman, 2007).

This inattention to student differences can also be explained by the public school's structure toward "regulated schooling" or bureaucracy (Gutek, 2004, p. 149). Like all significant social systems, schools are burdened by multiple issues that concern

diverse and changing expectations and pressures for accountability (Gardner, 2011). "Since students progress through twelve or more grades in different schools and at different levels, school systems have traditionally attempted to ensure a sequential coordination through bureaucratization of content and methodology" (Kimbrough & Todd, 1967, p. 221). According to Schaefer (2005), a school's bureaucratic structure has specific features that organize people and experiences to achieve efficiency. These efficient strategies were first described by Max Weber that include a clear division of labor, a hierarchical order of authority, written rules and regulations, and impersonal relationships between teachers and students. Schools, therefore, function like "peculiar kinds of organisms, with their own kind of constraints" (Gardner, 2011, p. 149).

Efficient strategies have a clear division of labor. This division often resembles that of "educational factories" for the purposes of "industrial production" (Toch, 1991, p. 49). Teachers function like production line workers, principals like foremen, superintendents like CEOs, and school boards and citizens like shareholders (Toch, 1991, p. 49). These roles are managed through a large and clearly stated set of rules and regulations to ensure accountability (Gardner, 2011).

Efficient strategies employ mass education approaches (Renzulli, 1982; Toch, 1991). The emphasis is to educate the general population of students, not the individual student with unique needs, by targeting the mythical, average student. Efficient teaching will emphasize memorization and repetition over discovery so that students learn to "reflex" quickly and not "reflect" slowly (Stivers, 2003, p. 60).

Efficient strategies also assess student learning in the form of standardized tests that decontextualize what has been learned in the form of multiple choice items or short answers (Gardner, 2011). As stated by Ainsworth (2013) in reference to the CCSS,

> Educators agree in principle that a sharper focus on fewer standards would dramatically improve student learning, but they feel unable to do this in practice because there are so many standards to cover for the annual high-stakes test. The reality is that intensive preparation for standardized tests continues to drive instruction in classrooms across America. (p. 1)

Reducing student understanding to measurable data points also brings "scientific" and "objective" integrity to student achievement demonstrating accountability (Gardner, 2011; Stivers, 2003). Efficient strategies naturally deemphasize complex ways of understanding and the identification of students who already have these capabilities.

Efficient relationships within bureaucracies are based upon the authority of the position, not the nature of the individual who occupies that position (Kimbrough & Todd, 1967). According to Kimbrough and Todd (1967), the student-teacher relationship in this context is impersonal, extensive, and abstract so that school officials can follow systematic procedures for managing work situations. Schaefer (2005) explains that this style of engagement is intended to be carried out *sin ira et studio*, which means without hatred or passion that allows school officials to "perform their duties without the personal consideration of people as individuals. Although this is intended to guarantee equal treatment for each person, it also contributes to the often cold and uncaring feeling associated with modern organizations" (p. 134). A social efficiency approach has the effect of creating a mechanistic experience (Stivers, 2003).

A bureaucratic structure quickly reveals the role of power in shaping compliance. Gatto (2005), a New York school teacher for over 30 years and the recipient of the New York City Teacher of the Year award and New York State Teacher of the Year, presents a rather critical view of bureaucratic compliance based upon his experiences. He believed that the hidden curriculum of compulsory schooling teaches children class position (children are numbered to stay in the correct class), indifference (children are brought to enthusiastic level of interest and must stop what they are doing once the bell rings), emotional dependency (children must surrender their individuality perceived as a "contradiction of class theory, a curse to all systems of classification" (p. 7)), intellectual dependency (children learn to wait for their teacher and complete tasks without resistance), provisional self-esteem (children learn to base their self-esteem on external assessment), and public surveillance (children have no private time and are always watched).

This powerlessness is systemic as teachers themselves feel a loss of agency and autonomy in an ever expanding bureaucratic system controlled by their unions, school boards, state legislatures, and general public (Gardner, 2011). According to Gardner (2011), teachers exhibit a type of learned helplessness called "defensive teaching" (pp. 152-153). While they adhere to rules, they do not make excessive demands upon their students or themselves by "asking students to mostly memorize definitions and lists rather than to tackle challenging problems, they will maintain control over their classrooms, but at the cost of educational inspiration" (p. 153). An efficient system burdened by multiple stakeholders can eventually strip the creativeness out of teaching.

In summary, in the name of efficiency, achieving unity of command is very important in bureaucratic structure as "everyone is turned into a cog in the machine" (Stivers, 2003, pp. 60). Individuals adopt a bureaucratic mind that obeys authority (Stivers, 2003). This machine is greased by rules or "operations" that are clear, consistent, and specific. These features, however, compromise the system's ability to respond to new situations. Bureaucratic rules function like computer operations that, although they can be altered by feedback from prior results, they do not offer guidance for unforeseeable contingencies (Bruner, 1996). Sacrifice of ideological differences weakens this system's ability to quickly and creatively adapt to changing environmental trends (Kimbrough & Todd, 1967).

Clash of Educational Ideals

Differences in ideology between general education and gifted education have naturally yielded points of contention about various aspects of public schooling. These points appear in the form of educational scope, theories, and unit of organization. The first concerns the scope of education. Should education strive to educate the whole child or an aspect of a child's development? Adhering to public school ideology that prioritizes social responsibility, general education operates under the whole child model that attends to multiple aspects of a child's development (Cross & Coleman, 2005). According to Cross and Coleman (2005), this model presumes that children should be well balanced in all their achievements and interests "derived from averaging estimates of peers' performance at particular age/grade levels" (p. 58). Achievement across multiple areas through consistent development is ideal. Therefore, general education attends to deficits in order to return the student to this ideal state.

Cultivating talent is presumed to bring unbalance and possibly cause irreparable harm (Cross & Coleman, 2005). According to Cross and Coleman (2005), talent development is contrary to the goals of the whole child model as one aspect of development is supported over another and has garnered responses of "uneasiness, suspicion, even hostility in some cases" (p. 58). Gifted education, however, does not regard differential development as pathological. Colangelo, Assouline, and Gross (2004) have even questioned whether a whole child model is internally valid, whether even and consistent developmental is normative.

Because a whole child approach supports multiple aspects of student growth beyond cognitive development, a premium is placed on protecting a student's self-esteem, which is seen as an index of a child's emotional, moral, and intellectual health (Lego, 2004). The tension between the whole child approach and talent development approach is reflected in each disciplines approach to protecting the student's self-esteem in collaborative group work situations. According to Kulik (2003), general education teachers typically resist grouping students by ability level for concern this practice would compromise student self-esteem. Teachers apply the labeling theory that predicts student self-esteem will rise if students are put into a group labeled high ability, but fall if put into a group labeled as low ability.

However, Kulik (2003) asserts research has not supported this prediction. In his own meta-analysis study, self-esteem went up for students of low ability when placed into groups of similar ability, while self-esteem went down for high ability students when placed into their matched ability groups. Kulik stated that high ability students will lose some of their confidence—at least initially—when placed with similarly minded peers,

while the inverse occurs among low ability students. Kulik attributed this effect to Festinger's social comparison theory that examines frame of reference. This theory has also been called the Little-Fish-Big-Pond effect (Colangelo, Assouline, & Gross, 2004). According to social comparison theory, students judge their abilities by comparing their abilities to those around them to either seek accurate feedback about oneself or to increase one's self-image (Corcoran, Crusius, & Mussweiler, 2011). Student self-image goes up among low ability students because they make "downward comparisons" with others they outperform when grouped with students of similar ability (Corcoran, Crusius, & Mussweiler, 2011, p. 121). Students of equal ability will have a lower academic self-concept when attending schools where the average ability of other students is high, but higher self-concept when the average ability is low (O'Mara & Marsh, 2007). Gifted education, therefore, applies the social comparison theory in the consideration of groupwork, while general education applies the labelling theory.

Perhaps the most enduring point of contention concerns how schools are organized around chronological age and not the needs, abilities, or achievements of students (Clark, 2008). Pendarvis and Howley (1996) describe public school as a lock-step system that uses chronological age as the only criterion for admission and placement. "Age trumps everything else. For many educators, age—not readiness—has become the primary determinant for grade placement" (Colangelo, Assouline, & Gross, 2004, p. 6). This strategy would align with the goals of a bureaucratic structure to be objective, equitable, and efficient.

However, the field of gifted education, that values humanism and individualism above all else, has challenged this approach. Reis and Renzulli (2009) stated,

> Tidiness and efficiency are important to the operation of any enterprise but should never take the place of responsibility to do the right thing for the young people we serve. Einstein, the personification of scientific high ability across ages and cultures said, "Not everything that can be counted counts, and not everything that counts can be counted." (p. 233)

Even Gatto (2013), a general education teacher of the New York Public schools, stated, "It is absurd and anti-life to be part of a system that compels you to sit in confinement with people of exactly the same age and social class" (p. 24). Perry Zirkel, a lawyer who has written about legal issues germane to gifted education, criticized this practice as tracking by birth date (Colangelo, Assouline, & Gross, 2008). Differentiated instruction will always be necessary when students are organized primarily by age (Clark, 2008).

Gifted Education as a Community of Outsiders

The vastly different approaches to education of students has led to gifted education appropriately considering itself an outsider community compared to the insiders in general education. Gifted education is commonly perceived as a luxurious and unnecessary function of schools. As expressed by Borland (2003),

> Opera exists; without opera singers, there is no opera. Baseball, thankfully, exists as well, and without a shortstop, there is no baseball team. Schools also exist, but can one reasonably argue that without gifted children there would be no schools? "Gifted children" is a construct that, unlike "opera singer" and "shortstop," is not rooted in functional necessity. (p. 113)

Not only is gifted education chronically underfunded, high ability students in the regular classroom suffer from significant intentional and unintentional negative treatment because of their skills and talents.

Underfunding of Gifted Education Programs

Schools remove gifted programs before other programs when faced with budgetary challenges (Davis & Rimm, 2004). Although the gifted education community (Gallagher, 2004; Renzulli, 2004) and the National Commission on Excellence in Education (1983) have argued that gifted education is just as relevant as other special education programs, this has not been the popular perception. Disparate funding exists between gifted education and special education. For instance, Chicago public schools spent $2 billion on instruction in 2000. Gifted education received $3 million, while special education received $531 million or 177 times the gifted rate (Stanley & Baines, 2002). In Texas school districts, approximately 33% of the budget was spent on special education, but "less than one percent for gifted programs" (Stanley & Baines, 2002, p. 11).

Underfunding is particularly noticeable on the national level. The Jacob K. Javitz Gifted and Talented Students Education Program, the only federal program to serve high ability students by funding demonstration grants, a national research and development center, and leadership activities, recently was refunded at $5,000,000 after being defunded in 2011 (Council for Exceptional Children-The Association for the Gifted, n.d.). According to the U.S. Department of Education, the highest amount of funding was made available in 2003 at $11,250,000, stabilizing between 2008-2010 at $7,463,000, until defunding in 2011 and recent refunding in 2014 (Council for Exceptional Children-The Association for the Gifted, n.d.; U.S. Department of Education, n.d.). Ann Robinson summarized the political landscape this way, "Currently, the greatest challenge facing the field of gifted education is one of under resourced and

disappearing infrastructure at all levels—local, state, and national" (Robinson, 2012b, p. vii).

Scarce resources prompt out-groups to search for a stronger group identity (Tajfel & Turner, 1979). The gifted education community regularly reflects on questions of relevance (Borland, 2003) in an educational setting where they feel "apart from, not a part of" (Gallagher, 1991, p. 12). Three decades ago, Joseph Renzulli, director of the National Research Center on Gifted and Talented, raised concerns that the community could become obsolete like the progressive education reform movement in the 1930s and 1940s that similarly shared a child centered approach, but lacked a clearly articulated purpose and ability to communicate its relevance in a time of changing national priorities.

> To be certain, many of the ideas of the progressives were integrated into the mainstream of American education, but the movement bogged down and lost its punch as a major reformation because it failed to follow through on its criticism with a solid and positive course of action. (Renzulli, 1980, p. 3)

The search for group identity requires identifying a strategy that will help the community overcome its sense of political vulnerability as well as provide it with a common sense of purpose.

This strategy requires identifying the type of relationship gifted education wants to establish with general education. Expressed by Renzulli (2004),

> Are we a support system for general education, or a separate entity unto ourselves? We are certainly part of a potential support system for general education, but we also should have a degree of separation that helps develop

> students who will be the top rank of their professions and fields of interest. (p. xxviii)

Forging that relationship will be met with challenge. According to Tajfel and Turner's (1979) integrative theory of intergroup conflict,

> an unequal distribution of objective resources promotes antagonism between dominant and subordinate groups, provided that the latter group rejects its previously accepted and consensually negative self-image, and with it the status quo, and starts working toward the development of a positive group identity. (p. 38)

In a world with limited resources, gifted education must recognize that it will face opposition from those who feel that gifted programs diminish the resources available for the other aspects of education. Gifted education cannot be so idealistic as to ignore the potential for hostile reactions.

Prejudice, Discrimination, and Neglect of High Ability Students

Prejudice

High ability students experience irrelevancy in a different form from gifted education programs. Irrelevancy can be experienced through prejudice. Prejudice is a negative attitude toward an entire group of people (Schaefer, 2005). Advocates of gifted education have named prejudice toward high ability individuals as anti-intellectualism (Colangelo & Davis, 2003; Geake & Gross, 2008). Richard Hofstadter (1963) who wrote *Anti-intellectualism in American Life* describes anti-intellectualism as "writing off the majority of the nation's children as being more or less uneducable…unfit not just for the academic studies that prepare for college but even for programs of vocational education leading to desirable skilled occupations" (p. 344). According to Toch (1991), anti-

intellectualism can be described as a general sentiment of not supporting harder or more challenging work in the classroom.

This sentiment characterized the life adjustment movement that became popular in the late 1940's through the mid-1950s. This movement "was an attempt on the part of educational leaders and the United States Office of Education to make completely dominant the values of the crusade against intellectualism that had been going on since 1910" (Hofstadter, 1963, p. 343). This reference to 1910 describes the academic curriculum endorsed by the Committee of Ten that emphasized academic subjects like foreign languages, math, science, and English (Hosftadter, 1963). The "Prosser Resolution" initiated the anti-intellectual movement that placed emphasis on life values to prepare students for their roles as family members, consumers, and citizens. High schools and their curriculum were reorganized to "accommodate substantially lower expectations for most students" in the form of "mass education" (Toch, 1991, p. 52). Although life adjustment supporters initially sought a curriculum change for just the majority student population rather than the outlier population, this approach was later advocated for all students. "What was good for them (majority students), was good for all American youth, however gifted" (Hofstadter, 1963, p. 340).

Charles Prosser was an advocate of vocational programs who introduced a resolution to the U.S. Office of Education in 1945 stating "that 60 percent of the nation's secondary school students were not suited for college or skilled occupations and should be directed toward 'life-adjustment training'" (Toch, 1991, p. 51). Prosser predicated his position on scientific findings by Lewis Terman and John Thorndike. According to Hofstader (1963), Prosser applied Terman's IQ distribution to estimate that 60 percent of

the student population, who did not have an IQ of 110 or higher to pursue a professional or academic career, did not need college or skill-based instruction. Hofstader (1963) criticized Prosser for applying a deterministic typology about student educational achievement at a time when there was still no consensus about the genetic or fixed nature of IQ. Prosser further justified his vocational prioritization by applying Thorndike's work about transference of learning (Thorndike & Woodworth, 1901; Kliebard, 1995) to assert that students could not be transfer learning from one situation to another (Hofstader, 1963). Desired skills, Prosser believed, needed to be taught within the situation they were meant to be used. Students should learn specific skills for specific tasks, a process Kliebard (1995) later described as automization. As expressed in his 1939 lecture at Harvard University, Prosser stated that "nothing could be more certain than that science has proven false the doctrine of general education and its fundamental theory that memory or imagination or the reason or the will can be trained as power" (Hofstader, 1963, p. 345; Toch, 1991, p. 52). Hofstader described Prosser's actions as

> a major scandal in the history of educational thought. If a quantitative survey of the experiments means anything, these educators ignored the bulk of the material, for four of five of the experimental studies showed the presence of transfer under certain conditions. (1963, p. 349)

Jerome Bruner (1960) refuted Prosser's claim and asserted that "massive general transfer can be achieved by appropriate learning, even to the degree learning properly under optimum conditions leads one to 'learn how to learn'" (p. 6). Bruner (1960, 1996) described this optimal condition as a spiral curriculum circling from an initial intuitive representation to a more formalized one to bring depth to understanding. Similarly,

Gardner (2011) stated that deep understanding is achieved when the teacher can help students recognize a problem from multiple vantage points. “An important symptom of an emerging understanding is the capacity to represent a problem in a number of different ways and to approach its solution from varied vantage points; a single, rigid representation is unlikely to suffice” (p. 19).

Although the life adjustment movement came to a close in the late 1950s when the U.S. decided to harness student intellectual abilities amidst mounting political threat from the Soviet Union after their successful launching of Sputnik (Toch, 1991), anti-intellectualism persists into the modern era. In a classic study that examined student attitudes toward their peers, Tannenbaum (1962) demonstrated that high ability students tend to be labeled the least desirable peers among the general population of students. Hypothetical students who were characterized as “brilliant-studious-nonathletes,” traits that describe the stereotypical high ability student, were deemed least desirable among the students in the study (p. 24). Tannenbaum concluded that athleticism was a protective factor for high ability students. Cramond and Martin (1987) who replicated Tannenbaum’s study to examine pre-service and experienced teacher attitudes toward high ability students found a similar result. Cramond and Martin concluded that teachers may harbor anti-intellectualism toward high ability students. Evidence of anti-intellectualism are the negative labels that persist today associated with the gifted education community and the students they serve as being elitist (Freeman, 2005), racist (Benbow & Stanley, 1996), or even Neo Conservatist (Berliner & Biddle, 1995).

Passive Discrimination

In the modern era, high ability students can also experience irrelevancy in the form of passive discrimination in the classroom. Imber (1990) defines passive

discrimination as treating "differently situated students" similarly. Passive discrimination occurs when classroom teachers treat high ability students like other student populations when high ability students present different intellectual needs. Shore and Kanevsky (1993) as cited in Robinson, Shore, and Enersen (2007) stated that high ability students differed from the general population of students in seven ways of thinking: (1) they have more extensive knowledge which is used more effectively; (2) they utilize metacognition more efficiently and more often; (3) they spend more time on the complex cognitive parts of problem solving; (4) they understand problems better in terms of commonalties and transfer; (5) the employ assumptions that they evaluate systematically; (6) they are flexible in choosing strategies; and (7) they enjoy and create complexity.

An example of passive discrimination is when general education teachers use cooperative learning in the classroom, believed to help all students (Davis & Rimm, 2004; Robinson, 2003). Under a cooperative learning model, teachers identify, to the extent they can, and distribute high ability students among separate groups with typical learners. The teachers expect the high ability students to function as helpers in the group process to allow the group as a whole to demonstrate higher mastery of the material (Gallagher, 1991). However, cooperative learning as a valid strategy to support intellectual challenge for high ability students has not been proven (Davis & Rimm, 2004). High ability students often resent shouldering the responsibility of the group's performance while others function as "free-riders" or "social loafers" (Robinson, 2003, p.284). Compared to working in these mixed ability groups, high ability students prefer working alone (Davis & Rimm, 2004) in the form of accelerated or enrichment assignments in lieu of cooperative projects. They benefit from working in groups if they

are allowed to be grouped with other high ability students (Robinson, 2003) and when group work content is differentiated to match the skill level of the group members (Benbow & Stanley, 1996). Cooperative learning is a form of passive discrimination if classroom teachers do not supplement this approach with other strategies to support intellectual development for high ability students.

Neglect

Finally, high ability students can experience irrelevancy through "benign neglect" when general education teachers prioritize the needs of at-risk students over theirs (Finn & Petrilli, 2008, p. 10). Educational neglect is inattention to the special education needs of a student by "refusing to allow or failing to obtain recommended remedial education services or neglecting to obtain or follow through with treatment for a child's diagnosed learning disorder or other special education need without reasonable cause" (Children's Bureau, Office on Child Abuse and Neglect & DePanfilis, 2006, para. 24). While remedial education as a form of individualization is typically thought of as applying solely to bringing at-risk students up to grade level, this individualization should apply to all students who need some different kind of educational environment. Teachers often focus on the learning needs of students whom they perceive as struggling (Abell & Lennex, 1999; Finn & Petrilli, 2008). In a 2008 national survey of public school teachers from grades 3-12, 63% of teachers said struggling students received most of their attention, while only 7% said high ability students did. When further asked about who received focused one-on-one assistance, 81% of teachers said that struggling students would receive that kind of educational support, while only 5% named high ability students as receiving such attention (Farkus & Duffet, 2008). The consequence has been differences in educational growth between students perceived as struggling and high

ability students. According to the Thomas Fordham Institute (2008), "While the nation's lowest achieving youngsters made rapid gains from 2000 – 2007, the performance of top students was languid" (p. 2). Tomlinson and Callahan (2004) describe the position of high ability students as "a minority, which as is often the case with minorities, is frequently misunderstood, devalued, and underserved" (p. 111).

CHAPTER V

THE CULTURAL OBJECTS OF GIFTED EDUCATION

Cultural objects showcase how a group of people or community make meaning of their world and reveal what is considered most important to them. Describing the cultural objects of the gifted education community is challenging. Unlike tangible cultural objects like art, the cultural objects that unite the gifted education community are core ideas that concern the nature of high ability and the students who demonstrate this ability. Higher-order thinking is central to the identity of gifted education (Robinson, 2012a) evidenced by a sustained history seeking its cultivation. Early scholars like Galton in the late 1800's studied the genetic influence of genius, while modern scholars such as Renzulli study school wide enrichment programs. This commitment is driven by a humanistic ideology that embraces individualism, creativity, and intelligence. For the gifted education community, therefore, higher-order thinking approaches function as their cultural objects; they are the foundation for all scholarly and academic pursuits. Understanding these objects begins with a discussion about the nature and identification of high ability students in the context of the purpose of gifted education. Once these students have been identified, the conditions necessary to support their development will be examined. Finally, the ability of gifted education to claim authorship of the approaches to talent development in high ability students must be addressed.

The Purpose of Gifted Education

The purpose of gifted education is to help students of high ability develop talent. This process involves identifying student potential called gifts and transforming them into mature abilities called talents within the parameters of the field of interest selected by the student (Subotnik, Olszewski-Kubilius, & Worrell, 2011). Developing talent is a form of self-actualization. As stated by Subotnik et al. (2011),

> We assert that aspiring to fulfill one's talents and abilities in the form of transcendent creative contributions will lead to high levels of personal satisfaction and self-actualization as well as produce yet unimaginable scientific, aesthetic, and practical benefits to society. (p. 3)

Some leaders of gifted education such as Renzulli, Reis, Treffinger, and Feldusen (Davis & Rimm, 2004) have recommended replacing the terms "gifted education" with "talent development." Borland (2005) even proposed eliminating the gifted term altogether as he considered it unnecessary and even a barrier to achieving the goals initially set by the field.

While a "gifted" label is associated with negative political associations, students who show potential for or demonstrate high ability should have a name. There is no justification for ever referring to high ability students as "some" students. A name protects them from the anonymity of merely being "some" students. The problem is that any name used to identify high ability students will likely be perceived as elitist and make them a target for those who harbor anti-intellectual beliefs. In this analysis, as a matter of convenience, I will use the comprehensive term "high ability students" to refer to those individuals identified as either "gifted" or "talented," but retain the terms "gifted education" to describe the programs that historically serve them.

Defining Gifted and Talented

The term "talented" is often used interchangeably with "gifted." Defining and distinguishing talented from gifted continues to be the major policy challenge for gifted education (Reis, 1989; Subotnik, Olszewski-Kubilius, & Worrell, 2011). While many definitions exist, there is still no universal consensus for either term (Davis & Rimm, 2004; Thompson & Subotnik, 2010). According to the NAGC (2008e), this challenge is tasked by the complexity of the phenomenon. Gifts, talent, and intelligence are fluid concepts that look differently under different cultural and historical contexts.

The current array of working definitions can be arranged along a continuum with some that apply conservative criteria, while some apply more liberal criteria. Conservative criteria identify a singular characteristic related to high IQ, while liberal criteria identify multiple characteristics that may not be measured by IQ such as task commitment or creativity (NAGC, 2008e). The more liberal definitions are further differentiated by their developmental or domain emphasis. Some definitions differentiate gifted potential from achieved talent. For instance, according to Gagne's differentiated model of giftedness and talent (DMGT) (2003, 2005), giftedness is the expression of untrained or natural abilities in at least one ability domain that places the child in the top 10% of his or her age peers, while talent shows developed abilities or achievements that places the child in the top 10% of his or her age peers who are in the field. Other definitions differentiate among the multiple forms of giftedness defining giftedness in creativity differently from giftedness in sensory-motor capabilities (Renzulli, 2005; Subotnik et al., 2011).

The most popular working definition of gifted is the federal definition that broadens the definition of gifted to include demonstrations of talent. This definition was

first articulated in the 1972 Marland Report to Congress, which was adopted into the 1972 Javits Gifted and Talented Students Education Act (Public Law 91–230, section 806). This definition is:

> children and youth with outstanding talent perform or show the potential for performing at remarkably high levels of accomplishment when compared with others of their age, experience, or environment. These children and youth exhibit high performance capability in intellectual, creative, and/or artistic areas, possess an unusual leadership capacity, or excel in specific academic fields. They require services or activities not ordinarily provided by the schools. Outstanding talents are present in children and youth from all cultural groups, across all economic strata, and in all areas of human endeavor. (U.S. Department of Education, 1993, p. 2)

This definition suggests that school districts should consider a broad range of talents beyond intellectual ability (U.S. Department of Education, 1993) with the implicit suggestion that assessment of such talents not be restricted to using an IQ score (Neihart et al., 2002; Reis & Renzulli, 2009).

Despite its popular usage, the federal definition is still quite controversial. Reis (1989) asserted that while many states applied the federal definition, they did not do so in the flexible and inclusive way it was intended. Some school districts ignored potential and relied exclusively on talent as an admission criterion when teachers nominated only those students who showed achievement in the classroom. Some districts, through a matrix structure, adhered strictly to the federal definition and required candidates for their

gifted education programs to show all capabilities, which excluded many high ability students who were talented in only a few domains. Other districts applied the multiple criteria serially by not assessing students for their multiple potentialities if they did not score high on a preliminary intelligence test.

All these interpretations of the federal definition created "multiple hurdles rather than multiple windows" (Shore, Cornell, Robinson, & Ward, 1991, p. 52). They created what Gardner (1984) called

> an atmosphere of raw striving that results in brutal treatment of the less able, or less vigorous, or less aggressive; it may wantonly injure those whose temperament or whose values make them unwilling to engage in performance rivalries; it may penalize those whose undeniable excellence do not add up to the kinds of performance that society at any given moment chooses to reward; and it may victimize those who can't fight back, e.g., children. (p. 25)

Exclusionary interpretations of a vague, federal definition barred students from gifted education programs who did not perform well on intelligence tests, came from disadvantaged communities, or came from culturally different backgrounds. Yet, a wider net also risked eliminating talent strategies like accelerating curriculum, because "many students in the broadened pools cannot cope with such acceleration" (Coleangelo & Davis, 2003, p. 32). According to Renzulli (1978), a good definition should be clear enough to guide policy development and implementation. For the many reasons stated, although a popular definition exists, the federal definition has not offered guidance toward uniformity of understanding and application of gifted education principles.

Subotnik et al. (2011) recently posited a very comprehensive definition of high ability that attempts to satisfy the needs of both researchers and practitioners by including and describing evidence based findings in a way that offered some practical guidance. This definition is stated below:

> giftedness is the manifestation of performance or production that is clearly at the upper end of the distribution in a talent domain even relative to that of other high-functioning individuals in that domain. Further, giftedness can be viewed as developmental, in that in the beginning, potential is the key variable; in later stages, achievement is the measure of giftedness; and in fully developed talents, eminence is the basis on which this label is granted. Psychosocial variables play an essential role in the manifestation of giftedness at every developmental stage. Both cognitive and psychosocial variables are malleable and need to be deliberately cultivated. (p. 7)
>
> Giftedness (a) reflects the values of society; (b) is typically manifested in actual outcomes, especially in adulthood; (c) is specific to domains of endeavor; (d) is the result of the coalescing of biological, pedagogical, psychological, and psychosocial factors; and (e) is relative not just to the ordinary but to the extraordinary. (p. 3)

This definition fully articulates the relationship between gifts and talents along a developmental continuum of excellence with multiple contributing variables. In their follow up paper, Worrell, Olszewski-Kubilius, and Subotnik (2012) clarified that the gifted label tends to describe abilities in childhood that allow access to special programs

in K-12 settings, but in adulthood, talent becomes the dominant label as it describes abilities achieved. In the adult world, regardless of discipline, achieved behavior is recognized as the form of excellence, not potential. Therefore, while being talented implies the individual is gifted, being gifted does not imply the individual is talented. In this analysis, giftedness is defined as talent potential that is exceptional in either degree or kind, while talent is defined as developed potential at the upper end of a distribution in a particular domain. Eminence is the most mature form of talent. Eminence is "contributing in a transcendent way to making societal life better and more beautiful" (Subotnik et al., 2011, p. 7).

While I appreciate the diligence in which Subotnik et al. have detailed the developmental course of talent development in their definition of giftedness, this definition is still not fully satisfying because it contextualizes high ability too much as a function of adult priorities through the roles adults play. This definition feels like an extension of Prosser's vocational movement that uses a functional vantage point to determine student purpose. An effective definition, to me, recognizes high ability students for who they are as people at whatever stage of life as they answer their own inner calling. They are not instruments of society and academic disciplines. They are individuals who have free will to do as they please, but with enough high ability to self-actualize and get to their self-selected destination.

This is why the definition that resonates with me the most is Sternberg's (2005) definition of successful intelligence. Sternberg supports a self-selected definition of success and identified high ability individuals as those who can harness their analytical, synthesis, and practical intelligences. Analytical intelligence reflects traditional

academic knowledge measured by IQ. Synthetic intelligence refers to creativity, insightfulness, intuition and coping with novelty. Practical intelligence shows the ability to apply analytical and/or synthetic intelligence to practical situations. Sternberg later modified this theory to include wisdom (Davis & Rimm, 2004; Sternberg, 2000) as a form of intelligence to help balance multiple interests.

Properties of Gifted and Talented: A Biopsychosocial Model

Gifts and talents are hard to define because they are complex constructs having biological, psychological, and social properties. While understanding they are still a work in progress, shedding some insights on their most salient features will showcase the number of years gifted education researchers have devoted to understanding talent and the implied support that high ability students need to develop their talents.

Biology.

Genetics.

Biological features of giftedness can be traced to its genetic and sensory origins. Sir Francis Galton, who was very interested in examining individual differences (Albert, & Runco, 1999), wrote *Hereditary Genius* (Galton, 1892) that popularized the association between heredity and high ability (Davis & Rimm, 2004; Subotnik et al., 2011). By studying the genealogy of eminent families, he concluded that eminence was a function of heredity. He said, "men who are largely aided by social advantages, are unable to achieve eminence, unless they are endowed with high natural gifts" (Galton, 1892, p. 38). Heredity virtually guaranteed eminence because "few who possess these very high abilities can fail in achieving eminence" (Galton, 1892, p. 43).

However, some have argued that Galton did not fully examine the role of environment, which biased his findings toward genetic influences. Bloom (1985), for

instance, similarly found an association between eminent individuals and a family history of eminence that spanned two or more generations in the same or similar field. Unlike Galton, however, Bloom concluded that these families offered "natural access" to the resources within the field, which increased the likelihood of talent development (p. 174). Galton prioritized genetics in the development of talent. Galton believed he could cultivate talent by manipulating its biological features. Influenced by his cousin Charles Darwin, Galton believed that humans, like other species, were subject to the laws of natural selection and could be bred to harness their high ability. He created a program of eugenics, which he believed would increase talent scientifically without culling diversification that is the consequence of natural selection (Albert & Runco, 1999; Lumsden, 1999). Like others of his time, Galton wanted to "protect society from unintended social consequences" (Albert & Runco, 1999, p. 25).

Modern strategies to examine the relationship between genetics and giftedness rely on twin studies ("experiments of nature") and adoption studies ("experiments of society") (Deary, 2001, p. 68). These rare studies examined how identical and fraternal twins who have either been reared together or reared apart performed on intelligence tests. Implicit in this experimental approach is the belief that intelligence can be measured. However, Renzulli (2004) and Tannenbaum (1983) have often stated that non-traditional forms of talent cannot be measured by intelligence tests.

According to Deary (2001), the most recent and best known examination of the relationship between intelligence and genetics is the 1979 *Minnesota Study of Twins Reared Apart* by Tom Bouchard. In this study, more than 100 sets of identical and fraternal twins who were mostly reared apart took 50 hours of psychological and medical

tests. Participants came from Australia, Canada, China, New Zealand, Sweden, and West Germany (Bouchard, Lykken, McGue, Segal, & Tellegen, 1990). Scores on the Wechsler Adult Intelligence Scales (WAICS) intelligence tests were correlated. The scores of identical twins who were reared apart correlated at .69, while the scores between identical twins who were reared together correlated at .88. According to Deary (2001), in most psychological and social research, researchers do not find correlations beyond .5, which suggests these study correlations are large. These large correlations suggest that the genetic influence is high, because the separated twins shared genes only. The correlations from the reared together twins whose correlations was just slightly larger than the reared apart twins suggest the effect of the common environment is "negligible" as measured on the WAICS (Deary, 2001, p. 74). To summarize, the influence of genetics on intelligence was estimated at 50%, with increasing heritability across the lifespan (Coleangelo & Davis, 2003; Deary, 2001).

Sensory Experiences.

Sensory discrimination is another biological measure of high ability. "To appreciate and to make fine—but always relevant—distinctions is the mark of an educated mind. And the subtler the distinctions, the better the mind" (Walsh, 1964, p. 62). Galton believed that intelligence was positively associated with sensory discrimination and built the earliest laboratory to measure differences in sensory functioning. He became the "strongest force in applying empirical methods in the selection of subjects and the measurement of their individual differences" (Albert & Runco, 1999, p. 25).

Although Galton was the first to measure sensory experiences, others have since studied the relationship between sensory experiences and high ability. According to the

Columbus Group (1991) cited in NAGC, "What is Giftedness," (NAGC, 2008e), "giftedness is asynchronous development in which advanced cognitive abilities and heightened intensity combine to create inner experiences and awareness that are qualitatively different from the norm" (para 10). Kazimierz Dawbrowski's theory of positive disintegration helps explain the experience of heightened sensations. Although his theory is quite unknown in North American education and psychology, it is very well known among researchers of high ability and gifted education (Mendaglio, 2008).

Dabrowski conducted research on children with high abilities who all seemed to show heightened sensitivities (Mendaglio, 2008). According to Dawbrowski's theory, these heightened sensations assist with higher personality development as they create inner conflict that motivates an individual to search for an authentic and autonomous self. Positive disintegration is a process of personality development that is shaped by what Dawbrowski calls overexcitabilities, a high level of reactivity of the central nervous system, and dynamisms, instinct or drives that provide the energy for this development (Mendaglio, 2008).

This overexcitability can manifest in multiple forms (O'Connor, 2002). Psychomotor overexcitability offers a capacity to be energetic, active, and talkative; sensual overexcitability offers a capacity to experience sensual enjoyment; and intellectual overexcitablilty offers a capacity to make meaning of the world through symbolic thinking, independent thought, or synthesis of knowledge. Imagination overexcitability offers a capacity to make vivid associations of images and use metaphorical language, and emotional overexcitability offers an intense awareness of feelings. Although the forms can be varied, they each describe an intensity of experience

(Kennedy, Banks, & Grandin, 2011). Silverman (1993) said, “The gifted are ‘too’ everything: too intense, too driven, too honest, too idealistic, too moral, too perfectionistic, too much for other people. Even if they try their entire lives to fit in, they still feel like misfits” (p. 14). These sensitivities create experiences that are deep, meaningful, and unique (Robinson, Reis, Neihart, & Moon, 2002, p. 270). While these overexcitabilities may lead to positive experiences, Dawbrowski cautioned that these traits can also create deeply alienating and wounding experiences (O’Conner, 2002; Silverman, 1994) that cannot be readily communicated and understood by others.

Psychology.

Psychological aspects of talent are elements that describe the habits of mind required to cultivate talent. These will be discussed in terms of intelligence, motivation, and creativity. Although many of these developmental features have biological properties (Clark, 2008; Deary, 2001), this section will examine their psychological aspects.

Intelligence.

The first human intelligence tests appeared in 1905 in Paris when Binet and Simon devised the original intelligence test. They were tasked with the practical challenge of identifying students who would not benefit from a traditional curriculum. However, Lewis Termin, a psychologist at Stanford, adapted the Binet-Simon scale to create the Stanford-Binet Intelligence Scale, which introduced the intelligence test to the United States. The Stanford-Binet intelligence test used a single number, known as the intelligence quotient (or IQ), to represent an individual's score on the test (Cherry, n.d.). Termin used the adapted scale to screen and include over 1,400 children with an intellectual quotient (IQ) above 140 into his longitudinal study, “Genetic Studies of

Genius," about their physical, psychological, emotional, and social development (Terman, 1925). According to Subotnik et al. (2011), Terman's study represented the first systematic American effort to measure high ability as a function of cognitive ability or general intelligence.

The IQ allowed researchers to use a quantitative standard to assess for high ability. Terman (1922, 1925) referred to the top 1% or those with an IQ of 140 or above as high ability. The Marland definition referred to the top 3-5% as high ability (U.S. Department of Education, 1993). Then, there are other researchers who applied a more generous benchmark. Gagne (2005) considered the top 10% or those with an IQ of 120 and above as high ability, and Renzulli (2005) considered those at the top 15-20% with an IQ or 115 or above as high ability. These multiple benchmarks show there is a continuum of high IQ ability.

Intelligence, however, can also be examined as a non-quantitative construct. Gardner's (1983) writings on multiple intelligences introduced the notion that intelligence had qualitative features. Although Gardner saw emotional intelligence as a combination of interpersonal and intrapersonal intelligences (Davis & Rimm, 2004), others like Goleman (1995) combined and prioritized these forms of intelligences, which he called emotional intelligence. These alternative forms of intelligence would explain why some students who show strong academic abilities may not be equally strong in the practical world.

Collectively, these researchers contend that assessing for intelligence needs to move beyond a single criterion such as IQ, a practice that is still very popular today. Prioritizing a measurable approach restricts the conception of intelligence and high

ability. The American Psychological Association (APA) Task Force stated that too little is known about creativity, wisdom, practical intelligence, and social sensitivities to rely on intelligence tests alone that do not measure these constructs (Neisser et al., 1996).

Unlike traditional conceptions of intelligence that "educate students for success," these non-traditional conceptions of intelligence "educate students for life" (Heng, 2003, p. 46). Achievement of lifelong goals requires intelligence about oneself, others, and the broader society toward the attainment of personally, meaningful goals. According to Heng (2003), some academically bright students lose these capabilities as they subscribe to the narrow definitions and aims of traditional schooling. Cultivating more non-traditional forms of intelligences facilitate an ability to apply and engage in lifelong learning.

Moving toward a qualitative assessment of talent also has particular importance for identifying creative students. According to Davis and Rimm (2004), "if students are selected for a gifted program based upon scores in the top 1 to 5 percent in intelligence, the majority of creative students will be missed" (p. 41). Creativity will be discussed later in this section, but in terms of its relationship to IQ, a threshold level of IQ, about 120, is needed for creative production (Davis & Rimm, 2004; Sternberg & O' Hara, 1999). This means that once a creative individual has an IQ above 120, factors other than IQ are required to produce a creative idea. According to Sternberg and O' Hara (1999), very high IQ may actually interfere with creativity. High IQ individuals who may have been rewarded for their analytical skills do not cultivate their creative skills well. Gardner (1984) called this experience the "tyranny of talent" (p. 75) that tends to force individuals with exceptional talent to narrow their focus prematurely.

In addition to considering the type of intelligence, the degree of intelligence has important implications for understanding talent development. The Columbus Group (1991) articulated that with increased intellectual capacity, there is an increased risk for asynchronous development that yields vulnerability, requiring modification in parenting, teaching and counseling for optimal development. Simonton (1994) stated that an IQ around 119 was ideal. For each IQ, there is a "region of comprehension" (p. 234). Individuals are most likely to be understood if the audience is within that comprehension region. Individuals with IQs too low cannot understand, while individuals with IQs too high can quickly find fault and not listen. This comprehension region is typically one standard deviation below one's IQ. An ideal IQ would allow an individual to communicate with the largest number of people (those with IQ of 100).

Motivation.

Although high intelligence is clearly an important component for talent development, other habits of mind, which are "at best loosely related to general intelligence" (Feldman, 2003, p. 10), deserve even more attention. According to Reis and Renzulli (2009), "No single non-cognitive trait is more influential on high levels of performance than effort or motivation" (p. 234). "It takes enormous energy, commitment, focus, and perseverance to produce great work" (Feldman, 1999, p. 175).

Even in the early history of understanding talent development, high motivation was seen as a necessary condition for overcoming challenges. In *Hereditary Genius*, Galton (1892) said,

> The child's indomitable tendency to the higher studies, could not be repressed by his foster-mother's ridicule and dissuasion, nor by the taunts of his school fellows, not by the discouragements of his schoolmaster, who was incapable of

> appreciating him, nor even by the reiterated deep disappointment of finding that his ideas, which he knew to be original, were not novel, but long previously discovered by others. (p. 39)

Since then, the role of motivation has been studied more systematically. Renzulli recognized the value of high motivation in his three-ring conception of giftedness (Renzulli, 2005; 2012). Essential high ability traits include above average general intellectual aptitude and/or specific abilities (note that only an "above average" aptitude is needed), high levels of creativity, and high levels of task commitment or motivation. High motivation was a common feature of classroom achievement whether the child exhibited "schoolhouse achievement" (performers) or creative productivity (producers), the two primary manifestations of talent. Sternberg's and Lubart's investment theory of creativity (1991) identified motivation as one of the six required resources for talent development.

Collins and Amabile (1999) described two forms of motivation as it affects creativity. Intrinsic motivation, when an individual engages in an activity for its own sake, is conducive to creativity. Extrinsic motivation, engaging in an activity to meet an external goal, is not conducive to creativity. As discussed earlier, the CCSS fostered creativity through extrinsic strategies. According to Collins and Amabile (1999), intrinsic motivation is so strong that even thinking about an intrinsic reason for doing a task may increase creativity. The inverse is also true: extrinsic motivation creates an "undermining effect" (p. 301). Research has shown that expected performance evaluations that function as extrinsic constraints reduce creativity. Even the process of watching as a way of supervising produces less creativity.

Csikszentmihalyi (1990) calls motivation "flow" and examined the nature of intrinsic motivation and precipitating experiences. He described flow as a "state in which people are so involved in an activity that nothing else seems to matter; the experience is so enjoyable that people will do it even at great cost, for the sheer sake of doing it" (p. 4). Although Renzulli (2004) stipulated that motivation was a function of the student's interest in a task and the student's personality and physical makeup, Csikszentmihalyi believed that student interest was a function of the nature of the task. Optimal tasks have clear rules, goals, feedback, and allow for user control (Csikszentmihalyi, 1990). "They stretch the mind or body to its limits in a purposeful manner to attain goals that are difficult and worthwhile" (Csikszentmihalyi, 1990, p.3). Therefore, to cultivate creativity in particular, tasks that are challenging are also intrinsically motivating (Collins & Amabile, 1999). The outcome of every flow activity is to provide "a sense of discovery, a creative feeling of transporting the person into a new reality…In short, it transformed the self by making it more complex. In this growth of the self lies the key to flow activities" (Csikszentmihalyi, 1990, p. 74).

Creativity.

Creativity is a particular form of talent often perceived as an enigmatic and rare quality that is difficult to define and cultivate (Sternberg & Davidson, 1983). While many have studied creativity, I will limit my discussion to perspectives on creativity articulated by those in the gifted education community since it is only those perspectives that contribute their cultural objects. According to Lumsden (1999), creativity is a "tantalizing constellation of personality and intellectual traits shown by people who, when given a measure of free reign, spend significant amounts of time engaged in the creative process" (p. 153). Clark (2008) provides more specific parameters and describes

creativity as “the synthesis of enriched rational and spatial thought, heightened physical sensing and movement, sensitive emotional and social affect, and high intuitive consciousness” (p. 158). While none of these individual traits are particularly rare, Martindale (1999) asserts it is hard to find all the traits in one person.

An essential component of creativity is innovation. According to Martindale (1999), creative individuals produce a product that achieves some level of adoption in the broader society. Although Sternberg and Lubart (1996) would say that relatively little research has been done in creativity, most in the field of creative research would agree that creativity involves a process of producing a product that is new and useful (Colangelo & Davis, 2003). Subotnik et al. (2011) differentiated between two types of creativity. “Big C” creative people produce works that are considered eminent in their respective field, while “little c” people use creativity to advance their everyday life. The creative organization of ideas, therefore, can produce ideas that either revolutionize an entire domain like evolution or yield a subtler effect like creating a new recipe (Feldman, 1999). Subotnik et al. (2011) suggest that the emphasis of talent development should be toward cultivating “Big C” ideas.

Another fundamental component to creativity is risk taking. “All thinking involves risk” (Dewey, 2011, p. 82). Thinking, when it is a process of inquiry, requires some amount of risk taking in the course of investigating the unknown. However, according to Nickerson (1999), thinking at the highest level, to be creative, requires risk taking most of all, because conveying the value in one’s creative ideas requires confronting personal fears of ridicule, fears of exposing one’s limitations, and fears of failure. Timidity inhibits creative thinking.

Refusing to take risks is one reason why some high ability students underachieve. Underachieving high ability students are often prone to perfectionism (Davis & Rimm, 2004; Siegle & McCoach, 2009). Risk taking is perceived as a threat to their "perfect" self-image. To maintain this self-image, these students set goals that are easy to attain, that require little intellectual risk, and that do not advance their achievements (Balduf, 2009; Laffoon, Jenkins-Friedman, & Tollefson, 1989).

Therefore, supportive teachers create experiences of risk taking through assignments that bring challenge, while teaching these students how to value and respond to mistakes. Challenging assignments create "risks for understanding" and not "correct-answer compromises" (Gardner, 2011, p. 153). Risk is experienced by tackling uncomfortable problems without known right answers (Robinson, Shore, & Enersen, 2007). Tomlinson (1999) suggested that "development of high self-esteem requires that students be allowed to challenge themselves in an environment in which their mistakes and struggles, as well as their successes, are encouraged and appreciated" (p. 3).

Social Environment

Social environment describes the social support needed to develop talent while in the school environment. "The enduring belief that great creativity is developed largely alone, without assistance from teachers, mentors, peers, and intimate groups is largely a myth" (Feldman, 1999, p. 176). The development of talent from primary school to higher education is well articulated by Cross and Coleman's school-based conception of high ability (2005). According to Cross and Coleman (2005), high ability appears in the early grades as specific skills or general ability, but matures into demonstrable talent structured within a disciplinary context in advanced training. In this section, the learning styles and

social needs of high ability students will first be described briefly before discussing optimal social environments.

Education: Peers & Teachers.

The role of peers and teachers and their curriculum are invaluable (Feldman, 1999; Renzulli, 2004). In cases of extreme potential, the need for appropriate teachers and educational arrangements is most pronounced (Feldman, 1999). An educational plan that specifically assists high ability students needs to be compatible with their learning styles, academic interests, social engagement, and anticipated roles within society. This curriculum and its manner of implementation "must be a level, pace, depth, and complexity that would be inappropriate and frustrating for children of average ability" (Feldhusen, 1994, p. 232). These high ability traits will be discussed first to provide context before examining the roles of peers and teachers.

The nature of high ability students' intellectual skills results in them having unique and "complex" learning characteristics (Van Tassel-Baska, 2003, p. 178). Their learning styles vary in both quantity and quality from those of typical learners (Van Tassel-Baska, 2003). The learning style of typical learners focuses primarily on acquiring and comprehending knowledge. High ability students, on the other hand, acquire knowledge quickly and spend their time using that knowledge to synthesize new understanding, evaluate new situations, and analyze new problems (Winebrenner & Brulles, 2008). While typical students can be easily challenged with tasks that require them to recall things they have previously learned, high ability students prefer work that allows them to apply complex reasoning skills. When high ability students face an interesting and challenging problem, they can focus on it for longer periods with the goal of learning the material as quickly as possible. When they have completed a task,

however, high ability students like to "move ahead," rather than engage in repetitive usage of material they have already mastered (Van Tassel-Baska, 2003, p. 178). Thus, high ability students learn optimally in environments that support rigor and self-directed pacing.

An optimal educational arrangement should also include some understanding of their anticipated roles in society. According to Renzulli (2004), these roles as future leaders present the most powerful rationale for special services for high ability students. High ability students will be expected to solve intractable problems that require applying creative skills. Although traditional approaches are important for knowledge development, gifted education programs strive to go beyond these boundaries, "trying desperately to break the shackles of too much structure and too many predetermined objectives" (p. 53). Renzulli cautioned that this framework should not be interpreted as a denigration of knowledge, which is needed in increasing and relevant amounts to support mental operations. However, as a self-identified pragmatist in the tradition of John Dewey, Renzulli believed that solving "real problems" with ill-defined parameters and solutions was the foundation of creative production, and predicated his enrichment triad model upon this belief. The student role was investigative toward solving a problem that a student selects.

If problem solving and student-driven learning describe the qualitative features of a gifted education program, then acceleration describes its quantitative features. Acceleration is moving the student through the curriculum faster than is typical (Colangelo & Davis, 2003). Acceleration can take many forms depending on the number of subject areas in which a student has high ability. These include early entrance to

school, grade-skipping or grade acceleration, subject-specific or content acceleration and curriculum compacting or telescoping (Benbow, 1991; Robbins, 2007; Tieso, 2003).

This optimal environment is in part created by working with intellectual peers who equally enjoy challenge. High ability students experience less self-criticism and an increased self-concept in this grouping experience (Gross, 1989). They describe their social experience as delightful (Brody & Stanley, 2005; Gross, 2002). This need to work with intellectual peers continues well beyond the end of their formal schooling as they collaborate with intellectual peers toward advancement of their work and careers (Gardner, 1983). High ability students, therefore, benefit from working with other students who share their enthusiasm for higher-order learning, which motivates them to take on additional challenges (Feldhusen, 1989).

Teachers also function in a very critical role as mentors. According to Renzulli (1982), instruction of high ability students uses an Investigative or Inductive Approach wherein students select the topic of inquiry. Teachers, as mentors, function as methodological assistants, managerial assistants, informants about the concepts underlying the knowledge students are learning, and locators of resources to help students access a real audience for product evaluation. This approach differs from the Four-P Approach taught in the traditional general classroom. In the Four-P Approach, lessons have predetermined pathways, are prescribed by the teacher, are presented to the students, and produce a predetermined product. Renzulli (1982) believed it was important that teachers of high ability students function in a distinctly different way from traditional classroom teachers. Renzulli acknowledged that no teacher can be an expert in all subjects and with high ability students in particular, who have immense interest in

particular subjects, teachers will be outdistanced by their students in subject knowledge. Therefore, teachers of the high ability need to be "true experts" in the "management of advanced level work" (p. 155) in the ways described above. While traditional teachers function as subject experts, teachers of high ability students function more like process experts.

Domain & Field.

High levels of achievement have a form that is shaped by the expectations of a particular domain (Colangelo & Davis, 2003; Cross & Coleman, 2005; Csikszentmihalyi, 2009).

> The production of masterworks requires not only a large amount of practice, but also the coming together of a number of different sorts of external factors, many of which are independent of the amount of study and practice put in by a given individual. One's works must be accepted by the professional decision makers and the audience before they become masterworks…" (Weisberg, 1999, p. 242)

A domain is a particular set of norms or values within a discipline that prioritizes particular types of knowledge and processes of knowing. Talent, therefore, is not some general form of achievement (Gottfredson, 2003). According to Subotnik et al. (2011), talent will mature along a unique, discipline specific trajectory with different starting points, peaks, and end points. Both foundational domains (e.g., music, math, athletics, and writing) that prepare for performance domains (e.g. engineering, architecture, and law) have prescriptive procedures that facilitate the timing of emergent talents (Cross & Coleman, 2005). For instance, precocious math abilities can be detected in preschool years, but achievement in psychology does not appear until several years after earning an

advanced degree (Subotnik et al., 2011). Individuals who understand the domain, who are able to determine the value of products produced within that domain, and who serve as gatekeepers deciding who can have access to domain experiences and knowledge, are called the field. The field consists of the individuals who manage the domain.

Sociopolitical.

Yet even beyond the purview of the domain and field, recognition of potential and cultivation of talent depends on the sociopolitical environment of the society. In U.S. society, this environment supports a democratic philosophy. According to Gardner (1984), Americans, "love the idea of equality" (p. 27). Equality means the following:

> in the final matters of life and death all humans are equally worthy of our care and concern…Beyond this we believe that all are equal in the possession of certain legal, civil, and political rights…But we know that individuals are not equal in their native gifts nor their qualities of character nor their motivation; and it follows that they will not be equal in their achievements. That is why we give equality of opportunity such a central role in our social philosophy. (Gardner, 1984, p. 28)

Gardner warns there is an "extreme" form of equality that goes beyond equality of opportunity but insists on equality of outcome by "insisting that no one should be regarded as better than anyone else in any dimension and that there should be no difference whatever in status or income" (p. 28). This is reflected in social pressure to play down one's gifts. "One must be, above all, unthreatening to the other fellow's self-esteem" (p. 29). Carried too far, Gardner cautioned, that extreme equality would be the "end of that striving for excellence that has produced history's greatest achievements" (p. 30). "In its extreme forms, equalitarianism denies that there are inequalities in capacity,

eliminates situations in which such inequalities might exhibit themselves, and insures that if such differences do emerge, they will not result in differences in status" (p. 36). To achieve a state of equalitarianism, he predicted ever increasing government intervention (p. 49). Adorno and Horkheimer, principal members of the Frankfurt School critical of establishmentarianism, shed insight on the cause of this phenomenon by stating that idealism spawned totalitarianism. Adorno and Heorkheimer, who dissented from other criticalists during the counter-cultural, mass movement in the 1960s, criticized the movement for its extreme idealism that championed anti-intellectualism (Bronner, 2011).

Contextual Factors.

Chance.

Although discussion of chance factors as they affect talent development is not a primary emphasis in the field (Tannenbaum, 2003), it is still an important factor that should not be overlooked. Talent development depends on chance (Gagne, 2003; Tannenbaum, 1983). According to (Gagne, 2003), these are either advantages or disadvantages in the form of one's genetics, family resources, community resources, cultural background or historical time. These chances have the power to "facilitate or inhibit, and to direct or redirect, a creative act" (Tannenbaum, 2003, p. 55).

To some degree, achievement depends on factors that the individual has no control over. Examining factors that are not cultivated through deliberate strategies is not a typical educational approach. However, response to chance events impacts talent development. Successful individuals are those who can respond to chance factors (Sternberg, 2005). "Those who are prepared to step into new opportunities or to be resilient in response to setbacks due to chance will be most successful" (Subotnik et al., 2011, p. 226).

Austin (1978) described four types of chance factors. The first type of chance is accidental, when an individual happened to be in the right place at the right time. This is a completely passive experience. The second type of chance is called general exploratory behavior, which increases the likelihood of a chance event occurring. Although the direction is aimless, staying in motion mitigates inertia and generates random ideas that increase the chance of a meaningful idea emerging. The third type of chance is called sagacity. Here, those who happened to be most prepared in mind will recognize value in the chance event and be able to take advantage of it. Austin called this the Pasteur principle. Finally, the fourth type of chance yields the best opportunities of all called personalized action. The individual is most purposeful and deliberate. When a chance situation arises, the individual takes a risk. Therefore, risk-taking increases the ability to create talent from potential. "[Chance] interacts with inspiration and perspiration in a mutually dependent way. Without high potential, no amount of good fortune can help the mediocre person achieve greatness; conversely, without some good fortune, no amount of potential can be truly realized" (Tannenbaum, 2003, p. 56).

Chronological Time.

Chronological time supports talent development by increasing the likelihood that chance events will occur. "No ability, no matter how strong or versatile, is more than a tool. It must be honed and wielded with enormous dedication and long practice to produce anything extraordinary" (Gottfredson, 2003, p. 37). Ericsson called this period "deliberate practice" that consists of practicing particular skills with focus and intensity designed to improve performance (Ericsson et al., 1993). Hayes (1989) described this period as the "silent" or "uncreative" period. Although no product emerges during this time, the individual is still very engaged in the creative process as she lays the foundation

for future achievement. The creative breakthrough typically occurs ten years after the start of study (Ericsson, Krampe, & Tesch-Romer, 1993; Gardner, 1993). When Gardner (1993) examined seven cases of eminence to identify their common traits, he was struck by the operation of Ericsson's "10-year rule" across domains. The first breakthrough represents a "decisive break from the past," while the subsequent breakthrough that also follows ten years afterwards is of a "broader and more integrative sort, with the creator proceeding in a more nuanced way, tying innovations more directly with what has gone on in the past of the domain" (p. 370). The third breakthrough evaluates the domain in a historical or reflective way, which is perceived positively by the field if the field values such critical or reflective approaches.

Talent

The collective effect of the natural and contextual circumstances on high ability students is the development of talent. Although talent can emerge in multiple forms, its value has a more uniform meaning. According to Tannenbaum (1983), talent is appreciated for its scarcity, surplus, quota, and anomaly. Scarcity talents provide skills or services that are in short supply. Surplus talents contribute aesthetic improvements. Quota talents offer specialized, high level skills. Anomalous talents represent exceptional abilities that may not have a clear societal niche such as a trivia expert of a particular knowledge set. This latter form, without a clear disciplinary context, may be more of an emergent form of talent. Talent, therefore, is a confluence of biological, psychological, and social elements that mature over time bounded by chance factors. It represents achievement in its most refined form that elevates societal standards to that of excellence (Tannenbaum, 1983).

Authorship

In order for cultural appropriation to have occurred, gifted education must show that it has claims to higher-order thinking approaches through its quest for excellence. Claiming the origins of an idea is "authorship—that is, the idea that we can locate the source of a given work" (Ziff and Rao, 1997, p. 4). Tomlinson and Callahan (2004) describe the field of gifted education as a "pioneer in teaching for thinking" (p. 185). "In fact, it is likely that gifted education is the oldest, best laboratory and model for cognitive-based education which exists in American public education today" (Tomlinson & Callahan, 2004, p. 185). Robinson (2011) stated that

> In the 1970s, the last big wave of interest in gifted education, few people were talking about higher order thinking—we taught and learned in a basic skills environment, and now these kinds of thinking skills and instructional programs are accepted as the norm in general education. The same general education adoption goes for individual projects. A more recent example is problem-based learning (PBL), which was initially developed in the medical field to prepare for emergency room physicians, but was adopted early on in gifted education, too. Today, a search of the research literature on PBL provides citations largely from two fields—medical education and gifted education. (p. 4)

The gifted education community was the first to embrace Bloom's taxonomy (Robinson, Shore, & Enerson, 2007). Higher-order thinking stands at the core of the gifted communities' cultural identity evidenced by a continued history studying higher-order thinking such as creativity and problem-based learning.

According to Tomlinson and Callahan (2004), the gifted education community has drawn heavily from cognitive psychology that underscores ways of thinking. Gifted

education has applied knowledge from cognitive psychologists such as Adler, who advocated active learning and rigor; Sizer, who suggested students take responsibility for their own learning; Brandwein, who supported discovery based learning and ending tests as a basis for assessing growth; Toch, who recommended student-centered learning; and Goodlad, who suggested that learning should prioritize application of concepts over memorizing them.

Drawing from their work, the gifted education community has an advanced understanding of higher-order thinking such as analyzing, detecting bias, defending positions, and metacognitive processes such as planning, problem solving, and rehearsing ideas. "For nearly half a century, writers and practitioners in the field of instruction for the gifted have studied, described, applied, and evaluated the kind of cognitively based instruction which is now being recommended broadly for all students" (Tomlinson & Callahan, 2004, p. 185).

Researchers in the gifted education community such as Torrance, Treffinger, and Van Tassel-Baska, in particular, have examined creativity and problem based learning for years. According to Treffinger and Isaksen (2005), the gifted education community was the first to disseminate and apply the Creative Problem Solving (CPS) approach - a form of problem based learning. E. Paul and Pansy Torrance developed its earliest iteration called "The Future Problem Solving Program." Paul Torrance earlier created the Torrance Tests of Creative Thinking in 1966, which continues to be the most widely used divergent thinking tests to assess creativity today (Davis & Rimm, 2004). Treffinger applied the problem solving and creativity approaches to the field of gifted education (Karnes & Nugent, 2004). VanTassel-Baska, described by Borland (2003) as the

preeminent expert on curriculum for high ability students, researched instructional methods to teach problem based learning to high ability students. She instructed teachers of the high ability to include higher level questioning skills, listening skills, conferencing skills, and tutorial abilities in their use of both flexible team groupings and whole class discussions to teach problem based learning (Van Tassel-Baska, 2003).

In the last two decades in particular, gifted programs have put an emphasis on developing advanced thinking skills applying Bloom's Taxonomy and Creative Problem Solving (CPS) (Robinson, Shore, & Enersen, 2007). Coleman and Cross, as cited in Robinson, Shore, & Enersen (2007), stated that "the overwhelming majority of teaching methods reported in the literature of gifted education are variations on creativity and problem-solving themes" (p. 104). In summary, many researchers in gifted education assert that themes of higher level thinking germane to problem based learning and creativity have always been fundamental to gifted programs (Housand, 2013; Phillipson, Phillipson, & Eyre, 2011; Renzulli, 2012; Robinson, Shore, & Enersen, 2007). Although many educational reformers such as John Dewey have historically examined problem based learning and creativity, the field of gifted education has formally examined these ways of thinking toward understanding and helping high ability students in the classroom (A. Robinson, personal communication, November 10, 2013).

CHAPTER VI

COMMON CORE STATE STANDARDS: THE ACT OF TAKING

The Common Core State Standards (CCSS) are a state-led effort launched in 2008 (Tennessee Department of Education , 2013), guided by the National Governors Association Center for Best Practices (NGACBP) and the Council of Chief State School Officers (CCSSO)

> to establish a single set of clear educational standards for English-language arts and mathematics that states can share and voluntarily adopt… [They are] designed to ensure that students graduating from high school are prepared to go to college or enter the workforce and that parents, teachers, and students have a clear understanding of what is expected of them. (NGACBP & CCSSO, 2010t, para 1)

This chapter will introduce the rationale, purpose, and historical context of the CCSS and demonstrate that many of its concepts have been taken from gifted education.

History

Educational Reform Movement

The CCSS are the most current manifestation of the decades long educational reform movement. Secretary of Education T. H. Bell who created the National Commission on Excellence in Education in 1981 expressed concern about the "widespread public perception that something is seriously remiss in our educational system" (National Commission on Excellence in Education, 1983, p. 1). According to Renzulli and Reis (2004), this reform movement concerns the declining productivity in

the nation's public schools and the declining leadership abroad. Japan was then producing twice the number of scientists and engineers per 10,000 people as the US, and Korea had the highest number of PhDs per capita in the world (Naisbitt & Aburdene, 1990).

Several national studies in the 1980s such as the *Educating Americans for the 21st Century* (National Science Board Commission on Precollege Education in Mathematics, Science and Technology, 1983) and *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) revealed how schools were dominated by rote work and very little higher-order thinking, which garnered concern about student preparedness for increasingly complex and competitive demands (Richart & Perkins, 2004). The effects of this dominant approach were described in *A Nation at Risk: The Imperative for Educational Reform* by the National Commission on Excellence in Education (1983):

> each generation of Americans has outstripped its parents in education, in literacy, and in economic attainment. For the first time in the history of our country, the educational skills of one generation will not surpass, will not equal, will not even approach, those of their parents…The average graduate of our schools and colleges today is not as well-educated as the average graduate of 25 or 35 years ago, when a much smaller proportion of our population completed high school and college. The negative impact of this fact likewise cannot be overstated. (p. 7)

The National Science Board Commission on Precollege Education in Mathematics, Science and Technology (1983) expressed concern that an existing midcentury curriculum could not foster competitive, academic skills for the 21st century. The future

of education needed to teach more complex thinking skills such as critical and creative thinking, reflective and metacognitive thinking, self-regulation, decision-making, and problem solving (Richart & Perkins, 2004, p. 777), now described as the 4Cs in the 21st Century curriculum: communication, collaboration, critical thinking, and creativity (Partnership for 21st Century Skills, n.d.).

As the Educational Reform Movement was underway, two types of students were targeted; the high achieving and the at-risk. According to Renzulli and Reis (2004), the first goal was "to provide the best possible education to our most promising students so that we can reassert America's prominence in the intellectual, artistic, and moral leadership of the world" (Renzulli & Reis, 2004, p. 3). This approach supports excellence that seeks to develop individual potential among high ability students measured by student achievement (Gardner, 1984). The second goal was "to improve the education of at-risk students [and especially those students in inner city schools and rural poor areas] who, if they do not drop out, often graduate from high school without the ability to read, write, or do basic arithmetic" (Renzulli & Reis, 2004, p. 5). This approach supports equity that seeks to help underperforming students so they can achieve "average" standards (Davis & Rimm, 2004, p. xv). The No Child Left Behind Act of 2001, for example, is a policy tool to support equity (Robinson, 2009). Excellence, driven by freedom of opportunity, and equity, driven by equality of outcome, underscore the major decisions and tensions in public education. According to Rokeach (1973), equality and freedom are the two basic political values in all democratic social systems.

Detracking Reform Movement

To align these goals for excellence and equity, higher-order learning and higher-order learners were brought into the general classroom. "Recruiting a greater share of the

best and brightest into public education's classrooms has been a major thrust of the reform movement" (Toch, 1991, p. 135). Therefore, while the educational reform movement precipitated the harnessing of high ability students, the detracking movement implemented the process. Separate programs for high ability students had already been the common practice since the early 1930s (Toch, 1991). These programs for excellence generally took the structure of "tracking" students (i.e., separating students into classrooms based on academic ability) by pulling them out of the general classroom. Hostility towards tracking approaches and, therefore, excellence emerged in the mid-1980s (Davis & Rimm, 2004). Parents and educators united to attack the program for treating children differently (Oaks, 2010; Berliner & Biddle, 1995) in a way that "defies the egalitarian principles upon which our nation was founded" (Bittick, 1995, p. 142). Cases were also brought about with the charge that tracking undermined the desegregation principles of Brown v. Board of Education (1954) by resegregating minority and white students (Oaks, 2010). One judge and a federal magistrate in Rockford, IL considered tracking as a form of racial discrimination (Oaks, 2010).

The criticisms of tracking extended beyond arguments about inequality. Some believed gifted education unnecessary as many of its core features such as individualization, richer curriculum, and smaller classes, should be integrated into the general curriculum for all students to benefit (Berliner & Biddle, 1995; Davis & Rimm, 2004; Reis, 1989). Some believed that separating students by ability creates stigma by labeling some students as "failures" (Berliner & Biddle, 1995, p. 209) and other students as more able (Davis & Rimm, 2004).

Throughout the country on local, state, and federal levels of government (Oaks, 2010), the detracking reform movement began eliminating tracking within schools (Davis & Rimm, 2004). Some states like California and Massachusetts declared elimination of tracking prior to senior high school. On the national level, the National Governors' Association proposed eliminating tracking as a strategy to meet national education goals that were set in 1989 (Oaks, 2010).

The general education classroom became the primary instructional site for high ability students (NAGC, 2008f; O'Connell, 2003). By the late 1990s, pull out programs for high ability students had virtually disappeared in many states (Tomlinson, 1999). The majority of high ability students spent 80% of their time in a regular classroom setting (Westberg, Archambault, Dobyns, & Salvin, 1993). Several important pieces of legislation by Congress in 1994 were passed that supported higher level performance among all students, which justified the need to appropriate gifted practices into the general education classroom. The GOALS 2000: Educate America Act provided funding to states to provide "a framework for the reauthorization of all Federal education programs—by creating a vision of excellence and equity that will guide all Federal education and related programs" (Goals 2000: Educate America Act, 1994, sec.2. 6a). The Elementary and Secondary Education Act (ESEA) was reauthorized with substantial changes "incorporating the belief that all children can achieve higher academic standards" (O'Connell, 2003, p. 606). ESEA shifted the focus from basic skills to higher-order skills that called for enrichment and acceleration to assist all students.

Through this legislation, strategies that were typically the hallmark of programs for gifted and talented students were promoted for students most at risk of school

> failure. It suggested that all students need conceptually complex curriculum, problem-solving skills, instruction in the arts, and enrichment and acceleration. Further, all students had to be assessed based on the same standards. (O'Connell, 2003, p. 606)

Federal acts provided the necessary impetus to bring higher-order content into the general education classrooms.

By the time the CCSS was developed, additional underlying concerns had been identified. Some worried that variable state standards caused a "gap in instruction" as students moved from state to state. What may be articulated as grade level proficiency in one state could vary greatly from what is articulated in another (Baesler, 2013). Lack of uniformity, however, did not provide the motivation to inject increased rigor into the CCSS. That came from the perception that many states had intentionally lowered the bar for their students in recent years. Many state standards were "dumbed down" to proficiency levels to comport with the regulations of the No Child Left Behind (NCLB) Act of 2001 (Duncan cited in Sloan, 2010). For instance, many states set reading proficiency standards at the functionally illiterate level in scores on the National Assessment of Educational Progress (NAEP 2009 study cited on Foundations for Excellence in Education , 2010).

According to the Tennessee Department of Education (2013), the primary impetus for the CCSS was a 2004 report released by the American Diplomat Project (ADP) called "Ready or Not: Creating a High School Diploma that Counts." The ADP was a multi-year research project designed to examine high school graduation expectations in math and English language arts. Unlike previous assessment projects, the ADP based its

analysis on empirical evidence gathered from employers and college educators as to what they wanted from their new hires or students, respectively (American Diplomat Project, 2004). Three bipartisan, non-profit research organizations, Achieve, Inc., the Education Trust, and the Thomas B. Fordham Institute, served as the primary organizers of the project. The ADP report asserted that the high school diploma in the modern era has lost much of its value by functioning mostly as a "certificate of attendance" (American Diplomat Project, 2004, p. 1). "Most high school graduates need remedial help in college.… Most employers say high school graduates lack basic skills….They (employers) rate literacy and critical thinking skills as much more important than job-specific or computer skills" (American Diplomat Project, 2004, p. 3). The project organizers recommended restoring value and creating a "common currency" in the high school diploma by linking academic expectations to postsecondary education and the realities of work. "Strong" courses in high school were described as more predictive than family income or race for college success. To summarize, "Working to increase the number of students who are proficient without ensuring they are also prepared for the future will undermine not only the intent of the NCLB, but also support of the educational system itself" (American Diplomat Project, 2004, p. 5).

The CCSS, created to meet the proposed goals of the ADP report, implement a strategy to improve student achievement (Sloan, 2010). They identify academic expectations that "promise" knowledge, skills, and goals essential for educational success (Kendall, 2011, p. 40). Student competitiveness in the national and international market upon graduation and beyond will be ensured by making the CCSS progressively "rigorous" from grades K-12. In principle, the CCSS articulate the "highest state

standards in the country" that support "high-order skills," moves away from the "lowest common denominator" approach to teaching, and uses "smarter and better tests" to measure student learning (NGACBP & CCSSO, 2010t), and support student "innovation" (Foundation for Excellence in Education , 2010) and "independent thinking" (Center for American Progress, n.d.). According to the ADP (2004), analytical and reasoning skills that were once primarily taught in advanced or honors courses are now considered essential for all students. Content from Algebra II that may not have been required for graduation in the past is now considered essential.

Public standards of the highest quality emphasize excellence (Robins, 2007). CCSS refer to excellence implicitly by stating that "building on the excellent foundation of standards states have laid, the Common Core State Standards are the first step in providing our young people with a high-quality education" (Amery school district, n.d, para. 1—quoting the NGACBP & CCSSO, 2010gg, para. 1). I will use the term "excellence" explicitly throughout this analysis to summarize the goals of the CCSS. According to Robins (2007), policy makers who prioritize educational excellence typically have a concern about international competiveness. Excellence is believed to be the panacea that advances U.S. economic, military, and political might. This belief drives educational policy that supports public education of the highest quality. The context for the CCSS is no different.

By functioning as a "first step," CCSS designate goals only, not content or processes, toward maintaining excellence in education. These goals have some delineation or structure called strands, but do not identify which materials or strategies to use (NGACBP & CCSSO, 2010y). They only identify a "floor" that allows school

districts the discretion to target higher standards (Baesler, 2013; Foundation for Excellence in Education, 2010). Local school districts and teachers will make the curricular decisions about content and process (Council of Chief State School Officers, 2013; NGACBP & CCSSO, 2010y) and will decide which texts and other materials to select, how these materials will be used, and at what pace they will be introduced (Baesler, 2013). CCSS presume that by articulating goals, implementation will follow suit through systematic acquisition of necessary knowledge, resources, and skills.

The drafters promise that the CCSS will be inclusive (NGACBP & CCSSO, 2010gg), supporting "individual student growth, for all students across the achievement spectrum" (Tennessee Department of Education, 2013, p.6.) to ensure that "all American students are prepared for the global economic workplace" (NGACBP & CCSSO, 2010r, para 3). Supplemental instruction for teaching special populations such as students with disabilities and English language learners are provided on the National Governors Association Center for Best Practices, Council of Chief State School Officers website (NGACBP & CCSSO, 2010c-d). These instructions recognize the heterogeneity within these groups, the importance of strategizing process (e.g., articulating how these standards will be implemented) for group success, and the need for additional supports to meet these standards.

Adoption of the CCSS has been widespread; no doubt assisted by the availability of federal funds to assist in implementation. The District of Columbia, 42 states (Indiana exited CCSS in April 2014; South Carolina exited in June 2014; and Oklahoma exited in June 2014), and four territories have adopted the CCSS to date (NGACBP & CCSSO, 2010nn). They have been endorsed by educators across the country represented by The

National Education Association (NEA), American Federation of Teachers (AFT), National Council of Teachers of Mathematics (NCTM), American College Testing (The ACT), the College Board, the National Association of State Boards of Education, to name a few (NGACBP & CCSSO, 2010oo).

The CCSS can be described as a large set of rules and procedures. According to Ainsworth (2013), "The state standards at each grade level contain more concepts and skills than students can realistically learn within the course of one school year" (p. xiii). For mastery of English language arts in the CCSS, for instance, there are 32 college and career readiness (CCR) anchor standards divided across four literacy strands (e.g., reading, writing, speaking/listening, and language). Within the reading strand, there are 10 CCR anchor strands; for writing, there are 10 CCR anchor strands; for speaking and listening, there are 6; and for language there are 6. Each anchor strand is divided into many more grade specific strands to identify grade level benchmarks. For students in grades 6-12, there are two content areas to master: (1) ELA (reading, writing, speaking/listening, and language) and (2) history/social studies, science, and technical subjects (NGACBP & CCSSO, 2010ff)

The roles of educators and advocates of gifted education have been quite inconsequential in the development of CCSS. Gifted education advocacy groups are not key contributors to the CCSS. Materials to help general education teachers teach high ability students, another heterogeneous student group with exceptional traits (Renzulli, 1982), are absent from the CCSS special populations materials. The role of gifted education is to pay attention to the policies of general education and tease out its implications for gifted education (Swanson, 2007).

In response to the CCSS, NAGC has spotlighted unmet curricular needs for high ability students. According to the NAGC (2008d), the CCSS remain underdeveloped

> (1) while the Standards focus on what is most essential, they do not describe all that can or should be taught (para. 2); (2) the Standards do not define the nature of advanced work for students who meet the Standards prior to the end of high school (para. 2); and (3) the Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations. While gifted curriculum should align with these standards, they should not be limited by the CCSS (para. 2)

In particular, "With the new CCSS, it becomes critical for us to show how we are differentiating for gifted learners within a set of standards that are reasonably rigorous in each subject area" (NAGC, 2008b, para 1) by supporting "multiple pathways, more complex thinking opportunities, and real world problem solving" (NAGC, 2008b, para 2). When the goals of state standards and gifted education programs align, schools must ensure that the curriculum to follow allows students of high ability to go beyond what all students need to learn "in important ways" (Van Tassel-Baska, 2004, p. xxxi).

Déjà vu: Revisiting Excellence

The CCSS are not the first educational reform movement to focus on excellence. During the "antiestablishmentism of the 1960s and the 1970s" teachers routed "the majority of the students into courses with minimal academic requirements" to meet the "utilitarian needs of the increasing numbers of minority and disadvantaged students that they were serving" (Toch, 1991, p. 54). The National Commission on Excellence in Education created by Secretary of Education T. H. Bell examined the quality of education

in the United States and released a report, *A Nation at Risk: The Imperative for Educational Reform,* in 1983 that reestablished a need for a core curriculum described as the "New Basics" to cultivate "educational excellence" (Toch, 1991, p. 99). According to this report (National Commission on Excellence in Education, 1983), these new basics emphasized traditional academic subjects that included English, mathematics, history, science, and to a lesser degree computer science. The report advised that a school that cultivates educational excellence is one that sets "high expectations and goals for all learners, then tries in every way possible to help students reach them" (p. 8). Schools should create goals sequenced along a continuum, not presented as "minimum competencies" that tend to be misinterpreted as "maximum standards" that risk "lowering educational standards for all" (p. 13).

According to Toch (1991), *A Nation at Risk* triggered an onslaught of systemic, educational reform that put pressure on schools to prioritize academic courses. Some states raised the number of academic courses needed for admission into public universities. Advanced or honor courses sprung up that required a sequence of these academic courses. College scholarships were created that rewarded students for academic achievement over need.

Although a surge of academic courses resulted, the reform movement failed to achieve long term change. "Despite the reformers' successful push for new graduation requirements, they are receiving an academic education in name only" (Toch, 1991, p. 102). According to Toch (1991), academic courses across disciplines with their newly minted academic titles were still taught superficially at the most basic level of understanding. Teachers, who lacked depth of knowledge about the course subject, were

"misassigned" to these new classes. In part, this was the result of a general certificate program that qualified teachers to teach any subject regardless of their field of training and a common practice of senior teachers claiming an academic course from junior teachers who had more subject knowledge through a process called "bumping." Meanwhile, students already struggling with course content prior to the reform movement did not want to take more challenging courses for fear of lower grades and did not enroll in these higher sequenced courses. Although the educational reform movement of the 1980s, like the CCSS, emphasized excellence, it did so with an entirely different approach. The 1980s saw a push to emphasize excellence through the adoption of more rigorous academic course content. The CCSS try to create excellence though the development of more rigorous academic standards.

The Nature of Excellence

CCSS attempt to implement standards that will cultivate excellence for general education in a way that is, on face value, similar to the cultivation of excellence seen in gifted education (Coil, 2012). Excellence as taught in aesthetic education described by Maxine Greene (2001) is "the demand for common learnings, cultural literacy, and the like; the cry for excellence and higher standards of achievement; the emphasis on critical thinking in all classes, in all undertakings; the preoccupation with merit and mastery" (p. 134). An approach toward excellence in teaching helps students apply knowledge in an imaginative way that deepens understanding of ideas and the interconnections between them. Discovery, going beyond what is known, is essential to this imaginative process. Therefore, reproducing knowledge without seeing how knowledge reveals relationships is antithetical to excellence. According to John Dewey (2011), reproducing knowledge as an objective alone draws from a mechanistic, production based approach to learning.

> Intelligence is narrowed to the factors concerned with technical production and marketing of goods. No doubt, a very accurate and intense intelligence in these narrow lines can be developed, but failure to take into account the significant social factors means none the less an absence of mind, and a corresponding distortion of emotional life. (Dewey, 2011, p. 49)

Education in this form is "anesthetic" learning (Greene, 2001, p. 111).

Early tenets of gifted programs similarly defined excellence as creating knowledge, rather than reproducing known knowledge, with the goal of helping students face unfamiliar challenges (Robinson, Shore, & Enersen, 2007). This is achieved by targeting challenging and higher-order thinking skills (Robinson, 2012a; Robinson, Shore, & Enersen, 2007). Howard Gardner (2011) describes this type of learning as "education for understanding," which in its highest degree is the foundation of preeminent schools. Understanding is "a sufficient grasp of concepts, principles, or skills so that one can bring them to bear on new problems and situations, deciding in which ways one's present competences can suffice and in which ways one may require new skills or knowledge" (Gardner, 2011, p. 19).

Excellence presumes a teaching and assessment approach that can discriminate between educating and training, imagination and literalism, discovering and finding, perceiving and knowing, "consciousness of agency" and passive acceptance (Greene, 2001, p. 137) in order to develop higher-order skills. In the context of applying the CCSS, for instance, Ainsworth (2013) recommends that teachers comply with the most rigorous standards through a process called prioritizing. Because the number of state standards is so large, teachers will need to identify which standards are the most rigorous

or comprehensive and prioritize those, which will satisfy less rigorous and sometimes redundant subordinate strands. For English language arts, for instance, teachers will need to reduce the number of strands from one-third to one-half, while for mathematics, the number is one-third.

Excellence in the form of "rigor" is a complex interaction of teaching approaches, materials, and assessment strategies (American Diplomat Project, 2004). To meet English standards, for instance, students need to "analyze particular kinds of rigorous texts" (American Diplomat Project, 2004, p. 22). Therefore, the quality of the learning materials must be examined. To ensure that the "floor" does not become the ceiling, states with two graduation benchmarks may want to establish additional "cut scores" for assessment (American Diplomat Project , 2004, p. 13), one to delineate readiness for graduation using CCSS benchmarks, and others to identify students who have reached the level necessary to qualify for the higher graduation standard. For future consideration, states may want to identify multiple assessment benchmarks of student preparedness for particular professions or levels of college. This would entail identifying scores on assessment instruments that demonstrate that a student has attained the necessary skill level for what the student hopes to do. For example, a student hoping to attend a "top-tier" university would have to meet a much higher benchmark than one hoping to attend a junior college. These varying benchmarks would provide students with a realistic assessment of what their goals should be.

CHAPTER VII

CONCLUSION: BEWARE THE TROJAN HORSE

The Common Core State Standards represent a promise by general education that all students in the 42 states and four territories that have adopted the standards will be college and career ready through the acquisition of essential knowledge, skills, and abilities. These essential elements will be rigorous, supporting higher-order and independent thinking skills typically associated with educational systems that place a priority on the achievement of excellence. Unfortunately, the use of the elements in the CCSS is the result of misappropriation of words and concepts from the realm of gifted education, with the resulting transformation of their meanings. While the words promise excellence, the standards have equity, rather than excellence, as their goal.

The tension between equity and excellence has long dominated the relationship between gifted education and general education. Like the Greeks and the Trojans, these two communities have been at odds for many decades. This tension is ideological in nature and concerns the implied purpose of public education. General education focuses on developing a commonality among all students that tries to bring them to the same place. Gifted education focuses on the unique aspects of the individual students with high abilities to help them achieve things that only they can achieve.

This ideological tension draws upon a deeper divide between two basic political values that underpin all western democracies, equality (equity) and freedom (excellence).

Equity supports equal outcome, while excellence supports equal opportunity. The history of educational policy in the United States has had periods when either equity or excellence has predominated. When equity is prioritized the public schools emphasize helping at-risk students meet a common threshold of proficiency standards in schools. When excellence is prioritized, the public schools have emphasized helping high ability students develop their potential beyond proficiency standards. When one side is prioritized, the other side feels marginalized.

By promising to provide excellence to all, the CCSS appears to recognize and support the unique abilities of high ability students while maintaining a focus on equality. Within the gifted education community, standards of excellence function as a form of systematic programming that ensures high abilities will be cultivated. If the CCSS truly envisioned a system that would allow higher ability students to develop their talents to the utmost, then those standards would be consistent with the goals of gifted education.

However, this promise that the CCSS will bring excellence to all functions as a Trojan Horse that could lull the gifted education community into a false belief of ideological acceptance. While some in gifted education may see the CCSS as a victory trophy from general education finally declaring the prioritization of excellence, or at least recognizing its equal importance to equity, the standards are in fact the same prioritization for equity repackaged with "higher-order" wrapping. An ideological framework of closing the achievement gap, as backgrounded in the CCSS, again prioritizes at-risk students (equity) over high ability students (excellence). CCSS is just an extension of general education's historical commitment to equality through equity.

In CCSS, equality through equity takes the form of giving students with disabilities and English language learners recognition as groups that need differential support and assessment through clearly articulated strategies, while not giving high ability students the same regard beyond expressed opportunities for math compacting starting in the 7th grade with no discussion of teacher training and open discouragement of acceleration. Incentives to show above grade level and individualized achievement are removed through a common core pathway that standardizes learning so that all students achieve grade proficiency. This extreme equalitarianism that ignores differences in potential and achievement by eliminating incentives for individual performance directly thwarts gifted education's aim to develop student expertise beyond grade level or proficiency performance through recognition and reward of high individual performance using differentiated approaches. To summarize, the CCSS scripts a pathway for closing the achievement gap that brings at-risk students up to proficiency standards through differential support, while bringing the performance of high ability down to proficiency standards through what has been called "benign neglect" so that student equality can be achieved. The CCSS delivers "excellence" to all solely by defining excellence to mean something easily achieved.

The CCSS authors have been able to achieve this pretense for excellence by infusing the standards with words and phrases popular in gifted education giving the CCSS the guise of excellence, while cloaking the primacy of equity. Terminology include "higher-order", "rigor", "creativity", "acceleration", "compacting", and "individualism." These terms are applied superficially to the standards by taking their names, but not taking the meanings painstakingly developed by the gifted education

community. Higher-order does not mean creativity, but terminal achievement at the end of each grade level standard. Rigor does not mean challenge for high ability students, but challenge for typical students for whom the standards are normed. Creativity is synthesizing content to achieve understanding, not synthesizing content to deliver a new and useful idea. Acceleration is not skipping content that one has already mastered, but learning all concepts at a faster pace. Compacting does not mean reduced time in the K-12 system, but the same time in the K-12 system with additional activities. Individualism is not recognizing differences among all students, but recognizing differences among some students.

Changing the meanings that underlie the words has the power of changing the meaning and understanding of the related concepts and the associated behaviors. According to critical discourse analysis, the selection and use of words has the power to affect the way one thinks of concepts and subsequently how one relates to them. Words can be tools to change or legitimize concepts. Those who control word meanings have the power to shape understanding of concepts and subsequent behaviors toward them.

By changing the meaning of acceleration, compacting, creativity, and high ability through the CCSS, general education has now claimed these concepts for their own interpretation and use. If every student can become high ability by completing end of the year standards, then that term will no longer describe exceptionality relative to others. High ability will no longer convey "specialness," because "all students" will have the opportunity to be special, and, therefore, "equal." The term "high ability" will become a nominal term, changed from an ordinal one.

Meanwhile, when some general education teachers apply their appropriated understanding of higher-order concepts, high ability students will not receive the quality of instruction as these concepts originally intended, and therein lays the harm. The CCSS function as a Trojan Horse not only because they are misleading, but because they cause harm to high ability students and the gifted education community through equity standards that encroach upon them. High ability students will not be able to receive acceleration in the early grades. They will not be able to skip content and perhaps graduate early. They will not be able to experience what Renzulli calls "real creativity." Without this external support, all high abilities fade. Because talent development is both an intrinsic and extrinsic process, differential support is necessary to develop or to sustain talent. Even the most robust plant needs sunlight, soil, and water. A change in words has the power to initiate a sequence of the actions that can undermine growth of high ability students.

New Language

Defining Talented

Gifted education could certainly help to protect itself by settling on a single definition of high ability. This would allow gifted education to definitively claim a meaning and cultivation approach. A push toward consensus could be better achieved by conveying a foundational definition that is more essential and less special; that draws upon core and relatable features of talent. This change in language could also garner the support of a broader public audience.

Talent, to me, should be conveyed as the ability to endear caring from others for the work one has done. Talent evokes an experience in the audience that feels inspiring and meaningful. Caring best describes that experience because when people care for

something, they are motivated to invest psychologically or behaviorally into that something, because they find that something meaningful. Caring is both an intellectual and an emotional experience. When we experience a talented performance, we say to ourselves, "Of course." The performance or product is so important that it fulfills an essential need like a puzzle piece that has been missing. And, like a missing puzzle piece, we cannot think of future experiences without it. This is an intellectual response. An emotional response is different. When we respond to a talented performance emotionally, we say to ourselves, "I want more." A talented performance or product elicits a sense of longing. Talent, at its core, is the ability to produce work that evokes deep and primitive reactions of caring from others.

Describing Talented People

An essential and relatable definition should be coupled with an essential and relatable description of talented people. What motivates talented people is either a desire to understand or a desire to discover. This is akin to Renzulli's conceptualization of talented individuals as either performers or producers. Individuals who seek to understand deeply covet knowledge that is known in pursuit of making their understanding complete. Individuals who seek to discover covet knowledge that is unknown in pursuit of understanding alternatives. Both types of individuals are not satisfied with the prima facie of knowledge, which motivates them to search for either deeper or broader meaning, what has been called risk. Risk is an uncommon action. Risking is a rational act predicated upon an intuitive belief that there is something more. Risking draws from a faith like resource, trusting there is something more even though our sensory abilities do not perceive what is true or what is possible. Talent development draws upon a highly transcendent need.

It is easy to misunderstand talents, because talents are also optical illusions. Talented individuals produce performances that seem effortless. This effortlessness appears innately driven through a delivery of seamlessness and almost unconscious action similar in appearance to Csikszentmihalyi's concept of "flow." However, what appears primarily innate is actually built upon many hours of practice and attention to detail. A dancer spends countless hours controlling and directing his movements. A writer spends hours organizing her ideas to convey a coherent point, resisting temptation to yield to a tangential idea or use a convenient, but imprecise word. The attention to detail through persistent thought and behavior creates work so seamless that the audience sees a perfect image. This is an illusion. Dispelling the myths of gifts and talents is challenging, because people seem to love illusions. People want to hear about heroes who transcend unreasonable physical boundaries.

Conveying the Importance of Talent Development

Among the many unremitting challenges facing gifted education, the most ominous challenge is overcoming the common perception that talent development is irrelevant. Why should anyone care about high ability students and talent development? The gifted education community must answer this question convincingly. Of course, gifted education has already tried in many ways. Tannenbaum suggests society needs talented individuals to fulfill roles that are in short supply or require specialized knowledge. Renzulli talks about how society needs talented individuals to fulfill leadership roles to solve intractable problems. While these points are true, the lack of consistent support for high ability students suggests these explanations are still not satisfying.

By using language that is more relatable, the gifted education community may be able to better persuade others of its relevance, especially the general public. To me, talent development is important because it cultivates talent that helps people see what is possible and what is true. Talent is a type of light that shines the way for personal growth and social progress. Some aspects of talent function like participles of light that can be counted, while some aspects function like waves of light that can only be described. Talent is dual natured with both quantitative and qualitative features. While articulating what constitutes talent is hard, identifying talent is easier because of the immediacy in which we can see objects through what it reflects. Talent as light is seen indirectly through reflected objects. This is why we can see talent through multiple forms. Talent is just as essential to personal growth and social progress as light is for biological growth. Talent development, therefore, should be seen as an essential feature of public school education.

Students who have an unrelenting need to seek the unknown or what is true have talent potential. They are like travelers who seek destination of the greatest distance. Gifted education would give students 12 years to get to these destinations equipping them with internal and external resources. Those students who seek the furthest destinations need to start moving quickly. This acceleration, however, is not for all students who are comfortable and content travelling shorter distance within known parameters. A best destination is one that is satisfying to the individual student. Every destination has something interesting to see. Talent development is important because it values the internal maps that students brings to their educational journey and strives to ensure that students get to their self-selected destinations.

New Direction: From Accommodation to Resistance

The appropriation of higher-order concepts has important implications for the gifted education community. First, the gifted education community needs to understand it is at cross purposes with general education. While both communities use the same vocabulary to describe higher-order approaches, these words do not have the same meaning and set of associated behaviors. While general educators may believe high ability students experience rigor, creativity and acceleration, those words have different meanings than when used by the gifted education community. This lack of shared meanings results in false hope. What may be perceived as an act of inclusion is really an act of hegemony controlling educational priorities, resources, and behaviors.

Second, the gifted education community needs to think about its role in public education. The community needs to revisit the question posed by Joseph Renzulli three decades ago asking what is fundamental to gifted education. While NAGC advises gifted education professionals to play the role of translator and broker of resources to assist with differentiated instruction of the CCSS, the CCSS is not written to support differentiated instruction and assessment for high ability students. Advisement of this kind to assist high ability students, in particular, is futile and unwanted. Should the gifted education community seek to make its role more viable by advocating for higher-order thinking processes in general for "all students?" While this role as process expert for all students sounds appealing, the CCSS suggest that "all students" will not be an inclusive approach, but a targeted approach to assist the typical and at-risk student by changing higher-order strategies to only serve these students. High ability students again will not be served unless gifted education experts are listened to and used as expert teachers on how to implement the CCSS for high ability students. General education has no intention of

creating a representative or shared governance with the gifted education community in the further design and implementation of CCSS educational approaches. In fact, general education's persistent desire to close the achievement gap presents a real threat to gifted education's viability and risk for being perceived as "obsolete" by the general education community as described by Renzulli.

Third, to support a truly inclusive approach of "all students" requires a rejection of the grade based structure of general education. Regardless of the "high-end" language that is infused into the CCSS, these standards are still structured by grades. In fact, the CCSS authors place great emphasis on meeting grade based "proficiency" standards. "High" quality language on a grade based structure is still ornamental and not essential. To make high quality essential, the structure of public education needs to change to prioritize competency or achievement. While it is not the intent of this analysis to discuss the detail of a competency/achievement based approach, the gifted education community needs to evaluate its role as enablers by being complicit with the general education grade based model. As stated by Tuzzeo (2012), standards should not lead to standardization and common should not mean common outcomes.

The CCSS mislead not because they promise to provide excellence, but because they promise to be inclusive of all students. As expressed by Tanner and Tanner (2007), "a curriculum reform effort is destined for failure if the design and function of the curriculum violates the nature of the learner and violates the democratic prospect" (p. 124). A successful reform movement must serve all students, including those with high abilities. These standards may be fully capable of bringing rigor into the classroom for the typical student and remedy the anti-intellectual climate Hofstadter described that

followed the vocational movement set by Prosser. A commitment to "college and career readiness" may enrich general education through intellectually, rigorous assignments. Examining the integrity of the CCSS for typical students was not the purpose of this analysis. However, by changing the higher-order concepts to support typical students and to protect at-risk students, excellence is not provided to high ability students. Excellence for high ability students would ensure higher-order approaches, as originally articulated by Stanley, Renzulli, Reis, and others, would be delivered in the form in which they were intended through consistent dialogue and collaboration with experts in the gifted education community.

By again marginalizing high ability students, the CCSS is just a modern iteration of the basic ideological conflict between excellence and equity. However, what makes this equity reform movement more threatening to gifted education than prior reform movements is the act of taking and transforming gifted education terminology and concepts. This cultural appropriation renders the gifted education community more vulnerable than ever before. Gifted education needs to resist temptations to accommodate the assimilating structure of the CCSS and heed the advice that would have saved the Trojans: don't let down your guard because you think you have "won." Gifted programs that exist still must be protected. Where programs do not exist, keep up the good fight to put them in place. The battle is not over. The other side is ever closer to taking your weapons (the words) and turning them against you. The fight will now require even more diligence than before because it will be even harder to make the position of gifted education understood.

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