MEANINGFUL ACCESS TO THE COMMON CORE FOR HIGH SCHOOL STUDENTS WITH SIGNIFICANT COGNITIVE DISABILITIES

by

Arlene Hackl Platten

A Dissertation Presented to the
FACULTY OF THE USC ROSSIER SCHOOL OF EDUCATION
UNIVERSITY OF SOUTHERN CALIFORNIA
In Partial Fulfillment of the
Requirements for the Degree
DOCTOR OF EDUCATION

December 2014

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Acknowledgements

Writing a dissertation requires the support of many people with key insights into the content and processes entailed and with deeply personal connections to the subject matter. I am indebted to such individuals for helping to make my study possible. I would like to thank the teachers of the moderate-to severe population for their time, effort, and interest in contributing their commentaries and suggestions to improve instructional practices and content for these very deserving students. I would like to thank Drs. Kaplan, Gallagher, and Carbone for their constructive feedback on each stage of my project. I am grateful to Dr. Sylvia Rousseau for instilling in me a deep concern regarding underserved diversity groups, and to Marlene Pugach for providing a solid foundation in qualitative inquiry processes and pedagogy relative to the target population. I also greatly appreciate the support of personal mentors Carl Pentis and Mary Grace Carpenter, who motivated me to pursue this degree; and of fellow doctoral students, Thomas Weinmann and Yulonn Harris, who strengthened my resolve to push forward and "fight on" when the challenges seemed insurmountable.

Most especially I would like to acknowledge the contributions of my family. My son Joseph provided the foundational inspiration for the entire project; his willingness to accompany me and lead me in our curriculum-building adventure added high interest, deep purpose, and boundless joy to my work. My husband Jeff and daughter Andrea provided great encouragement and technical assistance; their patience and their understanding were endless and invaluable. Finally, I wish to acknowledge my late parents Bruno and Josephine Hackl, whose steadfast commitment to all their undertakings lovingly exemplified the value of hard work and perseverance towards the highest outcomes.

Table of Contents

List of Tables

Abstract

This qualitative dissertation explored how high school students with significant cognitive disabilities in the moderate to severe category may receive an appropriate, standards-based education according to federal and state legislation given that they require fundamental living skills as well. It examined the ways their academic and functional learning requirements may be fulfilled through the development and implementation of a comprehensive curriculum consisting of adapted Common Core State Standards, life skills, and community-based instruction. It discussed the concept that students with cognitive disabilities require learning opportunities across a variety of settings, consistent with ecological development theory.

The study posed two key questions: How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills oriented, community-based curriculum? How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science? A research-based thematic curriculum was generated and field-tested on 7 educators of high school and middle school students with moderate to severe disabilities to obtain their perceptions of its feasibility and utility. The educators completed an initial background survey and then examined a voice-over PowerPoint curriculum sample using a curriculum evaluation form to guide their review. Educators were subsequently interviewed to determine their perceptions and check for alignment with previous responses.

Participants generally believed that students with significant cognitive disabilities could meaningfully access adapted versions of the Common Core based on students' level of ability and the provision of necessary supports. Key implications were derived from the findings. Teachers may need to engage in additional training and collaboration to generate customized

curricula or modify existing programs to bring about student success. Special education teachers require the support of general education colleagues and local administration to enable the development or implementation of a comprehensively appropriate curriculum for the target population. More research is necessary to determine other ways the Common Core can be adapted for a greater range of ability levels to ensure success for all.

CHAPTER ONE: OVERVIEW OF THE STUDY

Learning disability is increasingly viewed as part of the spectrum of dimensions linked to the overarching theme of diversity. It is relevant to the larger diversity agenda in that it raises the issue of equal access for students with disabilities along with marginalized groups within race, ethnicity, and gender categories. Particular attention and effort are required to ensure that students with learning disabilities, particularly significant cognitive disabilities, obtain equal access to and opportunity within quality educational programs (Connor & Baglieri, 2009; Pliner & Johnson, 2010). With the advent of Common Core State Standards (CCSS) and the legal entitlement of special needs learners to attain them, it is all the more critical for researchers to examine ways these students may access academic learning opportunities in a meaningful way (Thurlow, 2010).

Background of the Problem

Federal legislation mandates that all students, including those with disabilities, be enabled to access and progress in the general curriculum. To increase academic performance levels of students with special needs, significant legal mandates--such as the Individuals with Disabilities Act (IDEA) and No Child Left Behind (NCLB)-- have been passed by the US Department of Education (Cushing, Clark, Carter, & Kennedy, 2005). Because NCLB pertains to all students in terms of annual yearly progress expectations and interim language arts and math assessments, it ensures that educators are also held accountable for the academic performance of special needs learners. The intent of both mandates is to generate learning programs that derive their content and outcomes from the general curriculum to the fullest extent possible (Agran, Alper, & Wehmeyer, 2002; Cushing et al., 2005).

With the adoption of Common Core State Standards (CCSS), access to the general curriculum has a critical role in helping students with disabilities gain the knowledge and skills specified by these standards (Nolet & McLaughlin, 2005). Although they may be far removed from attaining the college and career-ready competencies addressed in the state standards, students with significant cognitive disabilities (SSCDs) now have more post-secondary learning and employment opportunities than ever according to their education and ability levels (Bowman & Weisenkauf, 1998; Hart & Grigal, 2010; Pampay & Bambara, 2011, as cited in Kearns, Kleinert, Harrison, Sheppard-Jones, Hall, & Jones, 2011). Further, those students placed in least restrictive learning environments that allow for maximum association with typical peers are found to have higher employment success upon their transition from school to work, regardless of cognitive development level (White & Weiner, 2004). There is empirical and theoretical support for access to general education contexts and curriculum as opposed to other school programs or settings for this population (Jackson et al., 2008). The extent to which the students of this population gain access and are facilitated to progress toward the general curriculum may greatly affect their post-transitional lives.

Fundamental to the conception and implementation of instructional programs aligned with the CCSS is the belief that such effort has merit in the case of special needs learners, particularly as regards SSCDs (Wehmeyer, Lattin, & Agran, 2001). Teachers are charged with developing and modifying the instructional content to produce meaningful outcomes, and educational agencies are accountable for making sure that students of all ability levels receive an education that challenges and interests them according to the highest reasonable expectations (Wehmeyer, et al., 2001). However, if teachers maintain an ableist viewpoint, predicated on the idea that students with disabilities are largely unable to learn, they may develop low expectations

for persons with disability and contribute to their marginalization in schools and in the work place (Connor & Baglieri, 2009; Herir, 2002). This viewpoint may also result in low teacher motivation and disinclination to actively pursue an appropriate curriculum (Rueda, 2011).

In the interest of progress for all students, including those with significant cognitive disabilities, there are essential criteria for an appropriate curriculum. According to the California Department of Education (2013), a proposed course of study must evidence alignment with state standards and principles of Universal Design for Learning (UDL). These principles comprise sufficiently adapted materials and flexible content delivery formats including the use of technology tools, clear guidelines for implementation, and a logical, coherent organization.

Accounting for the learning needs of students with disabilities, special education experts layer in additional criteria concerning the need for embedded life skills and personal relevance. This means that standards referenced in the curriculum must be judiciously selected for their application to the interests and functional needs of the learners in terms of enhancing their quality of life (Ayres, Lowrey, Douglas, & Sievers, 2011; Dymond, Renzaglia, Gilson, & Slagor, 2007). Further, the attainment goals must be linked with fidelity to grade level content standards, though they may differ due to the diverse learning needs of this population (Browder, Wakeman, Flowers, Rickelman, Pugalee, & Karvonen, 2007).

In recognition of the right of all students to attain standards created to enhance the activity of life, federal policy has increased its assessment requirements for SSCDs in ELA, mathematics, and science (Ravitch, 2010, as cited in Browder, Spooner, Wakeman, Trela, & Baker, 2006). West and Whitby (2008) state that even students with severe cognitive disability, deemed as the 1% of the population for whom wide scale assessments are inaccessible, are required to take alternative assessments linked to the aforementioned state content standards (as

cited in Ryndak, Moore, & Orlando, 2008). Though instructional programs serving this population have typically emphasized functional life skills over academic learning to enhance personal independence and the quality of life, the 1% population will not progress in the assessed academic content areas absent a thoughtfully planned general education program (Browder et al., 2006; Cortiella & Wickham, 2008; Dymond et al., 2007). It is highly questionable whether these students are currently making gains in general education according to their unique learning needs and capacities (Kearns et al., 2011).

Statement of the Problem

Ensuring that all learners make gains toward the general curriculum in accordance with recently adopted Common Core State Standards presents a great challenge in terms of students with significant cognitive disabilities. While many special needs learners require individualized accommodations to gain academic knowledge—such as allowances for multiple means of presentation and response, and different instructional supports (Bolt & Roach, 2009; Hitchcock, Meyer, Rose, & Jackson, 2002; Pugach, 2005)—it is not currently understood how the CCSS can effectively be developed for students with disabilities to ensure their productive access or academic success (Ravitch & Mathis, 2010; Thurlow, 2010). To add to the challenge, there is no common mindset among special educators and educational researchers on how to satisfy general curriculum mandates concurrent with facilitation of life skills development (Agran et al., 2002, citing McDonnell, Thorson, & McQuivey, 2000; Dymond et al., 2007; Ryndak et al., 2008). These concerns have yet to be adequately researched.

Assessment requirements and federal mandates aside, there remains a question as to whether the CCSS-based general curriculum is actually warranted for or applicable to the target population. Research indicates teachers often perceive that these students are not suited to the

content or contexts of general education (Ryndak, 2008 citing Newman, 2004; Schumaker, 2004; Wagner, Newman, Cameto, Levine, & Marder, 2007) and, therefore, cannot derive value from the general curriculum or its typical settings. However, this perception is inconsistent with the premise that educational experiences should be made relevant to the needs and interests of the student, not that the student must be "made" to fit the curriculum (Dewey, 1902; Schiro, 2013; Tyler, 1949). It is also inconsistent with research on outcomes derived from educational supports and services for students with significant special needs (Browder, Trela, Courtade, Jimenez, Knight, & Flowers, 2010; Federal Register, 2004; Jackson, Ryndak, & Wehmeyer, 2008; Ryndak et al., 2008). For example, Browder et al. (2010) found evidence that this population can acquire academic skills linked to secondary content with the proper supports and adaptations. Wehmeyer et al. (2001) contend that the practices of adaptation, augmentation of strategies, and curriculum alteration favoring principles of UDL could make a positive difference in the learning outcomes for the SSCD population. In addition, the US Federal Register unequivocally points to nearly 30 years' worth of research and experience indicating that more effective education for students with disabilities should be provided through high expectations and the provision of access to the general curriculum in the mainstream classroom to the fullest degree appropriate (2004). This finding strongly suggests the research-based belief on the part of the federal government that students with significant disabilities deserve better educational services than they have traditionally received.

Though studies show that students with severe cognitive disabilities typically perform better in the general curriculum alongside typical peers, it is often difficult to arrange for the necessary conditions to ensure student success (Hitchcock et al., 2002; Wehmeyer, Lattin, Lapp-Rinckner, & Agran, 2003). Such conditions include collaboration between general and special

education teachers (Cawley, Hayden, Cade, & Baker-Kroczynski, 2002); a sufficiently adapted, standards-based curriculum with age/grade-appropriate content for students with disabilities (Lee, Wehmeyer, Soukup, & Palmer, 2010), flexibly formatted materials, methods and informal assessments aligned with suitably challenging goals according to the principles of universal design for learning (Hitchcock et al., 2002) and strong teacher beliefs that such efforts are worthwhile (Lee, Amos, Gradoudas, et al., 2006). When these conditions are unmet—specifically at the high school level—academic learning experiences may cease altogether and be replaced by a life-skills approach consisting predominantly of self-help learning and community-based job skills (Wehmeyer et al., 2003). According to the U.S. Department of Education (2003), high school students with significant cognitive disabilities spend considerably less time in general education classrooms than their elementary and middle school counterparts, causing their participation in the standards-based curriculum to become increasingly restricted (as cited in Carter & Hughes, 2006). All of these obstacles make the attainment of rigorous Common Core standards all the more unlikely.

A life skills program featuring community-based instruction (CBI) may have its advantages to a degree. Linked to Social Efficiency ideology favoring pragmatic, utilitarian outcomes (Schiro, 2013), it may result in independent function and eventual work benefits for post-secondary SSCDs. But it is not, in itself, a curriculum (Dymond et al., 2007). If not contextualized within general education learning experiences, it may deprive students with significant cognitive disabilities their legal and human right to a broad-based education aligned with CCSS competencies meant to ensure greater life opportunities. However, life skills can be embedded in the general curriculum across a variety of settings (Browder et al., 2006; Jackson et al., 2008) to ensure that students are progressing in the general curriculum concurrent to their

pursuit of self-determining, life-long competencies. Recognition that the community is a resource for meaningful instruction comprising life skills and general curriculum objectives may be a critical step in the development of a comprehensive curriculum benefiting the target population (Beck, Broers, Hogue, Shipstead, & Knowlton, 1994). According to the research, this step necessitates consistent collaboration between special and general educators (Beck et al., 1994; Cawley et al., 2002).

From the research cited above, it may be concluded that students with significant cognitive disabilities have a right to a standards-based academic education that also encompasses functional knowledge and skills contextualized in CBI. Because of general uncertainty regarding effective programs and implementation processes, as well as some uncertainty as to whether such programs are warranted, these learners may continue being deprived of a quality education as mandated by law.

Purpose of the Study

Though many studies reference the need for SSCDs to access and progress in the general curriculum to reap essential benefits, few address the curriculum components and structure that would enhance the outcomes for this population. Some studies focus on a particular subject area, such as ELA, mathematics, or science, and mention ways these may be integrated (Browder et al., 2010). But there is a definite need for more studies focused on ways to incorporate self-help and transition skills within general education (Agran et al., 2002; McDonnell, Thorson, & McQuivey, 2000, as cited in Agran et al., 2002). Specifically, more research is needed on how high school students with significant cognitive disabilities can access the general curriculum to successfully facilitate their post-secondary transition to adulthood (Browder et al., 2007; Dymond et al., 2007). What is needed most is, in the words of Agran et al. (2002), an approach

"involving not two curriculums, but one sufficiently broad to address the needs of all students" (p. 132).

Taking into consideration the legal mandates of general curriculum access and functional needs of students with cognitive disabilities in the moderate to severe (M/S) category, the purpose of this study was twofold: to determine a curriculum that emphasized the relationship between Common Core standards and the personal needs and interests of high school students with significant cognitive disabilities, and to analyze teacher perceptions of the utility of this type of curriculum design. The content area of emphasis was life science based on the local ecology of the shoreline ecosystem. Incorporated in the curriculum were functional and standards-aligned reading, writing, and mathematics lesson objectives tied to life science concepts in a thematic approach. Though this curriculum was designed specifically for high school SSCDs residing within a particular south bay community and was not fully generalizable to students in different geographical locations, it was nonetheless intended to exemplify how the standards-based general curriculum could be modified and adapted to serve the high school SSCD population based on the local ecology of its prospective users.

Though SSCD students represent many types of disabilities, at varying levels of verbal and quantitative skills, the population specifically addressed in this curriculum study consisted of students ranging in ability from concrete symbolic to abstract symbolic (Beukelman & Mirenda, 2005; Browder et al., 2006). Specifically, the students of this population may have more receptive than expressive language and rely on symbols and sight words to read and demonstrate understanding of concepts. Achievement expectations may differ depending on the student's vocabulary and corresponding ability to understand and process symbols (Browder et al., 2007).

Research Questions

To address the combined need for general curriculum access and life skills development in a way that contributes to its fulfillment, it was important to consider the following research questions:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills oriented, community-based curriculum?
- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Theoretical Framework

A life science curriculum oriented to the student's local ecology was proposed for two important reasons clarified here in terms of the learning theories to which they correspond. Primarily, such a curriculum is meant to guide the teacher to begin where the students are (Tyler, 1949) in terms of the environment, capabilities and needs of the special student population to which it is geared. The curriculum content must be concrete, familiar, sequential, and grounded in Learner-Centered ideology (Schiro, 2013). It should be based on the actual living experiences of students, gradually preparing them to take on more socially productive tasks and responsibilities in the general setting—defined here as all the contexts where learning, living, and working may occur within a community.

When the aforementioned criteria are in place, the curriculum is aligned with the progressivist philosophy championed by Dewey (1938) and Kilpatrick (1941). It is personalized and engaging. It considers the whole child, addressing the health and well-being of the individual, and ensuring the best things in life or "the larger elements of happiness [more so]

than any other things whatsoever" (Wiggins, 2011, citing Spencer, 1861, p. 13). Such motivational elements are essential to helping students formulate their knowledge, interests, routinized tasks, and capacities whereby they will find their way in life and contribute meaningfully to their society (Tyler, 1949; Wiggins, 2011). For high school students nearing the end of their formal secondary education, said capacities are critical to future success.

Secondly, though the curriculum may be structured to provide a firm knowledge base, it should emphasize active participation in the aforementioned contexts over knowledge acquisition. Per Barab and Roth (2006, p. 3), whose research purports to "advance an ecological theory of knowing," the act of knowing is indeed an activity, contextualized and constructed in the individual-environment interaction. Therefore, the curriculum content must not be a collection of disjointed facts or concepts, but, rather, a thematic series of interactive learning experiences deliberately connected to the situations and persons that give them meaning (Barab and Roth, 2006; Bronfenbrenner, 1979; Tyler, 1949). It should thus allow learning to take place through dynamic, interrelated, and interdependent processes (Taba, 1962; Tyler, 1949). This may preclude the problem of cognitive overload and ensure connectivity and transfer of knowledge to long-term memory (Rueda, 2011).

In the sense that CBI-related learning experiences help frame the curriculum, said curriculum may also be viewed through the lens of ecological development theory (Barab & Roth, 2006). Ecological theory emphasizes learning through participation within one's own environmental network (Barab & Roth, 2006; Jackson et al., 2008), and is thus an extension of sociocultural theory (Rueda, 2011). The latter, focusing on the cultural and social underpinnings of learning, emphasizes the role of context in terms of the family background, the school, the community, the self, and one's peers in the social environment (Au, 2003). The study of the local

ecosystem, a key part of the California high school Content Standards (California Department of Education [CDE], 2010) may allow the cultural and social development of students when contextualized within a curriculum that provides meaningful access to collaborative learning experiences across a variety of local settings.

The ecosystem topic is more readily teachable in its tangible, observable forms than abstract concepts; for this reason, it is an appropriate subject for students with disabilities who require hands-on experiences based on concrete phenomena in natural settings (Mastropieri & Scruggs, 1992). The topic is arguably even more appropriate when related learning experiences are thematically linked to ensure understanding (Tyler, 1949). To the extent that the curriculum in its activities and experiences is linked to a universal theme—in this case, systems—it encompasses ecological theory in that the parts and players of the learning environment may interact to make learning possible.

Importance of the Study

This study attempted to demonstrate that the academic and functional needs of students with significant cognitive disabilities could be interwoven with community-based instruction to address Common Core State Standards in a meaningful way, as contextualized in learning experiences and across settings relevant to the target population. It focused on how to incorporate all educational requirements into one curriculum sufficiently broad-based to attend to the needs of all learners (Agran et al., 2002). Because the above-referenced literature calls for such a curriculum to ensure that SSCDs make progress according to their capabilities and their future career goals, it was necessary to develop a broad-based curricular program and determine teacher perceptions of its feasibility and utility. The information obtained from data collection and analysis may serve to inform special education teachers regarding how similar Common

Core-based programs of study can be customized for their particular students. It may also serve to inform researchers currently investigating this topic about additional possibilities for standards-based curriculum development and functional learning opportunities relative to these students. This study's contribution to the field of special education research may be significant given the historic dearth of emphasis on curriculum development featuring the interconnectivity of CCSS, life skills, and local community-based instruction (Agran et al., 2002). In the proposed curriculum, the focus on state science standards as foundational to thematic units of instruction incorporating the above learning criteria adds another dimension to the study that may increase its value when added to the research base.

Limitations and Delimitations

This study targeting curriculum development and implementation for high school students with cognitive disabilities in the moderate to severe (M/S) category had several limitations. The proposed model was generated for students capable of oral/receptive language who function at the abstract or concrete symbolic reading level (Browder et al., 2007). Therefore, it may not have had application to students with M/S disabilities who perform at higher or lower levels. Teachers who reviewed the curriculum sample did not have access to the entire curriculum, which may have made it difficult for them to ascertain key elements and provide a comprehensive evaluation. While the model included specific learning activities and lesson objectives tied to CCSS and life skills, with suggestions for potential modifications, it did not include detailed lesson plans because of the anticipated diversity of the student body. Further, the model was not tested on the students themselves, which arguably would have provided valuable data on its strengths and weaknesses.

The study also had its delimitations in terms of generalizability or external validity. The community-based instructional components centered on the Los Angeles South Bay area may not have had been fully generalizable to the local communities of all educators participating in the study. Under these circumstances, some teachers may have felt the curriculum required too much adaptation to be used effectively. Not all teachers have the same level of experience in terms of curriculum design and implementation as evident from the teacher responses in this study; therefore, they could not be expected to have the same perceptions as to the program's utility and feasibility.

Definition of Terms

To facilitate understanding of key terms utilized on a frequent basis in this study, it is necessary to provide an operational definition for each. They are presented below in alphabetical order, and sources from which they are used in the same context are also included:

- Common Core State Standards (CCSS), as discussed in Kearns, Kleinert, and Harrison et al. (2011) are the recently developed nationwide academic content standards in English language arts (ELA) and mathematics for grades K-12.
- Community-based instruction (CBI), as reported in Beck et al. (1994), is the concept of functional skills taught in those local community settings where students are likely to participate.
- Ecological development theory, as discussed by Bronfenbrenner (1979), is a concept in which human development is paired with ecological versus behavioral or biological factors; children's behavior develops to match that of others within their local social and cultural contexts (Bronfenbrenner, 1979, as cited in Jackson et al, 2008).

- General education (GE) as discussed by Cawley et al. (2002) refers to the regular, standards-based curriculum used in teaching the typical student population.
- Moderate to severe (M/S) disabilities as presented in Jackson, Ryndak, and Billingsley (2000) refers to students with significant cognitive disabilities who require specialized supports and instructional experts in order to acquire academic and functional skills
- Special education (SE) as discussed by Cawley at al. (2002) refers to education programs with special modifications and provisions to benefit students with special learning needs
- Students with significant cognitive disabilities (SSCDs) as discussed in Dymond et al. (2007) are those learners in the moderate to severe category as defined above.
- Universal design for learning (UDL), as presented in Hitchcock et al. (2002), refers to curriculum featuring rigorous goals for all students, materials with flexible formats and multiple representations of content, methods providing suitable learning opportunities and supports for all students, and assessment that provides critical information on student progress at regular intervals to enable instructional adjustments.

Organization of the Study

This study was organized in five chapters, each addressing a critical aspect of curriculum focusing on CCSS for students with significant cognitive disabilities. In this chapter, the problem was posed as to how students with significant cognitive disabilities could access Common Core State Standards according to their legal entitlement and within the context of life skills-oriented community-based instruction. In Chapter Two, a review of literature was presented to examine the concept of access to the general curriculum for students with disabilities, and to determine appropriate programs of study for them based on their entitlement to the Standards and to instruction concerning their functional needs. Chapter Three discussed

the study methodology. A life science curriculum centered on students' local ecology and a life skills approach to Common Core State Standards was developed for high school SSCDs and submitted, in part, to particular teachers of this population for evaluative review. Teachers were selected based on their teaching experience with this population at the middle school and high school levels and on their interest in curriculum design and development. Respondents were surveyed for their knowledge and beliefs about curriculum for these students. They reviewed a representative portion of the curriculum and recorded their initial impressions of the curriculum's utility on an evaluation guide with multiple choice and 1-4 Likert scale survey questions. Following the evaluative review and the collection of survey documents, teachers were interviewed on their perceptions regarding the utility of the proposed curriculum in their current or future implementation of CCSS for this population. Because the evaluation process drew on teacher impressions of the program's overall feasibility (Satchwell & Loepp, 2002; Weston, 2004) this study may be considered as an initial field test of a life skills-oriented, community-based curriculum focused on life science and incorporating essential Common Core State Standards for English Language Arts (ELA) and mathematics. In Chapter Four, the results of the study were reported by categorizing data according to emerging themes. Finally, Chapter Five discussed the findings and their implications for current practice and future research.

CHAPTER TWO: LITERATURE REVIEW

According to federal mandates, all students from grades K-12 have the right to a quality education that promotes their advancement in a standards-based general curriculum. This entitlement also applies to students with significant cognitive disabilities (Cushing, Clark, Carter, & Kennedy, 2005). With the advent of the recently adopted Common Core State Standards, an initiative specifically addressing students with disabilities of all levels clarifies that these students deserve to meaningfully access the Standards along with their typical peers (CCSS Initiative, 2010).

Though students with significant cognitive disabilities (SSCDs) may now take part in special education programs under prescribed mandates, it is not a given that they are successfully accessing and progressing in the general curriculum as stipulated by law (Hitchcock et al., 2002; Wehmeyer, et al., 2003). In fact, the notion that they have basic access to that curriculum may be inaccurate (Soukup, Wehmeyer, Bashinski, & Bovaird, 2007). These students have historically been taught functional life skills outside the general education teaching and learning framework, and their learning experiences have been grounded in community-based instruction (CBI) to address post-secondary transition skills—deemed as essential to employability—that cannot be taught within the general education classroom (Dymond & Russel, 2004; Ayres et al., 2011). Reflecting this reality, current research shows that students with intensive support requirements for academic learning are less likely to be included in the general setting, and are not as likely to be engaged in learning experiences associated with the general curriculum as their less disabled peers (Wehmeyer et al., 2001). Yet, research also indicates that post-secondary employment success rates are higher for those SSCDs who were provided general education learning experiences within the least restrictive environment (LRE), including

consistent integration with their typical peers. Therefore, though the community-based life skills approach is intended to enhance the post-secondary employability of students with disabilities, its limitations can adversely affect employment outcomes, found to be lower in the case of SSCDs who have been placed in restrictive settings throughout their school years as compared with their integrated counterparts (White & Weiner, 2004). Clearly, this paradox calls for a solution.

The adoption of Common Core State Standards requires general curriculum access for SSCDs to be reexamined in a new and challenging way, given that said access plays a vital part in helping these students gain knowledge and skills specified in the standards (Nolet & McLaughlin, 2005). Though many specially challenged learners need multiple supports and fine-tuned accommodations permitting varied means of presentation and response (Bolt & Roach, 2009; Hitchcock et al., 2002; Pugach, 2005), it has yet to be determined how the CCSS can be developed and implemented to ensure productive access leading to future employment success (Ravitch & Mathis, 2010; Thurlow, 2010). Neither researchers nor teachers who serve the special needs community of learners have come to terms on effective ways to integrate general curriculum mandates and life skills development (Agran et al., 2002, citing McDonnell, Thorson, & McQuivey, 2000; Dymond et al., 2007; Ryndak et al., 2008).

Research Questions

In recognition of the need to determine how the CCSS may be applied to the SSCD population to maximize their future outcomes, it is necessary to pose the following research questions:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills oriented, community-based curriculum?
- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Synthesis of the Literature

The purpose of this chapter is to examine, through a review of pertinent literature, the concept of access to the general curriculum for students of the target population and to determine appropriate programs of study for them based on their entitlement to the Standards and to instruction concerning their functional needs. Though focused mainly on the Common Core, it begins with the history of access leading up to the adoption of the standards in order to effectively situate their role in special education. The review is organized in the following sequence:

- Access to the general curriculum: the historical definitions of general curriculum access and impediments to access
- The Common Core State Standards Initiative: definition of, rationale for, and controversies surrounding the CCSS; the relationship of the new standards to special education (CCSS, 2010)
- Curriculum criteria and their applications to special needs learners: requirements for standards-based curriculum design according to state evaluation criteria and special education experts (Browder et al., 2006; CDE, 2013)
- Curriculum models, modifications, adaptations: their impact on teacher preparation, practices, perceptions, and access

- Presentation of Theories: learner-centered ideology in the context of the local ecology and ecological development theory (Barab & Roth, 2006; Schiro, 2013) as the theoretical framework for the curriculum design proposed in this study

It was the intent of this review to establish rationale for an investigation of the proposed research questions in terms of gaps between the cited literature and the current curriculum needs of the aforementioned student population. The review also accounts for the new state standards and their implications for curriculum development.

Access to the General Curriculum

The concept "access to the general curriculum" is hard to define, much less implement. An inconsistent or misconceived definition of access is evidenced or occasioned by a number of salient issues: shifting notions of access throughout special education history (Hitchcock et al., 2002), the mentality of ableism (Connor & Baglieri, 2009; Herir, 2002), the lack of institutional support inherent in the educational system (Stanton-Salazar, 1997), the need to differentiate placement and access (Hitchcock et al., 2002), a lack of school vision and goals with regard to access (Agran et al., 2002), teacher doubts regarding student capabilities (Agran et al., 2002; Lee et al., 2006), limited teacher training and efficacy concerning the Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB) initiative (Browder & Cooper-Duffy, 2003), and misalignment of individualized education program (IEP) goals with general curriculum standards (Soukup et al., 2007).

As the concept of "general curriculum" changes with evolving legislation designed to increasingly enhance opportunities for students with disabilities, the term "access" with reference to general education has also shifted and has come to mean different things at different times to school practitioners (Hitchcock et al., 2002). Prior to IDEA, students with disabilities were

denied a public education unless they could show the ability to benefit from a fixed general curriculum devoid of supports or modifications. Much like the members of other underprivileged minority groups, they had to be able to demonstrate the proper scholastic and sociolinguistic potential, or socially sanctioned ways of learning and communicating, in order to successfully access the general curriculum (Stanton-Salazar, 1997). In this instance, "access" meant little more than legal entitlement to a merit-based general education including physical "access" to learning spaces and buildings (Lippmann & Goldberg, 1973).

Over time, obstacles to a specialized education were decreased for students with disabilities due to legislation such as the Education for All Handicapped Children Act (EAHCA) of 1975, renamed IDEA in 1990. A greater understanding of the particular needs of students with disabilities ensured the provision of the IEP, which led to the expansion of special education and its systematized entry into the arena of public education (Benner, 1998; Yell, 1998). In this way, "access" came to mean the legal right to programs, materials, methods, and plans that students with disabilities needed in order to procure an education (Benner, 1998).

The Mentality of Ableism and Lack of Social Capital

Despite redefinition of access rights, new barriers to access emerged as special education programs grew. Because of its status as separate from the general curriculum, students with special needs were customarily taught apart from their non-disabled peers, ostensibly to be "taken care of" or "fixed" well enough to suit their eventual entry (or re-entry) into the general curriculum (Hitchcock et al., 2002). This practice calls to mind the medical model of disability, in which persons with a disabling condition are provided "treatment" in lieu of repairing the system whose rigid policies limit their well-being (Connor & Baglieri, 2009 citing Linton, 1998). Here, "access" meant receiving "treatment" in the functional academic skills designed to help

students become mainstreamed into general education, but, historically, most students were still not enabled to make this move and, therefore, remained isolated from their peers (Junkala & Mooney, 1986).

The schools' consideration of disability as an abnormality to be held separate or even eradicated suggests the mentality of ableism (Herir, 2002). Characterized by the devaluation of disability, such ableism reinforces a negative view of disability, contributing all the more to reduced educational attainment, and resulting in isolation demonstrated by lack of access to a meaningful education (Campbell, 2008; Hehir, 2002). Under these circumstances, students with disabilities are not honored for their diversity, but rather appear as a low-status subordinate group lacking the necessary funds of knowledge—discourse in terms of adequate language development, subject-area knowledge, networking skills, problem-solving skills, and technical knowledge—to obtain sufficient social capital or cohesive school network support. Yet, it is precisely this institutional support that is required to procure the resources and opportunities essential to academic advancements for these students (Stanton-Salazar, 1997).

Placement vs Access

Perhaps due to the mistreatment of learners with disabilities in isolated settings, there has been considerable uneasiness with the separation of special education and general education on the part of all concerned. As this uneasiness mounted over time, it gave rise to a "general education initiative" to meet the educational needs of all students--including those with disabilities (Lipsy & Gartner, 1989)—and provide each student access to an appropriately challenging curriculum. In its initial version, and through subsequent reauthorizations (in 1990, 1997, and 2004), IDEA identifies and supports the right of students with disabilities to make

academic gains toward the general curriculum through their inclusion in the general classroom setting with their non-disabled peers.

Yet, placement in the general setting alone cannot be defined as "access." As Hitchcock et al. explain, "equal protection of the rights of students with disabilities cannot be guaranteed by mere physical placement of students in a classroom setting alongside age mates without disabilities" (2002, p. 11). While SSCDs have been found to benefit greatly from collaboration with typical peer-tutors as evidenced by improved response to academic challenges and decreased levels of impeding behaviors, this peer interaction must be combined with curriculum modifications for progress to occur (McDonald, Mathot-Buckner, Thorson, & Fister, 2001). Often, these modifications do not take place as necessary. This is because the general curriculum itself does not consider the particular needs of diverse learners in its original, inflexible design (Hitchock et al., 2002). Nor does "access" itself denote "progress" in the general curriculum as required by IDEA (Weymeyer et al., 2003). Placement and access are thus not synonymous and need to be differentiated, perhaps by considering placement as an initial step in the provision of access.

Absence of School Vision and Goals

Given its evolving history, defining access to the general education curriculum is indeed a confusing task, and the term is currently not well understood or correctly interpreted in terms of the IDEA mandate (Agran et al., 2002). School practitioners continue to have varied notions of general curriculum access, and many interpret access to mean little else than physical entry in the general education classroom. This lack of appropriate definition may explain why few institutional agents—special and general education teachers, schools, or school districts—have

clear processes or policies on how to effect access according to the special needs of learners with disabilities (Agran et al., 2002).

The lack of school-wide vision and goals with respect to access is exemplified in several studies. For example, in a comprehensive K-12 study of special education programs in Iowa, over half of teacher respondents reported that their school district had no clear plan for promoting access to the general education for students with severe disabilities. Furthermore, they identified resistance from general educators and administrators as significant obstacles to access (Agran et al., 2002). Other studies note that, when special education students are involved in the general curriculum, general education teachers are the dominant instructors, and make few if any modifications for students with disabilities. This responsibility is left solely to the special education teacher (Lee et al., 2010) despite research on the effectiveness of—and the need for—a team approach to ensure progress in the general curriculum (Browder & Cooper-Duffy, 2003). As yet, there is typically no school-wide consensus about what skills should be emphasized and incorporated in general education to benefit students with severe disabilities (Billingsley & Albertson, 1999; Browder & Cooper-Duffy, 2003). Additionally, too few schools have created frameworks that describe strategies or the necessary supports for helping students gain access (Lee et al., 2006).

Teacher Perceptions Concerning IDEA/NCLB

Teachers are charged with developing and modifying the instructional content to produce meaningful outcomes, but their responses to IDEA/NCLB initiatives are uneven. Many educators working with students with severe disabilities doubt that access is achievable or that the focus on access is sensible (Lee et al., 2006). In the 2002 study conducted by Agran et al. (2002), 85% of teachers who involved their students with severe disabilities in general education

classes did not necessarily consider access to the general curriculum appropriate for them, and did not think these children should be held accountable to the same standards as their peers. Paradoxically, however, these teachers still believed that access to the general education curriculum leads to raised expectations for students with moderate to severe disabilities, and promotes the incorporation of life skills into the general curriculum.

It is possible that ableism may account for the dissonance between the opposing values of the teacher respondents; indeed, the unwillingness to hold special needs learners accountable because of moderate to severe disability can be deemed as an attitude that contributes to their disablement (Connor & Baglieri, 2009) since it presupposes they are not capable of academic achievement in the general setting. Teacher values notwithstanding, a diversified or marginalized group of learners such as students with severe disabilities rely heavily upon these very teachers and other institutional agents for the support they need to progress in school and in society (Stanton-Salazar, 1997).

Limited Teacher Training and Efficacy

Another explanation for teacher reticence to hold students accountable may be based on teacher skill and experience levels. The teachers who did not deem access appropriate despite their belief it would raise expectations may not understand what can be gained from access or how access can be accomplished. Though there is much literature on effective practices to develop quality education programs for SSCDs, practitioners do not regularly utilize these practices (Browder & Cooper-Duffy, 2003). Special education teachers surveyed in many states where strong efforts are made to shape quality education programs revealed, through self-reporting, that the use of best practices—inclusion, data-based instruction and instructional supports, and home-school communication—is often contingent on teacher skill and degree of

implementation difficulty. In addition, they cite time constraints and lack of administrative support as obstacles to research-based best practices (Ayres, Meyer, Erevelles, & Park-Lee, 1994). Surveys of general educators also indicated limited evidence-based practices in terms of specific strategies such as time delay or picture cues (Agran & Alper, 2000). Many of the impediments to meaningful learning call for additional teacher assistance and preparation.

In spite of all the evidence-based practices documented in NCLB, and its provision for qualified staff to utilize them (Shick, Williams, & Kupermintz, 2005), the inclusion of students with severe disabilities in the general curriculum apparently stems from a values- or teacher judgment-based policy instead of a data-based policy (Browder & Cooper-Duffy, 2003). Yet, as Browder and Cooper-Duffy point out, even if the inclusion of students with significant disability in standards-based academic programs is undertaken within a values-oriented policy, it calls on educators to create the means by which SSCDs will move from access to progress within the general curriculum. They go on to suggest that teachers target specific skills for mastery and align academic engagement with functional skills development, providing opportunities to practice skills in various settings. They further suggest that, as teachers gain more experience and training in the aforementioned best practices, they will be more inclined to hold students accountable to the general standards (Browder & Cooper-Duffy, 2003).

To the extent that accountable inclusion of SSCDs in general education remains a function of teacher beliefs and values, the role of teacher efficacy--the extent or strength of one's belief in one's own ability to complete tasks and reach goals--is relevant to this discussion. Bandura (1977), who provided the framework for studying the theory of efficacy, argued that human behavior derives from beliefs regarding outcome expectations. Indeed, professional experience helps inform beliefs. Yet there hasn’t been enough attention directed to providing

teacher support or training to effectively boost professional experience levels (Agran et al, 2002). In addition, general education teachers have consistently expressed their concerns about inadequate preparation and collaboration to properly serve students with disabilities in their classrooms (Agran et al., 2002). Arguably, if teachers doubt their ability to ensure progress in inclusive settings due to lack of support or on-going training, they may not hold SSCDs accountable despite their beliefs that inclusive practices promote access. Current research shows that training is greatly needed in several areas: curriculum modification, application of principles of UDL offering a wide array of multi-media instructional formats (Rose & Meyer, 2002; Spooner, Baker, Ahlgrim-Delzell, Browder, & Harris, 2007), appropriate IEP goal formation, and effective ways to embed curriculum modifications and functional academic skills within the general education classroom (Agran et al., 2002; Lee et al., 2010; Wehmeyer et al., 2003).

Misalignment of IEP Goals with General Curriculum Standards

Difficulties school practitioners have in adequately interpreting and promoting access are reflected in studies done by Giangreco, Dennis, Edelman, and Cloninger (1994) and more recently by Soukup et al. (2007) concerning the Individualized Education Program (IEP) document. The IEP is a critical set of statements describing a student's individualized learning outcomes and services based on documented levels of student performance. It is expected to describe exactly how students with disabilities will be engaged with and advance in the general curriculum, taking into account their unique needs (Wehmeyer et al., 2003). However, IEPs are frequently too extensive, non-specific, inconsistent, and not sufficiently related to general curriculum contexts—often listing goals for educational providers instead of for students—and addressing basic functional skills more than academic progress. They offer questionable direction in terms of curriculum planning in general education settings (Giangreco et al., 1994;

Wehmeyer et al., 2003; Soukup et al., 2007). Further, their misalignment with the general curriculum is often reflected in a disproportionate amount of instructional focus on an alternative "life skills" curriculum, causing students to be relegated to a separate setting. Thus, IEPs often do not ensure a proper fit between learner needs and IDEA-mandated learning contexts, and this mismatch is also an obstacle to access (Soukup et al., 2007; Wehmeyer et al., 2003).

It is clear from the literature that students with significant cognitive disabilities are not necessarily facilitated to engage or progress in the general curriculum as mandated by law. It must be the object of ongoing and future research to determine how to increase social capital and institutional resources for these students. Disability itself is often overlooked in literature focusing on access to a quality education for marginalized groups (Connor & Baglieri, 2009). According to Herir (2002), more inquiry within educational circles concerning the adverse effects of ableism is essential, as disabled students are possibly viewed as incapable of meeting standards or acquiring academic skills. From these statements, it follows that the study of curriculum design and implementation intended to enable this population to meet academic standards is warranted.

Common Core State Standards Initiative

The Common Core State Standards initiative is an effort organized by various states to create a uniform set of clear educational performance expectations for all students in kindergarten through grade 12 in English language arts and mathematics. These standards have been developed to ensure that all students finishing high school are ready to enter two- or four-year college programs, or enter the workforce. Through the National Governors Association (NGA) and the Council of Chief State Officers (CCSSO), the nation's governors and education commissioners self-acclaim as taking the lead in crafting these standards, with the input of

teachers, parents, school administrators, and education experts. They point out that, as different from previous state standards specific to each individual state, the Common Core State Standards are consistent across the nation; thus, their intent is to promote equal access to clear expectations for all students regardless of ability level or location (CCSS Inititative, 2010).

To ensure retention of those standards it deemed superior to the Common Core, the California Department of Education has made its own additions in ELA and mathematics (Plank, 2012). In 2012, the California State Senate, through Senate Bill 1 from the Fifth Extraordinary Session, established an Academic Content Standards Commission (ACSC) to develop standards in mathematics and ELA. The bill stated that 85% of the standards were to consist of the CCSS, with up to 15% additional material, and directed the State Board of Education (SBE) to adopt or reject the recommendations of the ACSC. As a result, a slightly adapted version of the national CCSS was created for California, including such additions as the requirement for formal presentations in grades 2 through 12 and analysis of text features in informational text in grades 6 through 12 (CDE, 2012).

Support for CCSS

Since their adoption, the notion of national standards has garnered some support. Many scholars identify what they perceive to be the benefits of a national curriculum: shared expectations offering consistency across the nation, a standards-based focus on educational reform, efficiency regarding the development of instructional materials and assessments, and the potential for higher-quality, electronically-delivered assessments (Plank, 2012; Porter, McMaken, Hwang, and Yang (2011). Per Au (2013), liberal Democrats "are fully on board with the CCSS" (p. 4). Also, the members of the NGA and CCSSO themselves indicate that the Standards are more constructivist in nature, and more centered on higher-order thinking skills

than the standards of previous years. Their focus on skills rather than specific content allows local school districts and policy makers to decide on specific content according to local needs and concerns (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010, as cited in Au, 2013). Further, the Standards seem to have been framed with the interests of all students in mind, including those with disabilities, as the expectations are the same for everyone (Porter et al., 2011; Thurlow, 2010).

Application to Students with Disabilities

Arguably, the new standards enhance the provisions of the Individuals with Disabilities Education Act (IDEA), under which students with special learning needs must be facilitated and challenged to progress within the general curriculum to achieve success in their post-secondary college or career endeavors (Browder & Cooper-Duffy, 2003). The CCSS adoption ushers in a unique opportunity for students with learning disabilities, including those with significant cognitive disabilities, to gain greater access to rigorous academic content standards. This is because their implementation is expected to result in a sharper focus on research-based instructional practices to improve achievement in ELA and math for each student, regardless of ability level (CCSS Initiative, 2010)

According to Thurlow (2010), the adoption of the Common Core State Standards should be interpreted, from its inception, as allowing for the greatest range of learners to engage in standards-based curriculum. This means that all appropriate accommodations should be utilized to permit maximum participation, including various forms of assistive technology and communication supports. Teachers and support staff must be prepared to deliver high-quality instruction, sufficiently adapted to multiple learning needs, to help students acquire CCSS-based

knowledge according to their age and grade. In fact, these provisions have always been requirements per IDEA (1997; 2004, as cited by Wehmeyer, 2006).

Despite the fact that government mandates exist to support access to CCSS, researchers point out that these mandates do not guarantee progress for SSCDs. In order to be academically connected to the grade-level appropriate, standards-based content, SSCDs will likely need much more support than what is currently provided (Thurlow, 2010). Despite their right to access, SSCDs are not being provided the same accommodations and curriculum modifications that would enable them to benefit from access (Wehmeyer, 2006). Carter and Hughes (2006, as cited in Ryndak et al., 2010) describe progress toward implementation of access-based education practices—despite a long-standing focus on legally required provisions and services—to be "slow, sporadic, and uneven, (p. 201). Further, not all experts agree on the skills or concepts that should be used to extend academic content standards to the 1% population (Ayres et al., 2011; Browder et al., 2007). Some believe that content standards show little application to students with disabilities (Adleman & Taylor, 2013, as cited in Au, 2013; Ayres et al., 2010; Ford, Davern, & Schnorr, 2001, as cited in Browder et al., 2007). Though educators have increased their learning expectations for SSCDs over the past decades (Browder et al., 2007), low expectations for this population have historically minimized the content to which they have been exposed (Thurlow, 2010).

Current Controversies

Much of the current literature on CCSS questions the advantages of the Standards not only for the SSCD population, but also for learners in general. Citing superficial and inadequate research to justify the adoption of the Standards, some scholars state that the evidence-based claims of NGA and CCSSO have done little more than advance government rhetoric and

political agendas rather than offer a solid, peer-reviewed foundation for the recommended educational policies (Au, 2013; Ravitch & Mathis, 2010; Tienken, 2011).

Complaints against the Standards emanate from many scholars. Analyzing the research of Porter et al. (2011) on the Common Core ELA standards, Beach (2011) found that the CCSS lack an integrated curriculum focus, possibly due to the typical standards classifications of reading, writing, speaking, listening, and vocabulary development referenced in most state standards. A number of experts say this can lead to the coverage of many topics with minimal depth of thinking and reduced teacher autonomy (Beach, 2011; Darling-Hammond, 2010; Porter et al., 2011; Wiggins, 2011). Additionally, the CCSS classifications may appear as a repackaging of current frameworks rather than a creative reinvention of them (Wiggins, 2011), as they do not focus the curriculum on the understanding and production of student texts (Beach, 2011).

Conservatives have varying reasons for their disapproval of the Standards. These reasons range from a fear of government control and criticism of government over-spending to over-standardization of a non-focused curriculum and potential misuse of student data without parental consent. By contrast, many leftist progressive educators claim the CCSS allow them to discover ways to do essential work because the Standards lack the sort of curriculum prescription characterizing previous standards (Au, 2013). However, as Au questions, if "CCSS are better than the bad standards we had before, does that make them inherently good?" (2013, p. 5). The implication is that, while the CCSS may be an improvement over individual state standards in the view of some, better is not good enough.

Current literature mentions additional controversies concerning the adoption of the CCSS that are worthy of notice. One is the shifting of public education money to profit-based

companies specializing in the production of educational materials and services (Burch, 2009). Capital investment in public education has risen substantially over the last decade due to the increased need for materials and test preparation (Rich, 2013, as cited in Au, 2013). With the advent of CCSS, conservative groups such as the Fordham Institute, the Pioneer Institute, and the American Principles Project are cited as projecting CCSS testing and preparation costs to exceed $10 billion, with the latter two groups predicting a cost of approximately $16 billion over seven years (Accountability Works, 2012; Murphy, Regenstein, & McNamara, 2012, as cited in Au, 2013). In some literature, there is speculation that those who formulated the standards seek to benefit those educational media companies with which they are politically affiliated, though said companies may be labeled as non-profits or foundations to appear as benefactors (Brooks & Dietz, 2012; Pennington, Obenchain, Papola, & Kmitta, 2012). Further, Brooks and Dietz (2012) report that many districts expect teachers to utilize preparation materials created by the same companies that produce testing measures, thereby limiting teacher creativity and decision-making while boosting the revenues of selected corporations.

Another concern surrounding the new standards is the centralization, or federalization of educational policy. Besides the contention that a uniform set of standards may lead to reduced empowerment of educators at the local level (Au, 2013; Tienken, 2011), the literature also raises questions about the merits of standardization in terms of student outcomes. Per Tienken (2011), there is no evidence supporting the notion that nationalization of standards leads to higher test scores, or that performance on standardized tests predicts future economic growth or success for individual students. Adding to the concerns of many educators is the premise that national core standards may lead to a standardized curriculum, and that students are not well served when they are expected to learn the same things regardless of their own life circumstances, interests, or

needs (Eisner, 2004; Ravitch & Mathis, 2010; Tienken, 2011; Wiggins, 2011). In their critique of the standards, Ravitch and Mathis claim that "not all of education's purposes are utilitarian and economic" (2010, p. 7), citing the value of education for a meaningful life as an example. This view appears to be corroborated by Wiggins (2011) as well as Tyler (1949), both of whom argue for personalized and relevant learning through which a student develops his own interests and talents—not only for the betterment of society--but for the sake of his own fulfillment. Extending this point to education as a vehicle for the pursuit of personal happiness, Wiggins offers the following quote from Spencer (1861): "As vigorous health and its accompanying high spirits are larger elements of happiness [more so than] any other things whatsoever, then teaching how to maintain them is a teaching that yields in moment to no other whatsoever" (as cited in Wiggins, 2011, p. 30). In addition, in Eisner's words (2004), education must enable students "to learn how to invent themselves—to learn how to create their own minds" (p. 9). Thus, to the extent that the Standards are seen and implemented in a uniform way, their value and relevance to the overall well-being of the individual student, particularly those with special learning needs, may be disputed.

Intent of the Standards as Defined by CCSS

Regardless of all aforementioned concerns, a review of the introduction to the CCSS (2010) defines the standards in a way that suggests a disinclination to prescribe a standardized, non-integrated curriculum. In the section titled "What is Not Covered by the Standards," it is clearly stated that the Standards do not define how teachers should instruct, but rather, what "all students are expected to know and be able to do" (CCSS, 2010, p. 5). The section also explains that it is beyond the capacity of the Standards to enumerate all the content students should learn, and that the Standards merely constitute the foundation of a student's course of study.

Addressing concerns over lack of integrated focus, the Introduction portion of the California CCSS states that each standard need not be seen as a separate entity, and that several standards can be targeted in an integrated approach applied to a single, rich learning activity. Further, the particular delivery methods or instructional materials necessary to effectively teach diverse learners—of ability levels ranging from intellectually advanced to significantly learning disabled—are not defined by the standards. Therefore, the Standards "must be complemented by a well-developed, content-rich curriculum consistent with the expectations laid out in this document" (CCSS, 2010, p. 5). This statement may be interpreted to mean that for all students, the development of meaningful curriculum is left up to the local decision-making processes involving the teacher, the school, and the district. For students with significant disabilities, the implementation of the curriculum must allow for the use of various forms of technology or supports needed to ensure maximum engagement of students with special education needs (CCSS, 2010).

The recent adoption of the CCSS represents a new opportunity to examine academic learning opportunities for students with significant cognitive disabilities who may have previously been excluded from educational experiences on the general curriculum. It invites educators and educational researchers to determine practical ways that the entitlement of this population to a comprehensive quality education may be fulfilled.

Curriculum Criteria Overview

To develop curriculum meeting state approval, the California Department of Education has specified criteria for the evaluation of curricular programs based on the adoption of curriculum frameworks for grades K-12 by the State Board of Education (SBE). According to the CDE's (2012) document titled "Instructional Materials in California: An Overview of

Standards, Curriculum Frameworks, Instructional Materials Adoptions, and Funding", the frameworks are drawn from national educational research and the knowledge base associated with specific content areas. They provide a firm foundation for instructional planning by mapping the scope and sequence of content that all students need to acquire. As such, they serve as guidelines for the local selection of curricular materials and delivery methods, and typically incorporate curriculum evaluation criteria. It is the duty of the Instructional Quality Commission (IQC) to supervise the development of these frameworks and evaluation criteria for instructional materials prior to recommending them to the SBE for adoption. Though there are no official state adoptions for instructional materials for grades 9 through12, the same evaluation criteria formulated for K-8 materials adoptions may be applied to instructional programs and materials used in high schools (CDE, 2012).

Curriculum Criteria Related to CCSS

A recent CDE publication on curriculum evaluation criteria clarifies that the current state frameworks and instructional materials are not as yet aligned to the CCSS. In fact, the CDE acknowledges that it will take years to achieve this task. In the interim, the CDE has provided criteria to bridge the separation between currently functioning instructional programs and California CCSS requirements:

- Alignment with and coverage of the California CCSS for a given grade level, along with the existing state-adopted grade-level programs and materials
- Material that meets the Standards for Social Content adopted by the SBE
- Error-free content
- Assessment tools providing sufficient evidence for evaluating progress on the CCSS
- Clear guidance for providing effective instruction to all learners

- Clear guidance on the use and integration of supplemental material

CCSS Curriculum Criteria Related to Students with Disabilities

A close review of CDE curriculum criteria clarifies that instructional materials must comply with CDE social content to the extent that they portray the diversity of the state's population and depict ways that people make various contributions according to their attributes and differences. Content must be sensitive and responsive to the needs of students who have specific learning challenges. It must show evidence of universal access (CDE, 2012). Clear reference to the necessary instructional supports for students with disabilities includes instructional programs based on the principles of UDL in order to facilitate effective progress for these students (CDE, 2010). Such programs must be based upon solid educational theory and employ a range of adapted materials, engagement strategies, alternate methods of communication, and instructional delivery methods (Browder et al., 2006; Hardman & Dawson, 2008; Hitchcock et al., 2002) so that learners can make meaningful gains in the Standards.

All of the above elements are essential for meaningful access to the general curriculum. The model proposed in this study attempts to incorporate these criteria to facilitate teaching and learning within the special education community.

Curriculum Models, Adaptations, and Modifications for Special Needs Learners

In order to deliver content to students with significant learning disabilities, curriculum must be mapped and substantial modifications, adaptations, and supports identified to ensure grade-level content access. Progress must be carefully monitored through ongoing assessment. Such factors as considered in recent research are delineated in this section for the sake of clarity.

Curriculum Mapping

Browder et al. (2006) identify seven steps for planning appropriate curriculum for students with significant cognitive disabilities:

- Chart the strands of the general curriculum for the student's grade level
- Identify the state standards for said grade level
- Collaborate with general educators to identify priority standards and matching objectives for each content area and see how the standards are usually taught (Cawley et al., 2002; Gardner et al., 2003)
- Plan alternative achievement goals accounting for student's symbolic level of communication (Gately, 2004)
- Ensure the original standard content has been upheld after it has been adapted
- Make the skills relevant by incorporating the interest and values of the student (Dewey, 1938; Kilpatrick, 1941; Tyler, 1949; Wiggins, 2011)
- For the IEP, identify key objectives needed to meet the selected targets

The above steps link to the following criteria offered by Browder et al. (2007) for instruction and assessment. These include academic content linked to the state frameworks and national standards (CDE, 2013); content linked to student's chronologically-based grade level; differentiation as necessary across grade levels for multi-aged groupings of students (Tomlinson, 2002); fidelity to original grade level standards and aligned performance objectives (Browder et al., 2007); multiple levels of access accommodating different levels of symbolic communication (Downing, 2006; Gately, 2004); and achievement focus promoting access to the learning experiences, materials, and instructional settings associated with the grade level but with the

accommodations, adaptations, presentations, and supports needed to support student engagement in the general curriculum (Wehmeyer et al., 2001).

Tools

Precise examples of the above-mentioned strategic tools are also provided in the literature referencing curriculum models for this population. Adaptations are defined as attempts to alter the presentation of the instructional plan or the way information is displayed to foster the student's involvement with and positive response to the curriculum. These alterations may take the form of larger font-size graphics, a variety of informational text features to highlight key information, internet-based technology using unique presentation processes and hyperlinks to video sources, voice-over readings, and pictorial or iconic representations of key terms (Browder et al., 2006; Wehmeyer et al, 2001). Further, curriculum models may incorporate augmentation strategies to extend the curricular learning activities with alternative methods of communication for students with limited speech (Browder et al., 2006). They may also provide metacognitive processing opportunities (Wehmeyer et al., 2001, citing Knowlton, 1998) involving self-management, self-regulation, self-determination such as decision-making, and self-advocacy (Wehmeyer et al., 2001).

Of particular note in the literature on accommodations is the use of such tools as picture symbols and communication devices to facilitate reading and calculators to assist in functional math activities. Though some students with moderate to significant learning disabilities are at the pre-symbolic level, many learn at the concrete or abstract *symbolic* level. To access reading material content, they often need to experience the representation in pictorial form or hear it on a communication device, whether a spoken slide presentation or electronic communication board (Browder et al., 2006; 2008; Wehmeyer et al., 2001). There are a variety of ways reading

material may be made accessible by using pictures, objects, signs, and symbols to reduce the cognitive demands of the learning task at hand (Downing, 2006). For math activities, students should be provided an integrated curriculum approach that stresses the use of calculators and computers and ensures application to real-life situations (Patton, Cronin, Bassett, & Koppel, 1997). According to Vygotsky (1978), all of these tools are useful in representational activity and assist in the co-construction of knowledge, which can be applied to future problem-solving activity. They have come to be associated with the principles of UDL to the extent that they are utilized as needed in the planning and implementation of curriculum for special needs learners.

Assessment

Besides the facilitation of student learning, there is another major reason teachers must effectively employ curriculum for this population of learners. Regardless of disability level, all students must be assessed on ELA, math, and science standards. The Smarter Balanced Education Consortium is developing a computer-adaptive test that will feature built-in accommodations for the California Modified Assessment (CMA). The National Center and State Collaborative is developing the alternative assessment to be used with SSCDs, which may replace the currently used California Alternative Performance Assessment (CAPA) in 2015. (CDE, 2014). Regardless of the particular assessment measure, assessment and instruction must be aligned with the original content based upon the Standards, which calls for ongoing collaboration between general and special educators. Thus, assessment and instruction are inextricably linked, and teachers can use student responses to appropriately adapted lesson activities to gauge student progress in learning the standards (Browder et al., 2010; Wehmeyer et al., 2011).

Teacher Preparation in the use of Program Adaptations

Scholars write that collaboration between general and special education is essential to bring about curriculum adaptations with high-quality content. This is partly due to increased inclusion of students with learning disabilities in general education. Said collaboration involves preplanning instruction in accordance with UDL principles and merging the knowledge, skills, and pedagogy bases of special and general education domains (Bellamy, Fowler, & Hale, et al, 2002; Browder et al., 2006) without compromising the distinct characteristics of each (Bellamy et al., 2002).

Browder et al. (2006) report that they explored the incorporation of UDL elements in the training of preservice teachers seeking their credentials in elementary or special education. They found that before training, 87% of teaching candidates were unfamiliar with UDL. Following training based on case studies and lesson plan development, both sets of candidates improved their inclusive planning. To the authors, this suggests that giving teachers a firm template for planning can immediately enhance their ability to formulate ideas for successful inclusive instruction and determine effective ways of teaching from the lesson's inception, rather than "after the fact" (Browder et al, 2006, p. 313)

Teacher Practices and Perceptions

The above teacher training account raises questions as to whether special education teachers adapt general education curriculum for SSCDs in a meaningful way and whether they perceive utility in planning for SSCD access to general education standards.

Access as defined by physical setting. Current studies show that teachers of SSCDs have misconceptions about what constitutes meaningful access to the general curriculum in the first place. Teachers do not agree on what access is or how to achieve it, particularly for high

school students with significant disabilities (Agran, Alper, &Wehmeyer, 2002; Dymond et al., 2007). In a study conducted in one high school to ascertain general and special education teachers' perceptions of access, almost half of the 25 respondents believed access meant physical location where instruction takes place, in opposition to the viewpoint of many researchers who believe access must also include content standards, age-appropriate materials, and quality instruction (Jackson, Ryndak, & Billingsley, 2000; Wehmeyer, 2006). Consistent with the views of some researchers (Browder et al., 2006), most believed the general setting was not the only location where general curriculum learning experiences could occur, and nearly half thought location selection should vary with the student's needs (Dymond et al, 2007). However, very few respondents considered environments other than formal classrooms (e.g. community locations, offices, or work sites) as potential places of learning. To Dymond et al. (2007), this limited view contradicts the literature on learning for SSCDs across multiple settings to promote generalization (Halle, Chadsey, Lee, & Renzaglia, 2004, as cited in Dymond et al., 2007) and CBI targeting functional living skills deemed as inaccessible in the classroom context (Beck et al., 1994; Renzaglia, Karvonen, Drasgow, & Stoxen, 2003, as cited in Dymond, 2007). Further, the perspective fails to consider the merits of ecological development theory applied to SSCDs as previously discussed in this chapter (Barab & Roth, 2006; Jackson et al., 2010).

Access to standards. Teachers also expressed varying views of the value of state standards in the development of curriculum for this population. Some felt it was necessary to use grade level standards; others believed in a curriculum based on standards from lower grade levels; and 28% questioned if general curriculum standards had any role at all in the case of these students (Dymond et al., 2007). The latter view is widely represented in research literature on teachers' perceptions of the utility of general curriculum implementation for SSCDs (Agran,

Alper, & Wehmeyer, 2002; Wagner et al. 2007, as cited in Ryndak et al., 2008). The majority of respondents could agree only on the idea that standards could serve as a guide for setting up educational programs, though less than half felt that they needed to be aligned with IEP goals. Only 25 percent emphasized supplementing the general curriculum standards with life skills instruction. Per studies done by Dymond et al. (2007), access to the general curriculum should be gained through CBI, community participation and independent living skills, though few study respondents evidenced a realization of this in their discussions with the researchers. Implementing CBI properly requires collaboration between special and general education teachers to determine relevant learning objectives that allow students to access general curriculum standards along with life skills (Beck et al, 1994).

Field-testing. From the above research findings, it is clear that teacher perspective plays a critical role in curriculum decision-making and implementation. Essential to any attempt at reforming or creating instructional programs for all students, including those with significant cognitive disabilities, is the perceived relevance of the program or lesson content in accordance with teacher beliefs and preferred practices. Ultimately, this cannot be assessed until the proposed program is reviewed and implemented as a field test, and teacher input or feedback provided on program effectiveness and limitations (Abrams, Pedulla, & Medaus, 2003; Satchwell & Loepp, 2002; Weston, 2004).

To meet all the learning requirements of students with significant cognitive disabilities, curriculum design and development must take into account a plethora of essential factors as evidenced in the above-mentioned criteria. Inasmuch as researchers can identify and successfully field-test these criteria and educators are able to implement them in the development

of instructional programs, students of the target population may succeed in meeting state standards as they acquire functional skills to effectively navigate their respective communities.

Presentation of Theories

In order to determine a proper approach toward curriculum development for students with significant disabilities, especially those at the high school level, it is also important to review the literature in terms of a suitable theoretical framework. This is necessary to help organize and contextualize the various pieces of information that apply to instructional planning. Of essence in the case of SSCDs is meaningful engagement or active participation in relevant learning activities beyond mere utilitarian, Social Efficiency-oriented purposes (Browder et al., 2006; Dymond et al., 2007; Eisner, 2004; Hardman & Dawson, 2008; Tyler, 1949; Wiggins, 2011). Such engagement is prioritized in the progressivist philosophy of education (Kilpatrick, 1941), learner-centered theory (Schirro, 2013), and in ecological development theory (Barab & Roth, 2006; Jackson et al., 2008).

In their discussion of ecological development theory, Barab and Roth (2006) make a strong case for setting students up in interactive situations leading to the acquisition of valuable knowledge such that the learner will willingly take part in those situations. To their way of thinking, an essential function of education is to determine "curricular contexts that extend themselves meaningfully into the personal life-worlds of individuals" (p. 7). Ecological theory emphasizes learning through participation within one's own environmental network (Barab and Roth, 2006; Bronfenbrenner, 1979; Jackson et al., 2008), and is, thus, an extension of sociocultural theory (Rueda, 2011). Sociocultural theory stresses the function of context in terms of the family background, the school, the community, the self, and others in the social environment as it emphasizes the cultural and social foundations of learning, (Au, 2003). The

position of ecological development and sociocultural theorists appears consistent with that of Schirro (2013) and Wiggins (2011) who stress the importance of learning experiences tailored to the student's capabilities and preferred pursuits based on learner-centered theory. Wiggins also emphasizes curriculum topics such as mental health, hands-on creativity, health-related physiology, and civic action within the local community (2011)—all of which are critical to the personal "life-worlds" of students as defined by Barab and Roth (2006).

In relationship to the aforementioned points, Hall (2013) presents several reasons to study and understand the local ecosystem. For example, he states, "Since all of us have to live to some degree in a natural or at least partly natural ecosystem, then considerable pleasure can be derived by studying the environment around us" (pp. 5-6). He also posits that, since humans appear to be altering the natural environment in many ways, the study of ecology can help learners understand the changes and the implications of their own actions (Hall, 2013). Simply put, a study of the local ecology has personal, humanistic merit as well as potential for environmental impact at the local level.

The above-referenced writings suggest that life science is a relevant subject for students with disabilities. In fact, scholars who have studied the academic performance of high school students with disabilities have noted that a hands-on science curriculum implemented through meaningful activities can be linked to the development of daily living skills and bring delight and meaning to selected learning concepts (Browder et al., 2006). This is achieved to the degree that lesson activities provide for observation, classification, communication, self-awareness, and life science learning experiences associated with healthy living (Browder et al., 2006; Browder et al., 2010; Mastropieri & Scruggs, 1992), such as a gardening project in conjunction with the study of solar energy (Browder et al., 2006). Science, then, is considered by these researchers as a

vehicle to providing real-life activities within a context of academic learning according to state frameworks. If science curriculum is properly planned, it may serve to bridge the gap between a life skills approach and a general education approach. This is crucial to the post-transition success of students currently at the high school level who need to develop essential knowledge and skills necessary for employment and functional living (Ayres et al., 2011; Cortiella & Wickham, 2008; White & Weiner, 2004).

The study of science is also highly amenable to thematic instruction, or the linking of many subjects and concepts through a chosen theme in an interdisciplinary teaching approach (Gardner, Wissick, Schweder, & Canter, 2003). Research on the learning processes of students with disabilities shows that a thematic unit approach, in which lessons are linked to foster connections and understanding (Tyler, 1949), is instrumental in meeting the learning needs of students with significant learning challenges (Browder et al., 2006; Mastropieri & Scruggs, 1992; Mastropieri & Scruggs, 1994). Indeed, one of the guidelines offered for textbook evaluation and adoption practices recommended by Stein, Stuen, Carnine, and Long (2001) is the strategic and intentional integration of skills and concepts centered on "big ideas." This type of organization is essential for mastery of a given subject and arguably all the more so for students who may be easily overwhelmed by too much unrelated content. It may help prioritize the most crucial skills and concepts and prevent rapid coverage of an unmanageable breadth of topics (Browder et al., 2007). In addition, thematic units provide a way to combine student interests with general curriculum skills such that students may be more motivated to perform academically. Because they are implemented across the curriculum, thematic units allow more opportunity for students to execute skills-based objectives aligned with general curriculum standards (Gardner et al, 2003).

An effective, well-planned curriculum that will appropriately serve students with significant cognitive disabilities requires a theoretical foundation that has direct application to the program's content and purpose. Such a foundation may contribute to the research that justifies the development and implementation of the curriculum. In this inquiry, the proposed curriculum is based on life science learning experiences comprising the general standards contextualized in the study of the local community ecology. Ecological development theory is therefore the ideal framework for the inquiry.

Summary

It is evident from the research presented in this chapter that teachers who serve students with significant cognitive disabilities, particularly at the high school level, struggle with defining and providing for their gainful access to the general curriculum. These students are entitled to progress in general education towards the new Common Core State Standards, and yet there is very little conclusive research pointing to how this challenge should be met. Because these students also require life skills to achieve success in their post-transition years, they must also receive instruction that promotes their full participation within their respective communities. How, therefore, can these students be educated to develop community-based life skills within the Common Core-based general curriculum? How may teachers perceive the utility of a curriculum that is meant to deliver life skills and academic standards within the context of the local community and its ecology? To answer these questions, a research methodology is proposed in the following chapter.

CHAPTER THREE: RESEARCH METHODOLOGY

Background and Purpose of the Study

Students with significant learning challenges, including those with moderate to severe (M/S) disabilities, have a right to make gains toward the general curriculum based on their age and grade under the Individuals with Disabilities Act (IDEA). This means they must be provided with relevant educational opportunities to ensure their future success (IDEA, 2004). This right is also addressed and reinforced in the Common Core State Standards (CCSS) Initiative (2010). The Initiative references the ongoing examination and development of research-based pedagogy and content delivery to help improve the access of all students to high-level standards in English language arts (ELA) and mathematics, as well as social studies and science through links to ELA standards. In special recognition of students with disabilities, the Initiative unequivocally calls for the teaching and assessing of the Standards with the appropriate services and supports, annual IEP goals aligned to standards, and specialized teachers. The language of the Initiative clearly calls for curriculum modification based on principles of UDL, emphasizing appropriate program adaptations and flexible methods and materials for teaching and assessing (Hitchcock et al., 2002). It sets high performance and mastery expectations for students regardless of ability level.

Despite its emphasis on academic rigor, the CCSS Initiative does not specify how the Standards are taught and the precise programs through which students benefit (2010). Therefore, educators must determine how the Standards will be implemented, and face an extra challenge with respect to students with significant cognitive disabilities (SSCDs). Though special education experts have emphasized the need for provision of access to content standards, there is a distinction to be drawn between access and progress. This distinction is important because the SSCD population will likely not learn the high-level Common Core standards-based content

without the appropriate instructional programs (Browder et al., 2006; Wehmeyer, 2006). That said, there is a credible body of evidence suggesting that SSCDs can and do progress in general education contexts and curriculum versus other settings and programs (Ayres et al., 2011; Jackson et al., 2008). Long-term results for those students who receive instruction in general education settings are far more promising than for those who do not (Ryndak, Morrison, & Sommerstein, 1999; White & Weiner (2004). Thus, it appears that the CCSS Initiative, if properly approached by special educators, has the potential to make a positive impact on the SSCD population.

Based on the writing of educational scholars and policy makers, there are common notions as to the criteria necessary for solid curriculum design. These criteria include alignment with state standards; the principles of UDL such as adapted materials and flexible content delivery formats; clear guidelines for successful implementation; and an organized, coherent structure (CDE, 2013; Tyler, 1949). For students with significant cognitive disabilities, additional criteria may apply, such as embedded functional life skills (Dymond et al., 2007), personal relevance (Ayres et al., 2011; Tyler, 1949), and provision for communication needs of students at various symbolic levels of language function based on receptive and expressive language capabilities (Browder et al., 2007).

Also, SSCDs may need a functional or life skills approach to promote independence and a high-quality future life. Arguably, this approach should focus on access to community-based instruction (CBI) including services, facilities, and activities relevant to the individual (Cortiella and Wickham, 2008; Dymond et al., 2007). Such an approach may alleviate concerns—whether substantiated or not—that general curriculum access mandates preclude the attainment of community-based life skills or essential individualized support (Ayres et al., 2011; Dymond &

Orelove, 2001; Ryndak et al., 2008). An instructional program based on the student's local ecology oriented to meeting specific learning needs across meaningful general education contexts has significant merit in the case of SSCDs (Jackson et al., 2008). It is the purpose of this qualitative study to propose such a program and ascertain its overall utility in terms of teacher perceptions.

A life science curriculum grounded in English language arts and math standards and oriented to the student's needs and interests within the local ecology is a potential solution to curriculum development concerns facing educators (Barab & Roth, 2006). It would require the curriculum content to be concrete, familiar, sequential, and grounded in Learner-Centered ideology (Schiro, 2013). It would be based on the actual living experiences of students, gradually preparing them to take on more socially productive tasks and responsibilities in the general setting, defined here as all the contexts where learning, living, and working may occur within a community (Barab & Roth; Jackson et al., 2008). As an example, the topic of local ecosystems is an appropriate subject for students with disabilities who require hands-on experiences based on concrete phenomena in natural settings (Mastropieri & Scruggs, 1992). The topic may be deemed as even more suitable when related learning experiences are connected to ensure retention and comprehensibility (Tyler, 1949).

Despite all that is known about the learning needs of students with severe cognitive disabilities, there is some confusion as to how SSCDs can gain meaningful access to both high-expectations content in the general curriculum context and essential supports including life skills (Ryndak et al., 2008). To exacerbate the problem, there is commonly a lack of shared understanding or collaboration among special and general education teachers on how to meet all the above criteria to appropriately provide for the varied educational needs of SSCDs (Dymond

et al., 2007; Ryndak et al., 2008). More contributions to the field as to how high school students with severe cognitive disability can receive a meaningful education encompassing both academic success and community-based life skills are needed at this time according to available studies (Browder et al., 2007; Dymond et al., 2008; Wehmeyer, 2006). This study aimed to contribute additional information to current research by reporting and analyzing teacher responses to a research-based curriculum model that is meant to account for the comprehensive learning needs of students with significant cognitive disabilities.

Research Questions and Method

Current research points to the need for curriculum development that will address the above-mentioned concerns and demonstrate how SSCDs at the high school level can be accommodated with the appropriate instructional program. To carry out this work, critical questions must be formulated to help steer research methodology:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills oriented, community-based curriculum?
- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

For the purpose of this study, a life-skills oriented, community-based curriculum focusing on life science and aligned with grade-level CCSS in ELA and mathematics was created according to current research on the functional and academic needs of high school students with significant disabilities. Representative sections of this curriculum were offered to teachers for an evaluative review. The review was the basis for an interview eliciting teacher impressions of this curriculum, which emphasized relationship between the CCSS and life skills for students with

significant cognitive disabilities who function at the abstract or concrete symbolic reading level (Browder et al., 2007). The study constituted an initial field test of the curriculum's implementation feasibility and limitations, and the outcomes had implications for future curriculum design and development (Satchwell & Loepp, 2002; Weston, 2004) aligned with Common Core State Standards for the target population.

This study was qualitative in nature. It was intended to determine a practical solution to the problem of insufficient curriculum content for high school students with significant cognitive disabilities. The qualitative methods presented in this chapter afforded the opportunity to speak with--and obtain detailed, pertinent information from--practitioners in the field of special education who work with these students. Through the various research instruments, it was possible to triangulate the apparent findings and gain greater understanding of them (Bogdan & Biklen, 2007; Maxwell, 2013; Merriam, 2009).

Sample

To properly investigate the above research questions, it was necessary to select a sample of special educators to obtain their views of the current curriculum offerings for high school students with significant cognitive disabilities, their beliefs about CCSS access for this population, and their input on the proposed curriculum. Because the curriculum proposed in this inquiry was concerned with the local ecology of the southern California shoreline, purposeful sampling occurred among public high school special education teachers from South Bay beach cities or adjacent areas who typically taught in special day classes. The teachers spanned several experience levels and years of service. All except one had taught for at least six years, with the range of experience being between 6 and 20 years. The only exception was a first-year teacher selected for her interest in the study and recent assignment to a high school classroom that served

students with moderate to severe disabilities (M/S). All teachers were selected as practitioners who primarily emphasized functional skills in self-contained classes even as they attempted to address the general curriculum, particularly the Common Core Standards. Four of the 7 teachers taught high school students with M/S disabilities. One taught a mild-to-moderate (M/M) class but supervised the M/S class at her high school, and two were middle school teachers of the M/S population.

Research Procedure

Prior to conducting the actual inquiry, a pilot study was conducted with doctoral students who were co-members of a thematic research group investigating Common Core State Standards. The purpose of the pilot study was to help determine the content validity of the procedure and interview protocols that follow in this section (Maxwell, 2013). Adjustments to the procedure and protocols were made according to the recommendations of the doctoral cohort.

Following the pilot phase, special education teachers recommended by colleagues and school administrators for their experience and capability teaching students with significant cognitive disabilities at the middle school and high school levels were contacted to apprise them of the inquiry and assess their interest in responding to the study. Those who expressed interest were informed of the procedural steps as follows:

- Participation in an initial survey to collect baseline data regarding teacher's background experience, current level of practice, beliefs regarding appropriate curricular emphases for the SSCD population, and needed supports
- Examination of a representative sample of the proposed curriculum and evaluation form/guideline document
- Teacher review/evaluation of proposed curriculum

- Participation in a post-evaluation interview to determine overall impressions of the proposed curriculum in terms of utility and impact potential

The initial survey, exemplified in Table 1, included multiple choice and Likert scale questions ranging from 1 to 4. Teachers were asked to respond to the survey immediately prior to receiving the curriculum sample and evaluation guide, exemplified in Table 2. At that point the survey was collected and a post-review interview location, date, and time were arranged. The curriculum sample was presented as a voiceover PowerPoint providing an overview and step-by-step guide to selected lesson activities and materials hand-delivered on a flash drive. Teachers were also emailed an evaluation guide in the form of a survey designed similarly to the initial survey. Its purpose was to enable teachers to record initial responses to the curriculum content and structure. Within approximately 10 days, a post-evaluation interview was held to ascertain teachers' perceptions of the curriculum in terms of utility, suitability, and shortcomings. Immediately prior to the interview, the evaluation guide was collected and reviewed.

Interviews were conducted in a semi-structured manner according to a pre-established interview protocol as demonstrated in the section following Table 2. This was done to ensure focus on the inquiry issue of how SSCDs may be facilitated to progress in the general curriculum based on their age and grade, as well as gain life skills essential to independent living within their present and future communities (Merriam, 2009). The questions were formulated to help the respondents reflect on and discuss their beliefs, relative to their own experience, about the learning needs and entitlements for special education students, and to ascertain how the sample CCSS-based curriculum design might affect their approach to instructional planning. Per Merriam (2009), the questions consisted of various types including background and demographic, experience and behavior, opinion and values, and knowledge. Field notes were

taken during and after the interviews to augment thick, rich description provided in the interview sessions (Merriam, 2009).

Table 1

Initial Survey

Survey Item (Background knowledge and attitudes)	**Content Relevance**	**Research**
1. How many years have you worked in special education? 2. What positions have you taken in this field? 3. On a scale of 1-4, what is your experience level with students in the moderate to severe category of cognitive disability? (4= high, 3= medium, 2=low, 1=none)	Development of teacher experience level Determination of knowledge and skill	(Fink, 2013) Surveys help determine attitudes, values, beliefs, and behaviors of respondents relative to the inquiry (Creswell, 2009; Merriam, 2009)
4. What type of instructional program is most valuable for this population? a) life skills b) general curriculum with modifications c) a combination of general curriculum and life skills d) other (please specify)	Development of values and opinions	(Creswell, 2009; Fink, 2013; Merriam, 2009)
5. Where should the instructional program take place? a) In the general education classroom b) In the special education classroom c) In both the general education classroom and the special education classroom d) Across a variety of settings that afford educational experiences	Development of values and opinions	(Creswell, 2009; Fink, 2013; Merriam, 2009)

Table 1, continued

Survey Item (Background knowledge and attitudes)	**Content Relevance**	**Research**
6. To your knowledge, how are the CCSS implemented for this population? (Short answer)	Development of teacher knowledge	Creswell, 2009; Merriam, 2009
7. How do you define access to the general curriculum? a) engagement in the general curriculum and CCSS b) exposure to the general curriculum and CCSS c) physical placement in general education settings d) any combination of the above	Development of teacher beliefs and knowledge	Creswell, 2009; Merriam, 2009
8. Which of these choices best describes your core beliefs about students in the category of severe special needs? a) All students can progress in selected CCSS on the general curriculum with the proper supports and instructional approaches. b) Some students can progress in selected CCSS standards, depending on the nature of the disability and the supports/program provided c) These students cannot be expected to progress on the general curriculum but d) should be included with typical peers in extracurricular activities	Development of teacher perceptions based on beliefs	(Creswell, 2009; Merriam, 2009; Fink, 2013)

Table 1, continued

Survey Item (Background knowledge and attitudes)	Content Relevance	Research
9. In your estimation, what supports or services could increase the likelihood of success for this population? Check all that apply. a) more age-appropriate materials aligned with Common Core/general curriculum standards b) more teacher training on standards-based curriculum design/implementation c) more technology-based tools to access curriculum content d) more community service training for this population of students e) more emphasis on student self-help and personal responsibility	Development of need for curriculum based on teacher knowledge and values	(Fink, 2013; Merriam, 2009; Creswell, 2009)

The Curriculum Evaluation Form shown in Table 2 was introduced to teachers with the Evaluation Form Preface, a portion of which is exemplified as follows:

Evaluation Form Preface

Like all students, high school students with significant cognitive disabilities are entitled to a curriculum permitting their meaningful access to the Common Core State Standards (CCSS) in English language arts, math, and science. Yet, this population may also require a life skills approach contextualized in community-based instruction to develop the functional competencies necessary for future success. The curriculum you have agreed to review is an attempt to integrate Common Core standards with life skills through learning experiences within the students' local community. The purpose of this evaluation form is to determine your perceptions

of the curriculum's alignment with CCSS, its implementation feasibility, and overall utility. A follow-up interview will be conducted to ensure accuracy and understanding of your positions on the issues addressed. Your responses will serve to inform an overall inquiry on curriculum design and implementation for the aforementioned special needs population.

Table 2

Curriculum Evaluation Form

Curriculum Evaluation Survey Item	**Content Relevance**	**Source**
For questions 11-21, please rate the curriculum you have reviewed on a scale of 1-4 as follows: (4—entirely; 3—mostly; 2—somewhat; 1—minimally or not at all)	These questions are needed to ascertain the utility of the curriculum in terms of providing for the needs of special education learners in the moderate to severe category	
11. Content is organized around central "big ideas" vs. a large number of topics to be covered (2001; Tyler, 1949)	Perception of the curriculum's adherence to curriculum evaluation standards in terms of content suitability	(Stein et al., 2001; Tyler, 1949)
12. Curriculum materials provide opportunities for teachers to scaffold instruction to provide for differentiated needs	Perception of the curriculum's provision for adaptability	(Stein et al., 2001)
13. Skills and concepts are strategically integrated to promote understanding	Perception of utility for students	(Stein et al., 2001)
14. The materials provide sufficient opportunities for ongoing formative assessment	Perception of assessment function	(CDE, 2013)
15. The curriculum satisfies the student's educational and personal needs/interests	Perception of CCSS and life skill connectivity	(Ayres et al., 2011; Browder et al., 2006; Tyler, 1949)

Table 2, continued

Curriculum Evaluation Survey Item	Content Relevance	Source
16. Instructional materials and objectives are aligned with the CCSS and state frameworks	Perception of alignment with CCSS	(CDE, 2013; Tyler, 1949)
17. Clear guidelines for successful implementation are provided	Perception of utility	
18. Curriculum as a whole applies application of principles of universal design for learning (UDL), including a wide array of adapted material and graphic, multi-media instructional formats	Perception of applicability to the SSCD population	(Browder et al., 2006; CDE, 2013)
19. Curriculum activities promote the student as a contributing member of his or her community	Perception of potential for student engagement	(CDE, 2013; Tyler, 1949)
20. This curriculum is an improvement over the ones I have seen or used before.		
21. I would use this curriculum or one with a similar structure geared toward the community of students within my local school district.	Perception of suitability level Perception of utility level	
22. What are the curriculum's shortcomings? (short answer)		
23. How should it be modified? (short answer)		
24. What supports are necessary to use it effectively? (short answer)	Perception of additional solutions to curriculum concerns	

Interview Protocol

The interview protocol, implemented following an evaluative review of the proposed curriculum, included the following components based on Creswell (2009) and Merriam (2009):

- Heading: Respondent's name, position, school, assignment, time and duration
- Interview plan: Semi-structured, flexible approach to keep the interview systematic yet allow for description-rich differences; probes to deepen responses as necessary
- Questions and question types, following restatement of inquiry purpose, brief summary of previous interview statements, and brief synopsis of proposed curriculum design elements
    1) Opinion: Is there a relationship between Common Core and life skills? Do you believe curriculum should emphasize that connection?
    2) Opinion/Knowledge: What constitutes a desirable curriculum for this population? What supports are necessary to effect one?
    3) Opinion: Could the proposed curriculum be useful? How so, or why not? Probe as necessary: Based on your experience, what are the potential benefits/impediments to its use?
    4) Knowledge: Which population could it serve?
    5) Experience/behavior: Focus on a particular student within this population, and his or her learning needs. How might this student respond to the objectives and learning experiences included in this curriculum?
    6) Knowledge: How would you modify or adapt the curriculum to suit the needs of your learners?

7) Knowledge: How might the curriculum influence your approach to the Common Core?
8) Experience/behavior: How might the curriculum affect the organization of your school community?
9) Opinion/values: In your opinion, how could a student's participation in this curriculum affect his or her quality of life?
10) Opinion/values: How does this curriculum impact your beliefs about teaching and learning for the targeted population?

Time Line

The time frame for the research procedure was 9 weeks from mid-April to mid-June. The schedule was as follows:

- Weeks 1-2: Conduct pilot study
- Weeks 2-3: Contact special education teachers, discuss study, and determine interest
- Weeks 4-6: Distribute and collect initial survey, followed by curriculum and evaluation guide
- Weeks 7-9: Collect evaluation guide and conduct post-evaluation interviews

Data Reduction

This study was qualitative in nature. Information from completed surveys was used to augment and interpret thick, rich descriptions derived from interviews (Merriam, 2009). To begin the data reduction process, it was necessary to undertake the following steps:

- Examine all responses and determine categories of information
- Assign a code to each category (Categories were based on content relevance descriptors in Table 1)

- Revise codes and add new ones as necessary based on constant comparison across all data sources, checking for reliability (Corbin & Strauss, 2008; Maxwell, 2013; Merriam, 2009)
- Count the number of responses for each code
- Count the number of participants whose answers were assigned to each code
- Put the codes in rank order, from highest number assigned to that code, to least
- Classify the codes into thematic categories (Glesne, 2011)
- Conduct multiple iterations of the classification process until saturation was reached (Corbin & Strauss, 2008; Glesne, 2011; Maxwell, 2013; Merriam, 2009).
- From the classification process, determine themes relevant to the inquiry

Interviews were summarized in terms of the following criteria: respondent, location, date, time, entry, approach to capturing data including field notes, and interview methods. After collecting all interview data, it was necessary to piece the findings together to determine a clear picture of them. Per Patton (2002), a systematic and thoughtful analysis of the acquired data is critical to properly fulfill the purposes of evaluation research (as cited in Merriam, 2009).

Analysis of data from evaluation forms, interviews, and field notes called for the following steps:

- Line number all interviews and field notes
- Re-read all data sources
- Assign a code to each segment of information that seemed meaningful
- Create an open coding log, revising codes and adding new ones as necessary based on constant comparison across all data sources (Corbin & Strauss, 2008; Maxwell, 2013; Merriam, 2009)

- Create a table headed with names of respondents and sourced by evaluation form, interview, and field notes
- Merge all qualitative research data, including survey data, clustering the codes into thematic categories (Glesne, 2011)
- Conduct multiple iterations of the classification process until saturation was reached (Corbin & Strauss, 2008; Glesne, 2010; Maxwell, 2013; Merriam, 2009).
- From the classification process, determine themes relevant to the inquiry

Validity

Internal validity is concerned with how well the research findings match the reality of the issue under study, or how credible the findings are. One way to ascertain validity in this qualitative research study was to determine its internal generalizability—that is, the generalizability of the conclusion within the study itself, considering the data that gave credence to alternative ideas (Patton, 2002, as cited in Merriam, 2008). Another way to establish validity was by the use of constant comparisons to help examine basic assumptions, viewpoints, and biases (Corbin & Strauss, 2008). Also, constant comparison across the data sets was done to ensure that thematic categories and corresponding elements held up under this form of triangulation (Merriam, 2009; Maxwell, 2013). Respondent validation was achieved through interviews intended to corroborate data provided from the survey and evaluation form, checking for accuracy, and comparing teacher thoughts and beliefs pre-and post- curriculum design exposure.

Reliability

In a qualitative research study, reliability refers to the degree of consistency between the results and the data collected. The most effective way to ensure reliability is to document one's

research trail through reliable data collection techniques including field notes, survey and interview code logs, and category tables (Maxwell, 2013; Merriam, 2009). In this study, field notes were embedded in interview notes, as they served as a basis for data interpretation. Detailed descriptions of data were also provided to help readers determine external generalizability, defined as transferability of referenced contexts to their respective situations (Merriam, 2009).

Conclusion

To uncover a solution as to how high school SSCDs may meaningfully access Common Core State Standards while receiving life-skills based community instruction, a curriculum had to be generated according to the functional and academic learning requirements for this population. Educators who taught these students were surveyed for their beliefs as to the most effective curriculum, reviewed a research-based curriculum model, and were interviewed to determine their perceptions. Through these methods, curriculum development could potentially be modified and enhanced to better serve the needs of the target population.

CHAPTER FOUR: RESULTS

Review of Problem

Despite federal legislation requiring access to and progress in the general curriculum for students with disabilities, it is highly questionable whether students with significant cognitive disabilities (SSCDs) are making gains in general education according to their unique learning needs and capacities. Yet, all students are legally entitled to a quality education that enables them to access the general curriculum in a relevant and meaningful way. The Common Core State Standards Initiative, in its Application to Students with Disabilities (2010), states unequivocally that such students, along with their typical counterparts, require knowledge and skills as well as rigorous grade-level expectations to the fullest extent possible in order to succeed in additional schooling and appropriate careers.

Still, there is disagreement among researchers and educational experts as to how SSCDs can gain meaningful access to the rigorous academic content associated with the Common Core as well as the practical life skills they need for personal independence (Ryndak et al., 2008). To ensure the overall success of SSCDs, particularly at the high school level, certain criteria must be met: collaboration between general and special education teachers (Cawley et al., 2002); instructional supports for learning based on the principles of UDL including flexibly formatted materials that permit multiple ways of receiving and expressing information and understanding (Hitchcock et al., 2002); strong teacher beliefs in the value of efforts leading to the maximization of student capabilities (Lee et al., 2006); and an age/grade-appropriate, suitably adapted, Common Core State Standards-based curriculum for SSCDs (Lee et al., 2010). Absent these criteria, high school students may be deprived of an academic program, though research shows they are capable of academic learning (Browder et al., 2010). A life skills-based program with

no particular academic focus may then replace academic learning altogether. However, when life skills are not contextualized within general education experiences, SSCDs may be deprived of their right to a broader education associated with CCSS competencies and meant to ensure greater life opportunities. Nonetheless, life skills can be embedded in the general curriculum setting across a variety of contexts and settings (Browder et al., 2006; Jackson et al., 2008). Consistent with ecological theory, therefore, appropriate curriculum for SSCDs must not be a collection of disjointed facts or activities, but an interwoven series of interactive learning experiences connected to meaningful situations and places (Barab & Roth, 2006; Tyler, 1949).

The question remains as to how such a curriculum may be generated. Expert researchers in the field of special education concur that more studies need to be conducted on how SSCDs at the high school level can achieve meaningful educational outcomes comprising academic knowledge and community-based life skills (Browder et al., 2007; Dymond et al., 2008; Wehmeyer, 2006).

Research Questions

In order to effectively contribute to these studies, it is arguably necessary to create a curriculum according to current research on the functional and academic requirements of high school students with significant cognitive disabilities and field test it on a qualified sample of educators who teach these students. Thus, a life-skills oriented curriculum focused on community-based life science (the readily tangible and observable) and tied to grade-level CCSS in English language arts and mathematics was crafted and subsequently evaluated by experienced high school special education teachers. The specific purpose of this endeavor was to address the following two research questions:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in English Language Arts (ELA), math, and science through a life-skills-oriented, community-based curriculum?
- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Overview of Research Methods

The first step in the inquiry process was to establish a curriculum model centered on a particular community. In this case, the Los Angeles south bay area was selected because of the richness of the local ecology of the southern California shoreline. CCSS ELA/Science (2010) and Next Generation Science Standards (CDE, 2013) were incorporated into the community-based program to create an integration of community-based life skills—competencies necessary to navigate this community—and related academic skills and knowledge.

The next step was to conduct a pilot study on the proposed inquiry based on the above research questions. This study was done with doctoral students of urban education who likewise researched Common Core State Standards and their application to students in a variety of contexts across many different settings. This was necessary to establish content validity of the procedure and interview protocols (Maxwell, 2013), and to adjust them according to recommendations made by the above-referenced doctoral cohort. The doctoral cohort viewed the problem statement, a summary of the literature, and the proposed methodology instruments: the initial survey, a curriculum sample, the evaluation form, and the interview protocol. A notable recommendation by the cohort was to select teacher participants already familiar with teaching in beach communities. Adjustments to the instruments were also made according to the recommendations of the doctoral cohort. These adjustments included the addition of items asking

teachers to define key aspects of special education, such as community based instruction and life skills.

The following step was to contact special education high school and middle school teachers recommended by administrators and colleagues, apprise them of the study, and ascertain their interest in field-testing a new curriculum. Those who agreed to participate were provided a representative cross section of the curriculum model in the form of a voiced-over PowerPoint presentation. This was delivered on a flash drive to special education teachers selected for their knowledge of and experience with SSCDs as well as their familiarity with the ecosystem of the local community. Prior to viewing the PowerPoint, the teachers first participated in a brief short-answer survey to ascertain their baseline experience and beliefs about teaching the targeted student population. Subsequent to completing and returning the survey, they received the PowerPoint presentation itself, along with a curriculum evaluation form to guide their responses to the content they studied. Finally, they were interviewed on their perceptions of the curriculum's overall utility to ensure the collection of thick, detailed data regarding the research questions. All teachers served students with moderate to severe disabilities. The majority of teachers in this inquiry sample (5 out of 7) were high school teachers; the 2 others taught at the middle school level. Per interview data reviewed in a subsequent section, one of the two middle school teachers had previously taught high school students with M/S disabilities. With the exception of one first-year teacher—selected on the recommendation of her supervisor due to her interest in the study, and her recent placement with the targeted student population—all teachers had taught students of the M/S population for a minimum of 6 years and a maximum of 20 years.

The last step was to collect all the data from the initial survey, the curriculum evaluation, and the teacher interviews in order to tabulate it. In this case, data tabulation called for a

synthesis of the survey data, a deductive summary of the interview data, an examination of the relationship between the survey data and the interview data, an identification of teacher perceptions of the proposed curriculum based on the complete data set, and a convergence of these perceptions into themes emerging deductively from the entire examination process (Merriam, 2009; Maxell, 2013). In sum, the research methods comprised a qualitative study based on a curriculum field test designed to help discern how best to satisfy the educational needs of SSCDs at the high school level.

Data Summary

The purpose of this section was to objectively present the data relative to this inquiry and organize it in a comprehensible way that allowed the selected research questions to be effectively addressed. Per Patton (2002), a systematic and thoughtful consideration of the acquired data is essential in order to properly fulfill the purposes of qualitative research (as cited in Merriam, 2009). Qualitative research methods were chosen for this inquiry in order to let educators provide their impressions of appropriate curriculum for SSCDs—referenced in schools as the moderate to severe (M/S) population—and to allow the data to emerge from those responses. In this report, the data summary began by addressing the first research question associated with the study: How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills-oriented, community-based curriculum? In order to explore this question, it was first necessary to establish whether or not teachers saw a correlation between Common Core and life skills.

Survey Data

Per Table 3, the trends that emerged from the initial survey were as follows: teacher beliefs regarding most effective programs for this population, their beliefs on general curriculum

access, teacher ideas about the suitability and/or adaptability of CCSS for the M/S population, teacher definition of life skills as related to community-based instruction (CBI), the role of setting in the learning experience, the relationship between CCSS and life skills, and the type of supports needed to make a positive impact on the education of M/S students. Because the research question examined the concept of relationship between the CCSS and essential life skills in terms of whether the former is accessible through the latter, the initial survey and interview data were reported according to teacher responses regarding this relationship.

Table 3

Teacher Background and Beliefs per Initial Survey

Survey Item/Teacher	Remler	Borsen	Branner	Elin	Dorado	Edwards	Anian
Years in Special Education	17	6	1	19	20	12	9
Current Program	SDC/Basic Skills High school	SDC M/S Life Skills High S.	SDC M/S Life Skills High S.	SDC M/S Life Skills High S.	SDC M/S Life Skills Middle S.	SDC M/S Basic Skills Life Skills Middle S.	SDC M/S Life Skills High S.
Experience Level with M/S	Medium	High	Medium	High	Medium	Medium	High
Most valuable program for target population	Life skills/ Functional academics combined	General curriculum/ Life skills combined	Life skills	General curriculum/ Life skills combined	General curriculum/ Life skills combined	General curriculum/ Life skills combined	General curriculum/ Life skills combined
Definition of Life Skills	Functional academics/ practical application Pre-vocational and vocational skills, practical living skills, social skills	Anything promoting physical and mental health; or economic well-being: street safety, shopping. cooking, money	Any skills or methods that assist students to be independent	Any skills or methods that assist students to be independent (house chores; transportation)	Skills needed to function in the real world (laundry, dishes, shopping, etc).	Integrate academic, personal, social, occupational skills	Skills that assist in becoming independent happy productive (hygiene, cooking, money use, transportation good nutrition).

Table 3, continued

Survey Item/Teacher	Remler	Borsen	Branner	Branner	Elin	Dorado	Anian
Definition of CBI	Involves mobility, social skills training, managing money and safety skills	Instruction outside the classroom involving student response to persons or environment	Anything that helps students function within society: safety skills, community signs, use of stores and facilities	Learning and practicing the skills within the student's communities: classroom peers, general school community, and wider community	Instruction in which students access community services to learn life skills	Considers dynamism of communities constantly changing, including physical, social, economic and political aspects	Applying/ practicing community skills in an authentic environment
Ideal Location of Instructional Program	Across a variety of settings that afford educational experiences	Across a variety of settings that afford educational experiences, as appropriate for each individual	In the special education classroom	Across a variety of settings that afford educational experiences	Across a variety of settings that afford educational experiences	Across a variety of settings that afford educational experiences	Across a variety of settings that afford educational experiences
Current level of CCSS utilization	School is in the process of aligning IEP goals to CCSS	No implementation at this time	Through IEP goals; selected from primary grade levels	In a highly individualized way based on student's needs/abilities,	Essential standards only pending more CCSS clarification	Minimal due to lack of clarity and resistance to excessive work load	Using a guide that has population-relevant academic and vocational corresponding to selected standards
Definition of Access to the General Curriculum:	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings	Exposure to the general curriculum and CCSS	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings	Engagement and/or exposure to the general curriculum and CCSS; some physical placement in general education settings
Description of Core Beliefs re: M/S students	Some students can progress in selected CCSS standards, depending on type of disability, supports and program provided	Some students can progress in selected CCSS standards, depending on the nature of the disability and the supports and program provided	These students cannot be expected to progress on the general curriculum	All students can progress in selected CCSS on the general curriculum with the proper supports and instructional approaches	Some students can progress in selected CCSS on general curriculum with the proper supports and instructional approaches	All students can progress in selected CCSS on the general curriculum with the proper supports and instructional approaches	M/S students should be included with typical peers in extracurricular activities

Table 3, continued

Survey Item/Teacher	Remler	Borsen	Branner	Elin	Dorado	Edwards	Anian
Supports or services to increase success for M/S students	More age-appropriate materials aligned with CCSS and more teacher training on standards-based curriculum design and delivery	More emphasis on student self-help and personal responsibility	More CCSS-aligned age-appropriate materials, teacher training on CCSS-based curriculum more student community service training, more focus on student self-care	More CCSS-aligned age-appropriate material, teacher training on CCSS-based curriculum community service training, student self-care and more technology tools	More CCSS-aligned age-appropriate material, teacher training on CCSS-based curriculum community service training, student self-care and technology tools	More CCSS-aligned age-appropriate material, teacher training on CCSS-based curriculum community service training, student self-care; technology tools	More CCSS-aligned age-appropriate materials, more tech-based tools to access curriculum content, more emphasis on student self-care

Question One: Survey Data Trends

All teacher participants believed that a life skills program is valuable for this population, with the majority of the teachers (5 out of 7) believing that the most valuable program for these students is a combination of life skills and general curriculum content. All teachers generally believed that life skills may be defined as those competencies that promote independent living and self-care out in the community, including vocational, living, and social skills. Most teachers conflated the definition of life skills and community-based instruction (CBI), stating that both involve learning to function as independently as possible (shop, cook, take transportation, follow street signs, practice personal safety) within their local community.

Only one teacher distinguished CBI from life skills, defining CBI as facilitating understanding of the shifting nature of communities in terms of their physical, political, and socioeconomic elements, which suggests a deeper awareness of the constituent aspects of the students' local area and how these may affect the lives of the students. In a subsequent interview, he explained that CBI relied upon experiences in the general community as much as collaboration with general education classes to provide learning opportunities with nondisabled peers as models. This concept of collaboration as a necessary criterion for authentic CBI, though

referenced in CBI-based research (Beck et al., 1994), was not evidenced in the definitions of CBI provided by any of the other teachers.

Consistent with their belief that a valuable program requires community-based life skills, the majority of teachers (6 out of 7) believed that locus of the instructional program should not be restricted to a single place. Even though they provided the bulk of their instruction in a separate "special day" classroom, they still believed that instruction should occur across a variety of settings according to the needs of the student within the student's local area of residence. The novice teacher was the exception. She believed that the ideal setting was solely the special education classroom, later stating in an interview that, in the classroom setting, CBI instruction could be safely and effectively simulated. In terms of educational settings, all teachers believed that access to the general curriculum involved exposure to the general curriculum and the CCSS, with 6 out of 7 believing that engagement in the general setting was also a potential factor in the access equation. The only exception was the same teacher—the novice—who viewed the special day classroom as the preferred setting. In a nutshell, all of the above points constituted areas of general agreement among all or most of the participating teachers. Their views on the topic of instructional setting corresponded to those of researchers who argue that the location should vary according to the multiple needs of the learner (Browder et al., 2006; Dymond et al., 2007).

At least three of the survey items returned more divergent responses. For example, the item questioning teachers' sense of how CCSS are being implemented drew a broad range of answers. One teacher felt that her district's guidelines on academic and vocational activities for students with M/S disabilities were well-enough aligned to the CCSS for appropriate standards to be selected and implemented, though her likewise participating colleague believed there was no real mechanism in place for CCSS delivery. Two teachers reported no evidence of CCSS

implementation at the time of this study. One teacher saw CCSS implementation as minimal due to teacher resistance stemming from lack of clarification and support. Two others, both from the same school, believed that CCSS would eventually be addressed through alignment with IEP goals. Both of these teachers, however, believed that the CCSS may not be appropriate for high schoolers with M/S disabilities at their actual grade level, a viewpoint that was also discussed at length in their subsequent interviews. Only two teachers believed that all students in the significant special needs population could progress in selected CCSS standards on the general curriculum with proper supports and instructional approaches, while three teachers felt that only some students could do so based upon the nature of their disability. Only one teacher—the novice—believed that the target population could not be expected to progress on the general curriculum to any particular extent. The divergent nature of teacher views on CCSS implementation and applicability is likewise reflected in the literature relative to the value of state standards in the development of curriculum for students of the M/S population (Agran et al., 2002; Dymond et al., 2007).

Finally, in terms of the supports necessary to ensure successful educational experiences for SSCDs, the results were also somewhat mixed. Only 3 teachers identified technology tools as essential, though the majority (6 out of 7) identified more age-appropriated materials aligned with the CCSS as a necessity. This is noteworthy considering that 2 of those 6 indicated that age-appropriate standards did not apply to this population. Six out of 7 believed that an emphasis on self-help was critical to student success, with one teacher believing it was the only critical support needed. Of the remaining 6, five believed that teacher training was critical, including those who initially felt that the CCSS should not be taught at grade level owing to the difficulty in helping SSCDs understand them. As pointed out by Browder and Cooper-Duffy (2003), many

teachers need to gain more experience and training in best practices for this population in order to increase their self-efficacy and hold students accountable to state standards. However, lack of proper supports often impedes the implementation of best practices (Ayres et al., 1994). Per their responses to the initial survey, teachers appear to realize the value of specialized training in creating alignment between grade-level standards and life skills-oriented programs of instruction for SSCDs.

The pre-curriculum evaluation survey reveals much information about teachers' beliefs regarding how, where, and what students with disabilities in the moderate to severe category should be taught with respect to life skills and Common Core State Standards. It also reveals their definition of appropriate content access and the supports they feel are needed to facilitate this access.

Question One: Interview Data Relative to Survey

To properly conduct this inquiry, it was necessary to speak with practitioners in the field of special education, notably those who educate the M/S population at the high school level. For the purposes of this study, interviews were conducted with 7 teachers from four school districts who have had experiences teaching high school students with M/S disabilities in a shoreline-adjacent community to determine their sense of the curriculum's overall utility in linking Common Core state standards with community-based life skills. The interviews were conducted in a semi-structured manner. This was done to ensure focus on the inquiry issue of access to the CCSS for students who also need a life skills-based approach, while at the same time permitting flexibility in the questioning style to capture the unique responses of each teacher interviewed (Merriam, 2009). The questions were formulated to help the respondents reflect on and share their beliefs, relative to their own understanding, about the needs and abilities of students in the

M/S population as a basis for approaching and implementing CCSS to teach them. Per Merriam (2009), the questions comprised various types including background and demographic, experience and behavior, opinion and values, and knowledge.

Provided in the subsequent sections of this chapter are content summaries of the interviews to help determine common threads as well as contrasting information. The first summary comprised the portion of the interview data relevant to the initial survey data and the first research question addressed in this study: How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills-oriented, community-based curriculum? Subsequently, the method of constant comparison (Corbin & Strauss, 2008) was used to allow for the emergence of general and specific themes, into which were eventually woven elements pertaining to the second research question regarding teacher perceptions of the curriculum based upon their evaluative statements.

For each interview, data were captured by iPhone voice-memo and abbreviated note-taking using a word processor. The pre-established interview protocol served as a guide, with probes added as necessary to stimulate episodic memory or the expression of additional details (Dere, Easton, Nadel, & Huston, 2008; Tulving, 2002, as cited in Merriam, 2009). To help unify participant responses and keep them focused on topics pertinent to the research questions, key statements were recapped and reaffirmed so they could more easily be linked to subsequent questions. Ideal position questions were also used to obtain insights into respondent knowledge and opinions (Merriam, 2009). Field notes recording impressions and initial interpretations were added in italics and incorporated into the transcriptions during and after the interviews. Below,

separate interviews were titled according to the name of the teacher interviewee; pseudonyms were used to protect the identities of the participating teachers and their respective school sites.

Interview one: Remler. Ms. Remler was interviewed by phone on May 30 from 10:10 to 11:00 am and subsequently on June 4 at from 7:45 to 7:57 a.m. to obtain clarification of a few minor issues raised in the first interview. Ms. Remler stated she was the special education department chair for grades 9 through 12 at Northwest High School and also taught the mild-to-moderate (M/M) non-diploma track (Identified by Ms. Remler as Level One) for grades 9 through 12. Though she did not teach students of the M/S population, her supervision of the educational programs and teaching for those students qualified her to participate in this study. She also had broad-based experience working in special day treatment programs for youth with severe emotional disturbances, and her total work experiences in special education comprised 17 years.

Based on the content of Ms. Remler's responses and the field notes, it was clear that the CCSS posed a huge challenge to her teaching and to that of her special education colleagues. In the first place, she did not believe the standards were meaningful for the M/S population: "A lot of what I've seen of CCSS math and ELA just has no relevance to those students at this time…They've had 9 years of training in the school district, and they're still not verbal or able to do a lot of functional things". Further, she stated that she found "no correlation between CCSS and life/functional skills", though she did believe the academic portion of the program could be aligned with CCSS. Basically, she felt the CCSS were not relevant to personal student needs especially as concerns the M/S population. Yet, she stated, "We know we have to align our objectives to [the CCSS]" and are "obligated to honor…whatever's in the IEP". But she lamented that "the district hasn't given any guidance" and was very concerned that her school

may have to create the academic program from scratch when the students arrive in 9th grade. To initiate the CCSS at the high school level, in Ms. Remler's view, is contrary to the purpose of Common Core, which is "to [incrementally] build up knowledge at each grade level, no matter where you come from". Because there was no training or consistency, she said that teachers were put in the confusing position of "picking and choosing" skills and standards.

When prompted to consider the possibility that teachers devise their own starting point, she immediately revealed that her school was beginning to examine standards for 9th grade students and would gradually extend the implementation of standards-based instruction to the 12th grade. To her, this meant using primary grade standards for the special education (SE) population at her school in order meet the students' current ability level: "We're looking at second grade because that's where the student is…so we're going to 2nd grade Common Core". However, she also stated that, "at the high school level, we start moving away from academics and start moving toward the functional". In context, this statement had particular application to the lowest functioning students—labeled as Level One at Northwest— who are "still not verbal, still unable to do a lot of functional things like hold a pencil". This statement seemed mitigated, however, by her assertion that "you can take any goal in CCSS and tie it into anything," for which reason she stated that she actually liked Common Core. The value of the Common Core/life skills alignment was also evident in her initial survey response, in which she indicated that the most effective program for the target population combines life skills with functional academics. However, the above-mentioned assertion was a bit confusing given her declaration that CCSS had no relevance or relationship to life skills for the M/S population, even though she specified that CCSS could be related to the academic portion of the program.

Ms. Remler's primary aim in providing instructional programs for the students of Northwest "is to make kids productive and responsible and be able to work…become productive adults…whether paid or volunteer, whatever it is, but to be productive." Ms. Remler's goals for the M/S population thus appeared to be directly associated with the utilitarian, Social Efficiency approach to education (Schiro, 2013).

Interview two: Borsen. Ms. Borsen was interviewed in person in her classroom at King High School on June 10 for a period of 37 minutes. She self-identified as a highly experienced education specialist and teacher of the M/S Special Day Class, grades 9 through transition, with six years of experience in her current position.

Per her interview statements, Ms. Borsen found significant merit in the application of Common Core State Standards to the M/S population. She disclosed that the CCSS training she had received thus far had been tailored specifically for the general education population, but did believe in relationship between Common Core and life skills for students with significant cognitive disability: "There's a parallel between the depth of understanding that we're looking for in CCSS and the depth of functionality of the knowledge in functional life skills. In both areas we're looking for deep understanding that can be applied". To a certain extent, based on her own experience and the general training, Ms. Borsen felt that she and her special education colleagues "have been doing CCSS-type teaching all along," but have simply been "much more narrow in our focus and much more interested in developing skills that students can apply". She wished that her school district curriculum advisors would help to organize a better community-based instructional program that would standardize the most important elements, but also accepted that "there will never be an ideal curriculum and every teacher is going to have to make some modifications…".

Though Ms. Borsen's interview statements are generally consistent with the information she provided in the initial survey, there were a few discrepancies that emerged relative to the basic themes of CCSS implementation methods and necessary supports. For example, she stated her belief that according to her training on CCSS, she had essentially been implementing the standards all along in a focused and narrow way in line with her students' educational needs. Her survey response, however, indicated that formal implementation was not occurring at the time of the study. Further, she mentioned that district advisement on general and CBI curriculum construction and implementation would be desirable supports, but focused on student self-help as an area of greater need in her survey response.

Interview three: Branner. Ms. Branner was interviewed by phone on June 12 at 7:30am for 27 minutes. She was a novice teacher who self-identified as moderately experienced in her role as an SE teacher of the MS population for grade levels 9 through 12 and worked at Northwest High School under the supervision of Ms. Remler. She was selected for the study because of her interest in the subject, her current M/S teaching assignment, and her perspective as a new teacher potentially open to a new curriculum approach.

With respect to the first research question, Ms. Branner did not see a connection between CCSS and life skills, consistent with her survey response to the effect that a stand-alone life skills program simulating community-based living experiences was the most valuable for her students. Yet, when asked if the curriculum *should* emphasize the connection, she replied that it should attempt to do so, though, in her initial survey, she responded that her students could not be expected to progress on the general curriculum. Contrasting her interview statements with her initial survey, it was noteworthy that, despite her core beliefs, she felt a variety of supports (excluding technology) could increase the likelihood of her students' success. Per Ms. Branner,

the desired supports included more age-appropriate materials aligned with CCSS, more teacher-training on standards-based curriculum design and implementation, more community service training for this population, and more emphasis on student self-reliance. All of this suggested her potential openness to expanding opportunities for her students with M/S disabilities by implementing a curriculum substantiated by services and materials she identified as critical.

Interview four: Elin. Ms. Elin was interviewed on June 4 in her classroom at Reginald High School for 35 minutes. She described herself as a highly experienced MS teacher in the independent life skills program (ILS) at Reginald. She had worked with the MS population for 19 years, including 14 years as a classroom teacher.

All data obtained from Ms. Elin showed consistency across her responses to items pertinent to research question one. She was very strong in her conviction that there was a connection between CCSS and life skills, and that curriculum should emphasize that connection: "[the connection] is not always obvious right on the surface, but when you look at the synthesized skills that any student is learning, it's going to have an effect on their life and their abilities to function". She believed that implementation of CCSS must occur in a highly individualized and flexible way, and the end goal was to make students independent. The steps toward this independence involved academic learning, in her view. Though Ms. Elin stated she was "not that up to speed" on CCSS, she believed that they "are much more [based upon] experiential learning and investigation and the procedure of learning than the standards we've used in the past" and opined that the more experiences the standards afforded as they were unpacked, "the more enriched kids' lives are going to be". She saw technology as key to helping students access content, along with more age-appropriate CCSS materials. She appeared to

speak confidently from the basis of her many years of experience working with the target population.

Interview five: Dorado. Ms. Dorado was interviewed on May 30 for 65 minutes in her classroom at Monroe Middle School, where she had served as a Special Day Class (SDC) teacher for 7 years, working mainly with 6th grade students in the M/S category. Her total work experience with the special education (SE) population encompassed 20 years, though much of that experience was with students in the mild to moderate (M/M) range. She described herself as moderately experienced working with the population specifically identified in this study.

Ms. Dorado's responses were generally very consistent across the survey and interview data sets. At the time of her interview, she explained that her district had not sufficiently in-serviced teachers on CCSS, much less on the design and implementation of a CCSS-based curriculum. She wanted to see more technology supports and general direction from the school district. Though she did believe that the most valuable program for the M/S population was one that combined the general curriculum with life skills, she said that her preliminary impression of CCSS was that the new Standards did not correlate with life skills. Her goal was to "get students ready for the real world," and academics were important only "as long as [they] tie in with life skills, because that's what's going to matter". Ms. Dorado elaborated on this by stating that, for some students, academic learning did not matter as long as they had a job, adding, "Our special needs kids—they're the best workers…they're the ones who take pride in their work; they're happy to go to work". Her statements, like Ms. Remler's, echo the Social Efficiency approach to instructional programs (Schirro, 2013), based on the premise that the main purpose of education is to prepare students for productive work.

Interview six: Bautista. On May 27, Mr. Bautista's interview took place for 65 minutes in his classroom at Southshore Middle School, where he taught a mild to moderate SDC class comprised of 6th graders. He was selected for this study because of his twelve years' experience in special education—notably his prior professional assignments teaching high school students with a variety of moderate to severe disabilities. He described his total experience level with the M/S population as moderate.

Mr. Bautista showed consistent responses to all items relative to Research Question One across the survey and interview data sets. He was adamant in his beliefs that CCSS are applicable to life skills and gave multiple examples of his viewpoint, including the following: "From the CCSS informational reading and science standards, we learn about plants and this [knowledge] can be applied by raising a vegetable garden, and [gardening] becomes a life skill because it's agriculture—a livelihood". To him, curriculum should emphasize the connection between general curriculum standards and life skills because "this is how students make sense of their combined learning experiences" (line 34). He felt that classroom learning experiences should simulate community involvements in order to ensure the safety and confidence of students once they attempted independent living in the larger community.

Mr. Bautista did not believe that CCSS were being implemented sufficiently in special education due to what teachers might perceive as confusing changes in teacher performance expectations, and a variety of challenges that may discourage them from working harder on CCSS implementation. He expressed the need for more CCSS-aligned, age-appropriate material; more teacher training; and especially technology access.

Interview seven: Anian. Ms. Anian was interviewed in her classroom at King High School on May 30 for 45 minutes. She described herself as a highly experienced M/S specialist

teaching a class with M/S disabilities in grades 9 through 12 at a lower middle class school; she had taught for five years out of the nine years she worked with the M/S student population.

Ms. Anian gave responses to all survey and interview questions that were consistent with her beliefs that Common Core and life skills are related and that Common Core can be embedded in a life skills-based curricular program: "There is a natural connection [because] you can be talking about things that are functional or vocational and incorporate reading standards and math standards, etc. within the content". Her primary goal for her students was to provide any and all skills that helped increase their quality of life and their independence. In her view, more student access to age-appropriate materials and technology tools were the necessary supports still lacking, as well as a greater curricular emphasis on student self-reliance.

Combined Survey/Interview Themes

According to the data obtained from the initial survey and individual teacher interviews regarding question one, the central and emergent themes are as follows:

- Teacher beliefs about relationship of CCSS to life skills
- The teaching of life skills within community-based instruction
- Applicability of CCSS to the M/S population
- Factors impeding access to CCSS
- Teacher goals for students
- Essential supports needed to teach CCSS to the M/S population

The above themes were addressed in light of teachers' perceptions of the proposed curriculum, in answer to Research Question Two: How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Question Two Data Summary

In order to align teacher perceptions with the above-mentioned themes, said perceptions—based on teacher responses to the curriculum evaluation form and total interview data—were summarized in Tables 4 and 5. In a qualitative study, this is done because patterns and themes from the perspective of all participants must be identified in an attempt to understand and explain them (Creswell, 2009, p. 199). Here, the data from both sources helped furnish descriptive information, advance new categories or themes, and bring to light hypotheses (Merriam, 2009) as to what constitutes appropriate curriculum design and implementation for high school students with significant cognitive disabilities. Table 4 indicates Likert scale responses of 1 through 4 where 1 represents "minimally", 2 represents "somewhat", 3 represents "mostly", and 4 represents "entirely") to curriculum evaluation criteria as presented on the curriculum evaluation form.

Table 4

Likert Data Summary of Responses to Proposed Curriculum Based on Evaluation Criteria

Curriculum Evaluation Criteria/Teacher	Remler	Borsen	Branner	Elin	Dorado	Edwards	Anian
"Big ideas" vs large number of topics	3	4	4	4	4	4	4
Scaffolding for distinct needs	4	3	4	3	4	4	3
Integrated skills, concepts	3	4	4	3	4	4	4
Ongoing formative assessment	3	3	4	4	4	4	3
Clear implementation guidelines	4	3	4	2	4	4	4
Application of UDL principles	4	4	4	4	4	4	4
Activities promoting community Involvement	4	4	4	4	4	4	4

High utility compared to other programs	4	4	4	4	4	4	4

Table 5 provides a verbal summary of the curriculum evaluation fill-in responses and interview content according to the prompts provided.

Table 5

Summary of Verbal Responses to Curriculum Evaluation Prompts

Curriculum Eval. Prompt/ Teacher	Remler	Borsen	Branner	Elin	Dorado	Edwards	Anian
Target population	M/M-M/S	From lower M/S to higher M/S	M/S students with reading and oral language ability	All M/S students except for the lowest non-verbal autistic	M/S depending on disability	Mostly moderate but also severe because of visuals	M/S with auditory receptiveness
Shortcomings	Need to address higher cognitive levels; hard to achieve in 1period	Specific to only one community ecosystem; requires adaptation	Some lessons are too long; too much language for some students	May cause scheduling problems if program is not self-contained due to multiple subjects	None, but should also be adapted for elementary	Confusing if not labeled for specific subsets of M/S population	Picture/text pages "too busy"
Preferred modifications	Modify CBI lessons to shorter periods and local area; include other ecosystems	Provide templates for other common ecosystems; Big pictures for lower students	Shorten written lessons and modify quizzes for some students narrowing response choices	Add text-only version for higher readers	Add more pictures with of comparable ecosystems	Add lesson plans for specific kinds of disabilities or severities; more animation and interactive options	Lesson content per page; organize by low, medium, high ability categories; incorporate sharing of experiences
Benefits	Extensions Adaptation Tying functional skill into CBI; Graphics	Organized to address core content and life skills tailored to CBI	Provides different ways to share knowledge; lots of visuals	Use of picture text to support life science curriculum; field trips	Colorful graphics and pictures; imbedded assessments	Picture support for reading; big ideas help to understand and make applications to real life	Personalized to students and their environment; emphasis on use of iPads
Potential influence on approach to CCSS	Provide guidelines for struggling teachers and use of CCSS at current grade level	Need more time reflection on CCSS to decide	Gives an idea of how to use CCSS	Shows how the standards can be adapted and imbedded in CBI so they can be applied to tM/S population	Follow the model. Examine CCSS standards, find out what regular ed students are learning, and adapt	Can help make CCSS more concrete and show how the standards can be modified	Activities can be used to address the standards given in our district guidelines

Table 5, continued

Curriculum Eval. Prompt/ Teacher	Remler	Borsen	Branner	Elin	Dorado	Edwards	Anian
Potential influence on school community	Collaborate across grade levels	Can bridge gap between SE (special education) and GE (general education)	May induce SE teachers to collaborate	More communication between special educators (SDC/ILS)	Discussion between GE and SE educators per above	Could be field tested at GE/SE meetings to facilitate mainstreaming	Increase collaboration between GE and SE
Supports deemed necessary for effective use	PD; Larger budget; CCSS training; More TAs/ Planning time; iPad	Realia/ iPad and iPad training for teachers; District-sponsored CBI	Manipulatives	Sample lesson plans, pacing plans, more suggestions for supplements/ enrichment	Color printers and iPads; PD	Teacher assistants, teacher training, supportive admin, iPads	iPads, computer access, funding for CBI outings, more adult assistance in small groups
Perceived effect on student's quality of life	Improved educational foundation for students of struggling teachers	Extended student engagement in academic activities	Improved environmental awareness and independence within community	Increased opportunities for independence/ life/academic skills needed in community	Based on continuation of family support	Increased independence within community through life skills integrating academic and social skills	Increased potential to be independent productive, happy members of society

According to the information provided in Tables 4 and 5, additional themes emerge:

- Curriculum model's perceived benefits
- Teacher recommendations for improvement
- Required conditions for successful implementation
- Curriculum's influence on teaching practices and school community

With respect to these themes, the Likert data from Table 4 was first summarized. Subsequently, all relevant data from interviews and evaluation forms, summarized in Table 5, was organized and exemplified according to essential categories emerging from the themes (Maxwell, 2013; Merriam, 2009).

Research Question Two solicits answers based on teachers' perceptions of a proposed curriculum that emphasizes the integration of life skills and Common Core standards in ELA, math, and life science. Teachers generally responded positively to the curriculum model. All

teachers believed that the integration promoted understanding of the CCSS, with five teachers believing that it did so strongly. All teachers believed that the model was usable and preferable in terms of the application of UDL principles, learning activities that promoted the student as a contributing community member, and content centered on thematic big ideas versus a large number of unrelated topics. Scaffolding for individual needs and embedded assessment opportunities were found to be either entirely or mostly present within the curriculum. In addition, 5 out of 7 believed that the curriculum strongly included clear guidelines for implementation. One of the most experienced teachers believed that sample lesson plans and pacing plans were missing from the guidelines. But overall, the proposed program was generally found to contain those elements consistent with essential state and special needs criteria for program effectiveness (Browder et al., 2006; CDE, 2013) based on most participant responses.

Thematic Categories

In the following sections, summaries are provided according to thematic categories derived from the synthesis of all data organized into the aforementioned themes and related to both research questions relevant to this study. These final categories are as follows, and utilize the terms *curriculum, model,* and *program* interchangeably:

- Teacher perceptions of curriculum's strengths
- Perceived curriculum omissions
- Potential impediments to curriculum implementation
- Program impact on teacher approach to Common Core
- Program impact on school community

Teacher Perceptions of Curriculum's Strengths

The proposed curriculum interrelating CCSS ELA, math, and life science with functional life skills imbedded in community-based instruction was found to have particular strengths in facilitating learning and teaching for students of the M/S population based on the connectivity of the above-mentioned components.

Facilitation of learning. All teachers felt the curriculum could effectively serve and engage students of the M/S population with particular application to those students capable of reading and using oral/receptive language. The visual component was apparently a strongly favored element in facilitating content access and reducing cognitive overload, a viewpoint also corroborated by current research (Downing, 2006). For example, Ms. Elin believed that even the students with autism who are non-verbal and the lowest performers could benefit because "…you can modify how you use it—with skills as basic as matching and sorting…and you can still be using items and pictures from the curriculum". Most teachers saw the visual representations and picture-supported text as opportunities to boost learning for this group. In the words of Ms. Remler, "Because of the way it's laid out with the visuals, with color and clear graphics…students would respond favorably". Ms. Dorado commented that she "loved the pictures and the way they tied in so much with the curriculum". Later in the interview, she added, "Many students within this population do not have the opportunity to actually see the concepts associated with the standards, but "if you have the pictures for them, and when they see it, and you have that color for them, they say—oh, that's what it is…they'd be more interested". Ms. Branner stated that the "real life photos would help them understand and recall the topics". Ms. Anian commented on the iPad as a particularly advantageous visual tool for motivating her students: "It's so awesome that [the curriculum is] incorporating the iPad—I just love the

technology". Ms. Anian's response to the technology component appeared to justify the technology provision made by the Common Core State Standards Initiative to ensure access to the general education curriculum and the Common Core State Standards (2010).

Many teachers also perceived an advantage for students in terms of the connection made between CCSS and life skills-oriented community-based instruction. Six out of 7 teachers saw the application of life skills to CCSS-oriented instruction regarding the local community environment as an enhancement to student learning as well as interest. Ms. Borsen qualified this as follows: "[The curriculum] would hold "very high interest for most of my students because it's very much tailored to what we do a lot, which is CBI—going into the community, discovering everything around you." Ms. Elin noted, "There are a lot of opportunities for field trips to work on the [life science] skills in the natural environment". She also pointed out that the curriculum included a lot of other subjects relevant to the students' lives, citing health education, nutrition, and weather—all of which were tied to the standards as well as CBI. In Mr. Bautista's words, "the curriculum started big and zoomed in to make things clearer and it's sort of a deductive approach. There's a lot of interactivity". When prompted to clarify this statement, he responded, "When you are there at the pier, you see what's there and see the food chain and the energy pyramid, and you go deeper and deeper". He believed that "students learn life skills with high motivation while they study the community because it's all about them and the natural environment". Similarly, Ms. Anian stated, "It's good to personalize [the curriculum] to the environment the students are going to be in". These responses were consistent with the views of researchers stating that critical learning experiences should be integrated and tied to relevant situations and places (Barab & Roth, 2006; Browder et al., 2006; Jackson et al., 2008; Tyler, 1949).

Besides discussing the general benefits of the curriculum, teachers also focused on particular students for whom the program could afford special opportunities. Mr. Bautista and Ms. Anian identified those students who were "hands-on," highly exploratory learners—those who needed to go out into the community to experience firsthand the concepts they were studying in class, including elements of the local marine ecosystem. Ms. Elin identified a student who understood the science curriculum but had trouble reading: "He has the intellectual ability to understand it [science] but doesn't quite have the decoding to read it, so the decoding slows him down but I think the picture-supported text opens up his access to the content". Similarly, Ms. Dorado revealed, "I do have some kids that are higher in their disability range and are considered M/S but I can see that this [picture-supported text] would totally benefit them and help them read". For her part, Ms. Osborne identified a student who had a high interest in technology and would be engaged "just by the style of the presentation…and the use of photographs that would reflect the actual community setting".

In sum, the color graphics aspect, the use of iPad as a learning tool, and the connectivity between life skills and CCSS-related learning opportunities within the local community were seen by most teachers as advantageous for students with M/S disabilities. Furthermore, most teachers believed that the multi-faceted community-based instruction would lead the students to a more productive, fulfilled, enjoyable, and independent life within their community of residence.

Facilitation of teaching. Throughout the data sets, potential advantages for teachers using the curriculum were also identified in terms of its content framework and guidelines for implementation. The stated advantages match several of the state criteria for curriculum design with respect to implementation of CCSS (CDE, 2013).

Content organization and structure were seen as benefits. Ms. Borsen explained as follows: “From the teacher’s perspective, to have an organized curriculum that [combines] the CCSS and functional life skills is just a great boost in terms of planning.” In like manner, and in line with education experts, 3 teachers perceived the variety of skills embedded in the study of one concept or big idea as conducive to more effective teaching and comprehensible learning experiences (Stein et al., 2001; Tyler, 1949). Ms. Remler stated, “I liked how one idea [the pier] incorporated a transportation piece, maps, money, and lots of other functional skills. I liked how that was broken down”. Ms. Elin similarly stated that the curriculum helped organize teaching in a meaningful way because “it gives a structure to the activities…you’re not just taking a field trip…to go shopping, but you are learning to use transportation to take a field trip to explore the ecosystem…”. Ms. Anian thought the hands-on aspect made it easier to “crystalize or concretize the more abstract standards”, a viewpoint that Mr. Bautista shared. Periodic comprehension checks or quizzes embedded in the content structure were viewed by all teachers as mostly or entirely effective in providing ongoing formative assessment. Thus, teachers identified several structural elements that could potentially make teaching easier and more effective.

Other advantages were perceived in terms of content delivery facilitation. Ms. Remler believed that the extensions and modifications provided added instructional assistance for teachers. She felt that the curriculum was particularly useful in that it could give struggling teachers the necessary guidelines to help students process the content at different levels of ability: “Students who are not taught by good teachers would be given a foundation”. All teachers indicated that the curriculum was generally easy to understand and utilize. Ms. Borsen felt that it constituted “an excellent model: clear, engaging, and relevant to our population”. Per

the above comments, teachers communicated their sense of how the model's structure could facilitate teaching.

Facilitation of goals for students. As indicated on curriculum evaluation forms and in several interview comments, most teachers generally believed that the proposed curriculum could help students attain educators' goals for them. Three teachers felt that eventual independence was critical to the well-being of their students and thought that the proposed model could help students understand their environment and be contributing and/or independent community members. Ms. Borsen, who believed that personal responsibility was a key goal, remarked that students would more likely remain involved in academic activities owing to the "engaging tools and supports", which would allow for more effective instructional time leading to the accomplishment of learning goals and objectives. Teachers Remler and Dorado emphasized the acquisition of job skills and employability as their goals for students, though they did not indicate that the curriculum could assist students to that end.

Perceived Curriculum Omissions

The data collected in this study brought to light the need for various additions, adjustments, and conditions for the effective use of the curriculum according to the viewpoints and experience levels of participating teachers. The recommended criteria were additional lessons targeted for specific ability or interest levels, timing adjustments, and the inclusion of additional learning modalities. All of these recommendations are seen as valid in terms of the flexibility and accommodations called for in the Common Core State Standards Initiative (2010).

Adjustments for varying ability levels. Six out of 7 teachers believed that the curriculum could be improved by including additional lesson plans and activities for widely varying ability levels within the M/S category. Mr. Bautista felt that the lessons should be

labeled according to the specific subset of the population they were targeting to ensure that the functional and academic needs of all students were met. In a similar vein, Ms. Anian felt that there should be a high, medium, and low version of the lessons presented; Ms. Elin believed that there should be more academic content with more text or text only for the higher functioning students, more emphasis on CBI and independent living for the lower performing students, and specific lesson and pacing plans to illustrate how the content may be taught. Ms. Remler and Ms. Borsen thought the life science aspect of the curriculum should be extended to include exposure to other ecosystems for higher level students; Ms. Dorado believed that the local beach ecosystem concept could be expanded to include comparison to other types of beaches within California or between states. However, she also believed that the life skills portion of the curriculum required more emphasis than the academic portion, and that academics had merit only insofar as they tied in with life skills: "What's important for this population is getting them ready for the real world…learning their money skills, taking public transportation, knowing how to go to a grocery store and what's on the list…that's what's going to matter". In her view, the academic basis of community learning experiences "really doesn't matter for some kids as long as they [can] have a job". Ms. Branner believed that the assessments should be modified to narrow the range of choices for some lower-performing students. According to all teachers, lesson adaptations were necessary to satisfy the individual or subgroup needs of students with M/S disabilities based on teachers' perceptions of their specific learning requirements.

Timing adjustments. Three out of 7 teachers thought that lessons would need to be time-adjusted in order to make the curriculum more serviceable. For example, Ms. Remler thought most CBI lessons should be modified to comprise shorter lessons within a more local area surrounding the school site so that they could be at least partially achievable within time

period constraints. Ms. Branner and Ms. Anian also wanted to see shorter written lessons with less content per page; to this effect, Ms. Anian stated that "the picture text/pages are busy" and needed more spacing and time allowed for each part. Ms. Elin pointed out that, owing to the inter-disciplinarity of the curriculum, it would need to be administered in a self-contained classroom to avoid timing problems and scheduling conflicts with teachers of separate disciplines. She perceived this as a disadvantage, however: "I don't want [the life skills class] to be a self-contained program, so when you are using a thematic unit that goes across all your subjects, it gets complicated to administer if you don't have the same students for ELA as you do for science". Furthermore, Ms. Elin mentioned that, because her high school used block scheduling, it might be difficult to see the students every day and maintain the flow of the program. She felt the curriculum lacked a pacing plan and time implementation time frame. All of these issues meant teachers would have the added challenge of figuring out how to pace the content and its delivery to implement the curriculum efficiently.

Additional learning modalities. In the portion of her interview discussing the most desirable curriculum for students of the M/S population, Ms. Borsen specified multiple means of learning. Besides a strong visual component to engage her students, she explained: "My students respond very strongly to music. Some are hands-on. Each concept…needs to be presented multiple ways. We sing it, sign it, we have a lot of different ways of approaching the same ideas". In the context of this study, her response is taken to mean that performing arts and modalities other than those addressed in this curriculum should be considered for inclusion in the proposed curriculum to make it more applicable to a broader range of learners.

Potential Impediments to Delivery of Proposed Model

In their evaluation and interview responses, some participants also shared their ideas on home issues and school-based obstacles that might limit or impede the fully successful implementation and outcomes of the proposed curriculum model. On the school front, the impediments were perceived as gaps in administrative guidance and services, and lack of sufficient technology, instructional materials, and personnel.

Home support issues. Both Ms. Dorado and Ms. Remler expressed the idea that family support played an important role in the successful utilization of the curriculum in terms of student outcomes. Ms. Dorado stated that successful results depended greatly on student home reinforcement. She believed that, if the family did not follow through with the curriculum lessons or goals and continue working with the students by providing home-based support, "all this will go to waste… and this is true of any curriculum". Ms. Remler explained that some parents did indeed "ask that we continue with academics all the way up to graduation", but then also expressed her concerns: "Some families are not sufficiently supportive and many just want their kids to be taken care of at school. They don't necessarily follow through at home". In her view, this problem decreased students' motivation, which, in turn, impeded them from learning core functional academics over extended periods of time. Citing lack of family assistance in the proper use of money for personal shopping as an example, she said, "Many are used to getting whatever they want, so they don't worry or care about money". These teachers felt that the overall success of the curriculum was at least partially contingent on family backing. This opinion was not found in the literature reviewed for the purpose of clarifying this study.

School administration gaps. Several teachers of the M/S student population identified a lack of familiarity with CCSS because of insufficient information, administrative guidance, or

training that may undermine teacher confidence in the use of a CCSS-oriented CBI curriculum. Pending receipt of some guidance from her school or district administrators, Ms. Dorado shared her impressions of implementing a CCSS-based curriculum thus: "Once we know where we are headed [with CCSS] it will be easier for us as teachers to know what we are doing. Ms. Borsen--in her concern over how to apply the proposed program to other contexts or settings more apropos of her students' own community, and the "extensive" work this endeavor might entail—stated, "I would like training in how to deliver [the curriculum] and as much direction as possible in how to customize it…Our beach here is very different…When I have seen curriculum from other places, I wonder, why doesn't my district have one specific to our own community?" Mr. Bautista was concerned about curriculum implementation success in the case of M/S teachers who lacked familiarity with CCSS due to insufficient administrative knowledge or support. By comparison, Ms. Elin said that the administration had not addressed the CCSS in any training specifically geared for high school special education teachers, which would curtail the likelihood of new curriculum design or implementation on the part of special educators.

Ms. Remler believed that her district had not tackled the organizational issues involved in planning the design or implementation of a CCSS-based curriculum for the special education population throughout the grade levels. "As a teacher," she said, "I've had to struggle the whole time teaching this population because there is no direction in curriculum". She had a difficult time sorting out how CBI experiences—including those in the curriculum—could be tied to the Common Core academic standards, especially for the lowest performing students without previous CCSS background knowledge from earlier grades: "Could a [CBI experience] be tied to the CCSS as an academic standard? That's what I don't have the training in, to know how to do that".

Though the curriculum she evaluated contained lesson activities designed to bridge the CCSS/CBI gap, Ms. Remler still felt she was missing the professional development necessary to make the connection. Because her school separates special needs learners into four distinct levels or groups, it was difficult for her to determine what aspects of the proposed curriculum may apply to each: "For some students, some kids will just be able to get on the bus. Others will be able to handle the more academic parts. Other students will want to know about animals that live down by the ocean shore. She believed "there is a varying degree of students and learning styles" needing to be addressed. It seems that general uneasiness with Common Core adaptation due to district-level gaps in teacher training and customization of instruction for students who comprise the M/S population was strongly seen as a potential obstacle to smooth implementation of the recommended curriculum. Deficits in the provision of administrative guidance for SE educators constitute a common theme in the literature regarding teacher challenges in meeting the learning requirements of SE populations (Agran et al, 2002).

Lack of technology tools. Most teachers stated that they needed additional technology to implement the curriculum appropriately. The most commonly desired tool, in 5 out of 7 cases, was the iPad, along with teacher training for its proper use. According to Ms Anian, "It's a roadblock that I don't have iPads for all of my students, which I would love to and I would hope to in the future. So hopefully…the curriculum is directing us toward [the iPad] because it gives [the curriculum] multipurpose to utilize a tool like that". Ms. Remler, who shared her belief that there was little alignment between CCSS and life skills, felt that the alignment could be facilitated with the responsible use of the iPad. She suggested that, if this instrument were made available to students, it would cause teachers to think differently about planning.

The technology issue was discussed in other ways as well. For example, Ms. Dorado also mentioned colored printers: "If we can't copy the [curriculum binder] lessons in color, it's not going to be useful…students understand more because of the colored pictures that are there." For emphasis, she stated, "If we can't…do it the way you presented it, what's the use?" Mr. Bautista felt that more animation and interactive options for clicking and activating images, as well as voice-over curriculum content, would also be more helpful for students in terms of providing access to content. But, in contrast to the other teachers, Mr. Bautista believed that the basic content of the curriculum "can still be done more simply according to the school's limited resources. He did not see the absence of technology as an impediment to the curriculum's overall utility because he believed the concepts could still be made accessible through hands-on learning experiences and thematic teaching across the curriculum. Though Ms. Branner did consider the use of technology as a life skill for some, she stated that, "for others, it wouldn't make much of a difference in their lives." She instead preferred to have more classroom manipulatives for her students.

Insufficient support services. Various support services were seen as desirable in order to implement the curriculum more effectively. At least 4 teachers indicated that their school districts should provide more professional development in utilizing the CCSS. Two teachers felt that more teacher assistant support and training were necessary. Two teachers believed that more funding should be allocated for CBI outings. Only 1 teacher identified a need for more adult assistance to help facilitate small group instruction. All of these desired services were seen by teachers as potential ways to boost their confidence levels and capacities for properly teaching a combined general standards and life skills-based CBI program (Browder & Cooper-Duffy, 2003).

Program Impact on Teacher Approach to Common Core

According to interview data, 6 out of 7 teachers indicated that the proposed curriculum exemplified how the CCSS could be used for the students that embody the M/S population at the high school level. Ms. Elin and Mr. Bautista believed the Standards could easily be imbedded in CBI, and Ms. Anian believed the CBI activities could be used to address the standards specified by her school district. Most teachers believed that the model demonstrated how grade level standards could be modified and made more concrete for M/S students. Ms. Branner, the only novice teacher, initially did not find the CCSS particularly relevant to her students, but eventually stated upon further reflection: "I think it gave me a pretty good insight as to how to do it [approach the Common Core]. It's hard to do it on your own—the CCSS are so broad…they give you a lot more flexibility, but seeing the curriculum gives me an idea of how to use the CCSS". Later in the interview, Ms. Branner went a step further, commenting that the model could influence curriculum development:

> [This program] opens my eyes to the fact that we can create a curriculum that can follow CCSS, that can at the same time teach our students something that will make them well-rounded and give them the exposure and also give them life skills we can incorporate in each lesson.

Ms. Remler, who teaches at the same school as Ms. Branner, had an entirely different response as to how the curriculum influenced CCSS implementation. According to her, the model showed how to take a standard apropos of an M/S student's actual grade level and adapt it to the student's ability level, as different from her school's typical method of using primary grade standards for students of the M/S population:

> When we get students in from middle school, they're at a second grade level, so we're taking the Common Core from the second grade level and we're building on that even though the student's in 9th grade. But this curriculum model does it the opposite way—an approach I will share with my team".

The latter statement appeared as a "breakthrough," given that the school's customary approach of basing the educational program of students with M/S disabilities on primary grade standards was at odds with the research recommending the selection and adaptation of grade-appropriate standards for the educational benefit of students within this population (Browder et al., 2006). In addition, Ms. Remler revealed that the model's guidelines would assist teachers in "how to do the [academic] extensions, to focus on other areas of learning and come away from just the functional skills".

Ms. Elin provided the following explanation of how the model influenced her approach to CCSS:

> I think what would help is that the CCSS are written, and [the curriculum] shows how you can synthesize the standard and how you can find out the essential part and how the kids can access this. Otherwise, it's too easy to say that this doesn't apply to me and do things as we have been doing right along. These CCSS shake things up and force us to take a fresh look at things.

Ms. Elin also remarked, "I think a lot of people tend to look at [CCSS] from the view of the general education high school teacher and look at the skills and just say offhand, 'These kids can't do that,' but…it's just a matter of structuring it the right way".

Most teachers believed that the model helped to show how the CCSS could be incorporated into the instructional planning and curriculum delivery processes for the students

who embody the M/S population at the high school level. The proposed model, largely based on a combination of aforementioned state and special needs curriculum standards (Browder, 2006; CDE, 2013), may therefore offer a potentially effective way—as yet undocumented in current research literature--to incorporate CCSS into a life skills-oriented CBI program.

Program Impact on School Community

In terms of teacher's perceptions on how the curriculum model might influence the school setting beyond the individual teacher's classroom, all 7 teachers believed it could potentially help foster increased communication among colleagues. This point has significant merit in the literature. According to research scholars of special education, collaboration is essential to properly implemented CBI (Beck et al., 1994). Also, a well-run SE program involves preplanning instruction in accordance with UDL principles, and blending the knowledge, skills, and pedagogy foundations of special and general education domains (Bellamy et al, 2002; Browder et al., 2006) while upholding the distinct characteristics of each (Bellamy et al., 2002). Seemingly aware of the benefits of professional interaction, teachers discussed the potential school-wide impact of the proposed program mainly from the perspective of collaboration.

Collaboration between general and special education. Most teachers thought the curriculum model could facilitate more communication between general education (GE) and special education (SE) to increase the likelihood of successful learning experiences and outcomes for students with M/S disabilities. Ms. Borsen believed that, in the future, "…when the administration says we need M/S teachers to take on CCSS…"[the curriculum] would give us something very concrete to show our colleagues in general ed: this is what we are aiming for—this is Common Core—do you have units that you can connect to what we are doing?" Ms.

Anian, a colleague of Ms. Borsen, likewise felt that the curriculum could be incorporated into the lessons taught in general education, notably the life sciences, and that the general education teachers could help supplement the content. She was very enthusiastic about this idea, owing to her experience with her school's "Best Buddies" program that already provided a structure for GE and SE collaboration, which she thought could be enhanced by a formal M/S curriculum. Ms. Dorado commented that the curriculum would prompt her to find out what her general education colleagues were teaching and instruct those concepts, though she stipulated she would focus more on CBI—an approach consistent with her previously stated beliefs that academics only had merit as long as they tied in with CBI-based life skills.

Mr. Bautista elaborated on ways the proposed model could potentially be used to effect collaboration between general and special education teachers on a school-wide basis. He recommended introducing it at a faculty meeting and suggesting more participation in CBI by the typical population. Following this initial step, he advised gradually inviting small groups of general education teachers into the SE classroom to observe its implementation. "Once people are familiar," he advised, " you can do a presentation and provide training to have more participation from the typical population…The general educators would be more willing to collaborate if they understand what or how these students are able to learn". He also opined that, since the curriculum was based on CCSS and tended to make the standards more concrete, it would be easier to mainstream students into regular education settings since they would be more inclined to understand the general curriculum.

Collaboration among special education teachers. The other participants also believed that the curriculum could bring about collaboration, but only among special educators. Citing low status and administrative support deficits, both Ms. Remler and Ms. Branner felt the special

education department was not welcome enough on the general high school campus to pursue school-wide collaboration, though they thought the special education community might work together to implement it. Yet Ms. Remler's phrasing was tentative: "Your [special education] teams would have to collaborate, certainly—and we have been trying to do this for years—collaborate down to preschool and show them the continuum and what it looks like in preschool through elementary, middle, and high". Per Ms. Remler, collaboration was necessary for students to benefit fully from a CCSS-based curriculum, but had been historically unachievable according to the broad-based criteria she envisioned.

Ms. Elin thought that time constraints and teaching demands determined the degree of collaboration possible. She commented that there was a bit more flexibility for collaboration within the SE community at her school than with GE, which she said was overwhelmed with testing requirements and college preparatory material. She explained that at least one SE teacher had helped create science programs for the mild to moderate (M/M) population, and that this teacher had more freedom to conduct some curriculum activities with the M/S population, "though not much because of the material she needs to get through…in meeting the criteria for junior colleges". Thus, special education teachers were aware of the benefits of helping each other achieve curriculum implementation, though the organizational structure needed to support collegial work was still lacking.

Conclusion

This chapter categorized and reported the qualitative research data gathered from initial surveys, curriculum evaluation documents, and post-curriculum evaluation interviews administered to special education teachers of the moderate to severe population. The purpose of

the endeavor was to determine the feasibility and utility of a curriculum merging Common Core State Standards with life skills-oriented community-based instruction.

As documented, most of the teacher responses to the inquiry were addressed in the current literature relative to the research questions posed in this study. Many of these responses contained premises that were upheld by the research community, while a few were unfounded or uncorroborated. Premises corroborated by the research included the need for more teacher training, technology, instructional materials, collaboration, and administrative support to design and/or implement a curriculum model comprising the above elements and sufficiently customized to meet the needs of highly individualized learners. Also corroborated in some cases were teacher notions of effective curriculum comprised of such components as "big ideas" blended with daily life skills within CBI, and clear guidelines for implementation that allowed for standards to be exemplified in recommended CBI activities. The premise that home support levels may determine student achievement outcomes was not found in the literature utilized for this study. Premises at odds with much of the literature include some beliefs that general, grade level-appropriate standards are not applicable or relevant to the students of the target population; and in one case, that the special day classroom devoid of technology tools is the most appropriate setting for these students. These premises may be based on teacher beliefs; they may also be conditioned by study limitations—further discussed in the next chapter—which prevented the clarification of how CCSS may be applied to the M/S population.

In the final chapter, findings are summarized and discussed. Potential reasons for teacher viewpoints as well as some inconsistencies in teacher perspectives are addressed. Curriculum merits and deficits, in light of study limitations, field test feedback, and characteristics of the

targeted population are also presented. Implications derived from the findings are provided along with recommendations for future studies.

CHAPTER 5: DISCUSSION

Restatement of Problem

California's recent adoption of the Common Core State Standards (CCSS) and documents affirming their application to students with disabilities (CCSS Initiative, 2010) demonstrates that all students deserve meaningful access to core general curriculum standards according to the California Department of Education (CDE). High school students with significant cognitive disabilities—classified as the 1% or moderate to severe (M/S) category—are also entitled to progress in the general curriculum even as they may be simultaneously engaged in life skills-oriented, community-based instruction with the goal of eventual personal independence.

The CCSS initiative is the latest of several government interventions designed to increase educational outcomes and performance levels of students with disabilities, including such legal mandates as the Individual with Disabilities Education Act (IDEA, 1997; 2004) and No Child Left Behind initiative (NCLB, 2001). IDEA stipulates that all students with disabilities have the right to access, participate, and progress in the general curriculum along with their non-disabled peers (Benner, 1998; Yell, 1998; Yell & Shriner, 1997). NCLB established yearly progress expectations stipulating that all students, as well as those in the M/S category, be evaluated in the academic content standards of ELA, mathematics, and science at interim grade levels through the high school level (Browder & Cooper-Duffy, 2003). All of the above measures have been instituted to counter the concept described as the underestimation of disability leading to lower expectations for students and lack of access to a meaningful education (Campbell, 2008; Hehir, 2002).

Even though high school students in the M/S category are represented in the government interventions designed to help them access the general curriculum, they may not actually be progressing in it (Hitchcock et al., 2002; Wehmeyer, et al., 2003). The CCSS Initiative does not stipulate how standards must be taught to any population, and this may cause particular confusion and disagreement among educators regarding how to effectively serve the M/S population (Dymond et al., 2007; Ryndak et al, 2008). Research shows these students are capable of academic learning, although they may be limited by programs which overemphasize life skills and are devoid of academic focus (Browder et al., 2010). Yet, life skills can be incorporated in the general curriculum across various settings and contexts that are relevant to learners within the M/S population, notably their own community (Browder et al., 2006; Dymond, 2007; Jackson et al., 2008). It is, thus, arguably desirable to integrate CCSS with life skills contextualized within local community-based instruction (CBI).

For high school students with M/S disabilities to have greater life opportunities associated with CCSS competencies, various essential criteria must be attained. Such criteria include: teacher collaboration across general and special education (Cawley et al, 2002), flexibly formatted instructional supports consistent with the principles of UDL (Hitchcock et al., 2002), strong teacher beliefs in the value of such efforts associated with high levels of teacher training and self-efficacy (Bandura, 1977; Lee et al., 2006), and an age-appropriate curriculum in which relevant Common Core standards are interwoven with life skills practiced across local ecological settings of specific value or interest to the students (Lee et al., 2010). Such a curriculum, based upon ecological theory, would permit thematic instruction featuring a high degree of meaningful connectivity to relevant persons, places, and situations as opposed to a series of non-related activities and loose pieces of information (Barab & Roth, 2006; Tyler, 1949). Because educators

exhibit a lack of shared understanding on how to meet the above criteria such that the target population may progress in the Common Core State Standards as they acquire essential life skills, more research must be conducted on ways to design and implement an effective curriculum for this population (Browder et al., 2007; Dymond et al., 2008; Wehmeyer, 2006).

Review of Purpose and Research Questions

Designing pertinent, research-based curriculum for students with significant cognitive disabilities (SSCDs) and then field-testing it on educators with experience teaching this population were the major goals of this research. A thematic program was created with the objective of tying selected Common Core ELA/math/science and Next Generation Science Standards (NGSS) to life skills contextualized in CBI. The Los Angeles-area south bay was selected as the focus community because of the rich ecological environment and commercial enterprises this area offers for learning life skills and life science through the application of adapted general curriculum standards. Curriculum was sectioned into interrelated thematic units. Each unit included a scope and sequence section with lesson activities featuring specific learning objectives aligned with CCSS and life skills, as well as extensions and adaptations. The content was focused on the subset of learners with M/S disabilities who function at the concrete or abstract symbolic reading level and who often have reduced oral language, yet comprehend more than they can verbalize. Such students require pictures, objects, signs and symbols to access the meaning of reading material (Browder et al., 2006; Wehmeyer et al., 2001). For this population, technology is useful to exemplify and enhance unit content (Gardner et al., 2003). Therefore, all curriculum content was provided in the forms of picture-coded text and iPad slide presentations.

This curriculum project, ultimately titled “My South Bay Community,” was generated to address two research questions:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills-oriented, community-based curriculum?
- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Methodology Overview

Upon its completion, a representative voice-over PowerPoint sample of the curriculum was created to enable a pilot study of the proposed inquiry and subsequently a field test. A brief initial survey combining multiple choice and Likert scale questions was created to collect baseline data on participating teachers' background experiences and beliefs regarding education for high school students of the M/S population. Other instruments created for data collection purposes included a curriculum evaluation form to guide the PowerPoint review and an open-ended protocol to facilitate post-evaluation interviews. These interviews were conducted to obtain rich descriptions and compare information among data sets. The research instruments facilitated a qualitative study based on a curriculum field test designed to help discern how best to satisfy the educational needs and interests of SSCDs at the high school level.

The initial phase of the inquiry, consisting of the pilot study, was conducted on a cohort of doctoral students engaged in researching Common Core State Standards with application to urban schools. The purpose was to establish content validity of the research procedure and interview protocols according to Maxwell (2013), and to make adjustments for clarity and suitability to the research purposes. Members of the doctoral cohort recommended that the field test sample (high school and middle school teachers of students with M/S disabilities) be selected based on familiarity not only with the target population, but with the south bay ecosystem as

well. Further, they recommended expanding the initial survey items to include participants' definitions of life skills and community-based instruction for comparison's sake.

The curriculum field test was conducted on a sample of 7 educators with experience teaching the target M/S population within a beach community. These participants were referenced with pseudonyms throughout the study. With the exception of one novice, all had between 6 and 20 years teaching experience. Four teachers taught high school students with M/S disabilities. One teacher taught students in the mild-to-moderate (M/M) category and also supervised the M/S program at her high school. Two teachers taught middle school students with M/S disabilities, and one of them had previously taught this population at the high school level. All taught self-contained classes and had started to take the newly adopted standards into consideration in the eventual planning and implementation of curriculum. Two teachers reported that their schools were beginning to align IEPs to Common Core State Standards. These educators were identified by colleagues or administrators as potentially suitable for and interested in the study, and consented to participate upon request. As with pilot study participants, they were given the initial survey followed by the PowerPoint curriculum sample and the evaluation form. Thereafter, interviews were conducted to clarify and compare previously provided information and elicit additional points for consideration.

In this qualitative study, data tabulation required a multi-faceted approach using constant comparison to triangulate data across all sets so that basic assumptions, viewpoints, and biases could be effectively examined. This practice of constant comparison also helped ascertain the study's validity (Corbin & Strauss, 2008). In addition, the above-referenced form of triangulation helped facilitate the emergence of thematic categories and ensure that selected elements were appropriately assigned to those categories (Bogdan & Biklen, 2007; Maxwell,

2013; Merriam, 2009). Multiple iterations of the classification process were required to determine each category and its corresponding elements until saturation was reached (Corbin & Strauss, 2008; Glesne, 2010; Maxwell, 2013; Merriam, 2009). At that point, the categories could be confirmed as convergent and stable, in the sense that they held up throughout the examination of all data sets (Merriam, 2009). To assist in the process of data localization and organization, the Search-in-Document utility of Microsoft Word was employed. Reliability was achieved based on the degree of consistency between the data collected and the results reported (Maxwell, 2013; Merriam, 2009).

This study required a thorough consideration of responses relative to each research question individually and then in combination. To process data related to the first research question (as to whether students of the M/S population could access CCSS through a life skills-oriented community-based curriculum), the following approach was used: a synthesis of the survey data, a deductive summary of the interview data corresponding to the first question, and an examination of the relationship between the survey data and the interview data. From these procedures emanated initial themes, which served as a frame of reference for reporting data relative to the second question about teacher perceptions of the curriculum. These perceptions were tabulated based upon responses to the evaluation form and interview content apropos of the second question. From this exercise, additional themes surfaced, and all themes were then synthesized into final categories. From the entire process, five related themes relevant to the overall inquiry emerged:

- Teacher perceptions of curriculum's strengths
- Perceived curriculum omissions
- Potential impediments to curriculum implementation

- Program impact on teacher approach to Common Core
- Program impact on school community

Findings, Implications, and Limitations

In this section, the findings associated with each research question are provided, based upon the thematic categories listed above. Implications derived from the findings are also addressed, as are limitations of the study's design and their potential impact on the findings.

Research Question One

The first research question, as follows, aimed to determine whether teachers thought the Common Core State Standards were within reach of M/S population of high school students if contextualized in instructional approaches commonly used on their behalf:

- How can high school students with significant cognitive disabilities access the Common Core State Standards in ELA, math, and science through a life-skills-oriented, community-based curriculum?

Findings. According to the data reported across most thematic categories, teachers--to varying degrees--believed that M/S students were capable of learning on the general curriculum when selected CCSS and life science standards were adapted and interwoven with hands-on, practical experiences in the local community. Consistent with their initial survey responses regarding the value of a combined academic curriculum and life skills program for high schoolers with M/S disabilities, 6 out of 7 teachers believed that some or all of these students could access CCSS within life skills-based CBI. These respondents referenced some students in the M/S population with expressive and/or receptive language enabling their comprehension at the abstract or concrete symbolic level. Three of these 6 teachers were particularly expressive

about the potential for student engagement in meaningful academic learning experiences tied to CBI and life skills.

Two of the 6 teachers did not believe that the CCSS were particularly relevant to the population, but still thought some of the students could access the standards meaningfully through pictorial content and hands-on community-based experiences. One teacher said she did not see a connection between CCSS and life skills, even as she remarked that CCSS could be linked with any learning experience. Conversely, the other believed that academic or CCSS-based learning activities were valuable only insofar as they could be connected to life skills.

Only the novice teacher, who exclusively taught the lowest functioning students, believed that the CCSS were not relevant to her students and generally not accessible to them even if embedded in life skills-oriented CBI. However, upon additional reflection, she remarked that the CCSS were usable to a degree, according to the proposed curriculum model, to provide exposure to a broader knowledge base that would include the acquisition of life skills.

All teachers believed that additional supports such as training, administrative guidance, collaboration, age-appropriate materials, and technology were necessary in facilitating access to meaningful standards-based learning opportunities for this population. Of particular note was one teacher's insistence that the lack of systemic collaboration and training beginning in the early grades resulted in confusion about how to implement the Common Core State Standards from 9th through 12th grades. Yet, despite this confusion, her school was attempting to align IEP objectives to CCSS.

Implications. Several important implications may be derived from the findings. Teachers did not all agree on the function of the standards. For some teachers, the standards provide an important foundation for contextualizing life skills and CBI to broaden students'

general knowledge base about their local environment and increase their opportunities for fulfilled independence. For others, the standards have merit only insofar as they can be linked to life skills or functional academics in the pursuit of basic functionality and employability. This dichotomy likely stems from a difference in core beliefs regarding the achievement capabilities of students within the M/S population. These core beliefs condition educators to determine which approach—the academic or the functional—is more appropriate. It is possible that some teachers may espouse beliefs consistent with ableism (Hehir, 2002), yet it is notable that all teachers, including those who questioned the applicability of the standards to life skills and CBI, believed that the use of the standards could enhance learning experiences to varying degrees. The lack of agreement on the value of general curriculum standards and their function within instructional programs for high school students with M/S disabilities is documented in the literature (Dymond et al., 2007). The paradoxical and somewhat inconsistent view that standards are not relevant but may lead to higher learning expectations or outcomes is likewise supported by previous research reports (Agran et al., 2002). Based on this study's database, no teacher noted the value of clear learning objectives in curriculum design and delivery. It may be that teachers' lack of emphasis on student-centered learning objectives aligned to sufficiently adapted standards makes the CCSS seem unattainable and therefore irrelevant.

Another important implication stemming from findings relative to Question One is systemic limitation of teacher training and efficacy. Though teachers generally thought that the standards were accessible or usable to help students learn on some level, some teachers referenced uncertainty about how the standards could meaningfully apply in their existing programs or to students' IEP goals. For some, the application of CCSS to life skills situated in CBI, as featured in the proposed curriculum, was not immediately apparent as an example or

model. This may be attributable to the study's limitations as presented in the next section; it may also suggest that, despite the number of years in teaching, professional skill and experience with respect to the development and/or implementation of research-based programs for the target population may still be lacking. However, given proper training and instructional support, teachers may gain the capacity to hold students accountable to general standards, as pointed out by Browder and Cooper-Duffy (2003). Their views about student abilities may also change. The possibility for such change appeared especially evident in the case of the novice teacher, who ultimately decided that students within the M/S population could benefit from effectively adapted standards.

The responses to Question One imply a need for district- and school-wide goals for the proper clarification and implementation of the standards. In order to provide effective life skills-oriented CBI as a vehicle for the inclusion and delivery of the general standards (Dymond et al., 2007), CBI must involve a teaching partnership between general and special education teachers such that students with special learning needs may benefit from the general curriculum when engaged across a variety of settings (Beck et al., 1994). According to the responses of all participants, there is an insufficiency of administrative policies and processes to effect district- and school-wide collaboration resulting in strong, standards-based CBI throughout the grade levels. Moreover, there is an insufficiency of services and technology tools to ensure access to CCSS standards within CBI, which is seen as a deterrent to strong curriculum development.

Study limitations. In part, this study attempted to discern how an examination of the proposed curriculum could influence participants' approach to Common Core standards. Because some teachers still expressed confusion over how the standards could be interwoven with CBI and life skills after viewing the model, it may be that the curriculum sample they received was

not comprehensive or clear enough to help them perceive those connections. It may also be that the sample provided was not immediately relevant to their particular learners, or that the sample components were not fully familiar to themselves as educators.

Research Question Two

The second research question, as below, was aimed at discovering teachers' perceptions of a curriculum imbedding CCSS in life skills-oriented CBI:

- How do special education teachers perceive a curriculum emphasizing the integration of life skills and Common Core standards in ELA, math, and science?

Findings. Based on the data reported across all thematic categories, teachers exhibited positive perceptions of a curriculum unifying the state-assessed general education standards with community-based life skills, albeit with some recommendations and stipulations for successful implementation. Teacher perceptions of the curriculum's strengths matched state and special needs curriculum criteria as identified by the CDE (2013) and special education scholars (Browder et al., 2006), respectively. Teachers generally thought the curriculum model facilitated the instruction of grade-level standards adapted to the students' symbolic level of communication (Browder et al., 2006; Downing, 2006; Gately, 2004; Wehmeyer et al., 2001), and tied to student needs and interests respective of their home community (Dewey, 1938; Kilpatrick, 1941; Tyler, 1949; Wiggins, 2011). They generally believed the model provided clear guidelines for implementation, including ongoing formative assessment aligned with content standards and objectives (CDE, 2013). All teachers thought the curriculum, organized around "big ideas" in thematic units versus a large number of unrelated topics (Browder et al., 2007; Stein, Stuen, Carnine, & Long, 2001), facilitated teaching and learning as associated with the M/S population.

All teachers believed the model served to demonstrate how the CCSS could be incorporated into curriculum planning and delivery processes for high school students with disabilities in the moderate to severe category. One teacher stated that the model showed how grade level standards could be adapted to avoid the practice common to her school of utilizing standards from lower grades. Also, she revealed an appreciation for the extensions and adaptations tying a broad range of skills into a single, standards-based lesson. Another teacher reported that she would use the curriculum's activities to address the standards provided by her school district. Two teachers remarked that the standards had been made concrete and accessible in how they were linked to the CBI lessons. Most teachers believed that the model's emphasis on standards identification would promote collaboration with general education teachers who might help provide instruction or instructional units based upon the same standards. The novice teacher thought the model exhibited how to develop a local or personalized curriculum integrating CCSS and life skills to expand students' learning opportunities. Given that this latter point was the main purpose of the curriculum model according to the author/researcher's intent, it is highly noteworthy that the novice was the only one who articulated it.

Most teachers considered the life science component of the curriculum to be valuable. They believed that the hands-on aspects—the observable and tangible rendered through graphics and field trips—enabled their students to understand marine ecosystem concepts in a deductive way and contributed to a greater awareness and appreciation of the ecology within their local community. This finding upholds the view of educational researchers who, according to ecological development theory, posit that a main goal of education is to determine the contexts that can be meaningfully connected to the "life-worlds" of students (Barab & Roth, 2006; Jackson et al., 2010)

Besides addressing the positive aspects of the curriculum, teachers discussed shortcomings and stipulated particular conditions for successful implementation. Most teachers believed that the curriculum should be modified to account for the specific learning needs of lower-and higher-performing students. Suggested revisions varied. The two teachers who felt that general standards may not be relevant to student needs nonetheless recommended that the curriculum be extended to include other ecosystems for students with higher ability levels. Similarly, another teacher recommended templates for the study of ecosystems other than the beach community, and the addition of learning experiences across a wider range of modalities. Two teachers from the same school thought the CBI lessons should be shortened for lower-performing students due to information processing delays and short time blocks. Other recommendations included: more assessment activities calling for student sharing of learning experiences, a narrower field of choices to facilitate assessments for lower-functioning students, additional lesson plans for specific kinds of disabilities, specific lesson and pacing plans**,** and more interactive technology incorporated into the content.

Teachers also discussed supports needed to successfully implement the proposed curriculum. Six out of 7 teachers believed they needed more district and school-site training on how to customize CCSS standards for M/S students according to their respective communities of residence. Although no teacher initially defined technology use as a life skill, all stated that it definitely was a life skill when directly asked. Most teachers stated that, if each student had an iPad, this would readjust their own thinking about how to plan lessons. They felt the iPad was essential to effective content delivery because of its capacity to graphically display concepts students might not otherwise understand. Another support teachers required was additional CBI/life skills student training in the forms of field trips and/or paraprofessional assistance. Two

teachers alluded to a need for more home support and reinforcement of school-based practices. Arguably, if these needs are met, students with M/S disabilities may be better served by teachers.

Implications and study limitations. The above findings offer essential implications partially relative to this study's limitations. Based on teachers' favorable responses to the integrated curriculum—and their stated preferences for additional program modifications and extensions—more highly adapted versions of an integrated, thematic curriculum should be developed for the M/S population to enable their meaningful access to CCSS. The model used in this study was limited to students with M/S disabilities in possession of abstract and concrete symbolic reading capabilities (Browder et al., 2006) and the learning objectives were established with these capabilities in mind. In terms of CBI, the model was set to the Los Angeles/south bay area beach community. Since it could not be tailored to each student or learning context, it was meant to serve as a template for the development of personalized curricula according to specific student ability levels and community of residence. The model did not incorporate the highly individual needs of each learner with M/S disabilities in each context through the provision of detailed lesson plans, and thus may not have had utility for all students. Though this limitation was explained to teachers at the outset, it is evident that some teachers evaluated the model in terms of its applicability to all of their students, including the lowest functioning. However, since teachers know their students better than outside curriculum developers—as evidenced by their highly specific recommendations to benefit their respective learners—they should ideally collaborate with special and general education colleagues to select, modify, and pace content according to individual student interests and needs. Segments of the curriculum's extensions and adaptations, presented to teachers in the voice-over PowerPoint, provided some examples of how curriculum could be modified for high school students with M/S disabilities. Yet, it is possible

that the examples were not comprehensive enough to enable sufficient adaptation of lesson objectives for those learners at the lowest or highest levels of function. It is also possible that teachers need more assistance in lesson planning and the adaptation of lesson objectives for this population.

To the extent that teachers did find the model helpful in exemplifying the practical use and adaptation of CCSS, they may wish to create their own revisions or generate their own units of instruction. To do so, however, would likely require additional training in several aforementioned criteria for student success: standards adaptation; the development of IEP objectives aligned with CCSS; the concept of cross-curricular thematic units; collaboration with special education and general education peers; and administrative support. The effective implementation of the curriculum requires administrative investment in essential provisions such as community-based field trips, color copiers, student materials, and para-professional assistance. More technological tools, notably the iPad along with training in its effective use, are likewise indicated to foster understanding of concepts in thematic units. (Gardner et al, 2003).

Taking the initiative to revise an existing program or generate a more appropriate curriculum based on a research-supported model would be a positive step forward for teachers of the M/S population. This work would call for teachers to prioritize the most essential standards-based learning concepts and link them to life skills-oriented CBI in a way that promotes comprehension and retention, resulting in reduced cognitive load (Browder et al., 2007; Rueda, 2011; Tyler, 1949). The result would likely be educational gains with life-long advantages for high school students with significant learning challenges.

Conclusion and Recommendations

Targeting the educational needs of secondary students with moderate to severe cognitive disabilities, this qualitative study field-tested the utility of a research-based curriculum combining Common Core State Standards and functional skills situated in community-based instruction. The purpose was to determine ways to provide meaningful access to the Common Core for SSCDs while taking into account their functional learning needs as well. Though high school students with M/S disabilities comprise only 1% of the total student population, they are typically underserved and under-supported even as legislative mandates uphold their right to progress in the general curriculum. This study generated a robust discussion on how curriculum design and delivery can be improved for this population using CCSS as a basis for inquiry. Participating special educators offered many insightful contributions in terms of the curriculum's functions and shortcomings as they considered the improvement of their own instructional practices and the success of their students.

The implementation of CCSS is a new challenge for educators of the target population. There are many ways the CCSS can be taught to students with M/S disabilities, as studies do show they are capable of academic learning when taught appropriately. However, more research is needed to show the variety of ways these students may learn, and longitudinal studies are necessary to demonstrate the impact of CCSS learning on their adult lives. More studies are also needed on ways the standards can be adapted and tied to a wider variety of learning activities in other settings. Additional research is required to determine effective training techniques for teachers in the proper customization and delivery of a CCSS-based curriculum. It is perceived that when such research goals are met, these very special learners will have far greater

opportunities to attain independence, make valuable contributions to society, and achieve happy and fulfilled lives.

References

Abrams, L., Pedulla, J., & Madaus, G. (2003). Views from the classroom: Teachers' opinions of state-wide testing programs. *Theory Into Practice, 42*, 18-29.

Agran, M., & Alper, S. (2000). Curriculum and instruction in general education: Implications for service delivery and personnel preparation. *Journal of the Association for Persons with Severe Handicaps, 25*, 167-174.

Agran, M., Alper, S., & Wehmeyer, M. (2002). Access to the general curriculum for students with significant disabilities: What it means to teachers. *Education and Training in Mental Retardation and Developmental Disabilities*, *37*(2), 123-133.

Au, K. H. (2003). Balanced literacy instruction: Implications for students of diverse backgrounds. In J. Flood, D. Lapp, J. Squire, & J. Jensen (Eds.). Handbook of research on teaching the English language arts (pp. 955-966). Hillsdale, NJ: Lawrence Erlbaum Associates.

Au, Wayne. (2013). Coring social studies within corporate education reform: The Common Core State Standards, social justice, and the politics of knowledge in U.S. schools. 4(5). Retrieved from http://ojs.library.ubc.ca/index.php/criticaled/article/view/182278

Ayres, B. J., Meyer, L. H., Erevelles, N., & Park-Lee, S. (1994). Easy for you to say: Teacher perspectives on implementing most promising practices. *Journal of the Association for Persons with Severe Handicaps, 19*, 84-93.

Ayres, K. M., Alisa Lowrey, K., Douglas, K. H., & Sievers, C. (2011). I can identify Saturn but I can't brush my teeth: What happens when the curricular focus for students with severe disabilities shifts. *Education and Training in Autism and Developmental Disabilities*, *46*(1), 11.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Barab, S. A., & Roth, W. M. (2006). Curriculum-based ecosystems: Supporting knowing from an ecological perspective. *Educational Researcher*, *35*(5), 3-13.

Beach, R. W. (2011). Issues in analyzing alignment of language arts Common Core standards with state standards. *Educational Researcher*, *40*(4), 179-182.

Beck, J., Broers, J., Hogue, E., Shipstead, J., & Knowlton, E. (1994). Strategies for functional community-based in- struction and inclusion for children with mental retardation. *Teaching Exceptional Children, 26*(2), 44-48.

Bellamy, T., Fowler, S., Hale, R., Koroby, C., Pugach, M., Shaker, C., Shanely, D., & Ying, R. (2002). Preparing teachers to work with students with disabilities: Possibilities and challenges for special and general teacher education. Washington, DC: American Association of Colleges of Teacher Education.

Benner, S. M. (1998). *Special education issues within the context of American society.* Belmont, CA: Wadsworth.

Beukelman, D. R., & Mirenda, P. (2005). *Augmentative and alternative communication: Supporting children and adults with complex communication needs*. (3rd ed.). Baltimore, MD: Paul H. Brookes Publishing Co.

Billingsley, F. F., & Albertson, L. R. (1999). Finding a future for functional skills. *Journal of the Association for Persons with Severe Handicaps, 24*, 298-302.

Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An Introduction to theories and methods* (5th ed.). Boston, MA: Allyn and Bacon.

Bolt, S. E., & Roach, A. T. (2009). *Inclusive assessment and accountability: A guide to accommodations for students with diverse needs*. Guilford Press.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Brooks, J. G., & Dietz, M. E. (2012). The dangers and opportunities of the Common Core: can public education emerge from the Common Core initiative with a renewed focus on student learning? *Educational Leadership, 70*(4), 64-67.

Browder, D. M., & Cooper-Duffy, K. (2003). Evidence-based practices for students with severe disabilities and the requirement for accountability in "No Child Left Behind". *The Journal of Special Education*, *37*(3), 157-163.

Browder, D. M., Spooner, F., Wakeman, S., Trela, K., & Baker, J. N. (2006). Aligning instruction with academic content standards: Finding the link. *Research and Practice for Persons with Severe Disabilities*, *31*(4), 309-321.

Browder, D. M., Wakeman, S. Y., Flowers, C., Rickelman, R. J., Pugalee, D., & Karvonen, M. (2007). Creating Access to the General Curriculum With Links to Grade-Level Content for Students With Significant Cognitive Disabilities An Explication of the Concept. *The Journal of Special Education*, *41*(1), 2-16.

Browder, D. M., Trela, K., Courtade, G. R., Jimenez, B. A., Knight, V., & Flowers, C. (2010). Teaching mathematics and science standards to students with moderate and severe developmental disabilities. *The Journal of Special Education*, *46*(1), 26-35.

Burch, P. (2009). *Hidden markets: The new education privatization.* New York, NY: outledge.

California Department of Education. (2010). *Common Core State Standards*. Retrieved from www.cde.ca.gov/re/cc

California Department of Education. (2012). *Instructional materials in California*. Retrieved from http://www.cde.ca.gov.ci/

California Department of Education. (2012). *California's additions to the Common Core State Standards*. Retrieved from http://www.cde.ca.gov/ta/tg/sa/documents/caccssadditions.pdf

California Department of Education. (2013). *Evaluation criteria—curriculum frameworks and instructional materials.* Retrieved from http://www.cde.ca.gov/ci/cr/cf/evaluation criteria1-412.asp

California Department of Education. (2013). *How will the Common Core State Standards impact California's special education students?* Presented to the National Center and State Collaborative Communities of Practice. Retrieved from www.cde.ca.gov/sp/se/cc/documents/impctonsped.pdf

California Department of Education. (2013). *Next Generation Science Standards*. Retrieved from www.cde.ca.gov/pd/ca/sc/ngssintrod.asp

California Department of Education. (2014). *Alternate assessments based on CCSS: How do they relate to college and career readiness?* Retrieved from www.cde.ca.gov/sp/se/cc/

Campbell, F. A. K. (2008). Exploring internalized ableism using critical race theory. *Disability & Society*, *23*(2), 151-162.

Carter, E. W., & Hughes, C. (2006). Including high school students with severe disabilities in general education classes: Perspectives of general and special educators, paraprofessionals, and administrators. *Research and Practice for Persons with Severe Disabilities*, *31*(2), 174-185.

Cawley, J., Hayden, S., Baker-Kroczynski, S., & Cade, E. (2002). Including students with disabilities into the general education science classroom. *Exceptional Children*, *68*(4), 423-435.

Common Core Standards: Language arts in California. (2010). *Ed Source.* Retrieved from http://www.education.com/reference/article/common-core-standards-language-arts/

Common Core State Standards Initiative. (2010). *Application to students with disabilities.* Retrieved from www.corestandards.org/assets/application-to-students-with-disabilities.pdf

Common Core State Standards Initiative. (2010). *Common Core State Standards for English Language arts & literacy in history/social studies, science, and technical subjects*. Retrieved from http://www.corestandards.ort/assets/CCSSI_ELA%20 Standards.pdf

Common Core State Standards Initiative. (2010). *Common Core State Standards for mathematics*. Retrieved from http://www.corestandards.org/assets/CCSSI_ Math%20Standards.pdf

Common Core State Standards. (2010). *Common Core State Standards Resources.* Retrieved from http://www.cde.ca.gov/re/cc

Common Core State Standards. (2010). *Introduction to the State Standards.* Retrieved from www.corestandards.org/assets/ccssi-introduction.pdf

Connor, D. & Baglieri, S. (2009). Tipping the scales: Disability studies asks "How much diversity can you take?" In S. Steinberg (Ed.). *Diversity and multiculturalism: a reader.* New York, NY: Peter Lang Publishing, Inc.

Corbin, J., & Strauss, A. (2008). Chapter 4: Strategies for qualitative data analysis. *Techniques and procedures for developing grounded theory* (3rd ed.) (pp.56-86). Los Angeles, CA: Sage.

Cortiella, C., & Wickham, D. (2008). Students with significant cognitive disabilities and standards-based curriculum: Why now? Why not. *Exceptional Parent*, *38*(9), 89-92.

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage Publications.

Cushing, L. S., Clark, N. M., Carter, E. W., & Kennedy, C. H. (2005). Access to the general curriculum for students with significant cognitive disabilities. *Teaching Exceptional Children, 38*(2), 6-13.

Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future.* New York, NY: Teachers College Press

Dewey, J. (1902). *The child and the curriculum.* Chicago, IL: University of Chicago Press.

Dewey, J. (1938). *Experience and education*. New York, NY: Collier Books.

Downing, J. (2006). Building literacy for students at the pre-symbolic and early symbolic Levels. In Browder & F. Spooner (Eds.), *Teaching language arts, math, and science to students with significant cognitive disabilities* (pp. 39-61). Baltimore, MD: Paul H. Brookes.

Dymond, S. K., & Orelove, F. P. (2001). What constitutes effective curricula for Students with severe disabilities? *Exceptionality, 9,* 109-122.

Dymond, S. K., & Russell, D. L. (2004). The impact of grade and disability on the instructional context of inclusive classrooms. *Education and Training in Developmental Disabilities, 39*, 127-140.

Dymond, S. K., Renzaglia, A., Gilson, C. L., & Slagor, M. T. (2007). Defining access to the general curriculum for high school students with significant cognitive disabilities. *Research and Practice for Persons with Severe Disabilities*, *32*(1), 1-15.

Eisner, E. W. (2004). Preparing for today and tomorrow. *Educational leadership*, *61*(4), 6-11.

Federal Register. (2004, June 19). (Vol. 67, pp. 41792-41793). Washington, DC: US Government Printing Office.

Fink, A. G. (2012). *How to conduct surveys: A step-by-step guide*. Sage Publications.

Gardner, J. E., Wissick, C. A., Schweder, W., & Canter, L. S. (2003). Enhancing interdisciplinary instruction in general and special education thematic units and technology. *Remedial and Special Education, 24*(3), 161-172.

Gately, S. E. (2004). Developing concept of word: The work of emergent readers. *Teaching Exceptional Children, 36*(6), 16-22.

Geier, R., Blumenfeld, P. C., Marx, R. W., Krajcik, J. S., Fishman, B., Soloway, E., & Clay-Chambers, J. (2008). Standardized test outcomes for students engaged in inquiry-based science curricula in the context of urban reform. *Journal of Research in Science Teaching*, *45*(8), 922-939.

Giangreco, M. F., Dennis, R. E., Edelman, S. W., & Cloninger, C. J. (1994). Dressing your IEPs for the general education climate analysis of IEP goals and objectives for students with multiple disabilities. *Remedial and Special Education*, *15*(5), 288-296.

Glesne, C. (2011). Chapter 8: Crafting your story: Writing up qualitative data. In *Becoming qualitative researchers: An introduction* (4th ed.) (pp. 218-240).

Hall, C. (2013). Ecology. Retrieved from http://www.eoearth.org/view/article/151932

Hardman, M. L., & Dawson, S. (2008). The impact of federal public policy on curriculum and instruction for students with disabilities in the general classroom. *Preventing School Failure: Alternative Education for Children and Youth*, *52*(2), 5-11.

Hehir, T. 2002. Eliminating ableism in education. *Harvard Educational Review, 72*(1), 1-32.

Hitchcock, C., Meyer, A., Rose, D., & Jackson, R. (2002). Providing new access to the general curriculum: Universal Design for Learning. *Teaching Exceptional Children, 35*(2), 8-17.

Individuals with Disabilities Education Act (IDEA), 34 CFR S 300. 34 (a). (2004)

Jackson, L., Ryndak, D. L., & Billingsley, F. (2000). Useful practices in inclusive education: A preliminary view of what experts in moderate to severe disabilities are saying. *Journal of the Association for Persons with Severe Handicaps, 25*, 129-141.

Jackson, L. B., Ryndak, D. L., & Wehmeyer, M. L. (2008). The dynamic relationship between context, curriculum, and student learning: A case for inclusive education as a research-based practice. *Research and Practice for Persons with Severe Disabilities*, *33*(4), 175-195.

Junkala, J., & Mooney, J. F. (1986). Special Education students in regular classes: What happened to the pyramid? *Journal of Learning Disabilities, 19*(4), 218-221.

Kearns, J., Kleinert, H., Harrison, B., Sheppard-Jones, K., Hall, M, & Jones, M. (2011). *What does "college and career ready" mean for students with significant cognitive disabilities?* National Alternate Assessment Center. Retrieved fromhttp://www.naacpartners.org/publications/CareerCollegeReadiness.pdf

Kilpatrick, W. H. (1941). The case for progressivism in education. In F. W. Parkay, E. J. Anctil, and G. Hass (Eds), Curriculum leadership: A contemporary approach (9th ed., pp. 36-39). Boston, MA: Pearson, Allyn, and Bacon.

Lee, S. H., Amos, B. A. , Gragoudas, S., Lee, Y., Shogren, K. A., Theoharis, R., & Wehmeyer, M. (2006). Curriculum augmentation and adaptation strategies to promote access to the general curriculum for students with intellectual and developmental disabilities. *Education and Training in Developmental Disabilities, 41*(3), 199-212.

Lee, S. H., Wehmeyer, M. L., Soukup, J. H., & Palmer, S. B. (2010). Impact of curriculum modifications on access to the general education curriculum for students with disabilities. *Exceptional Children*, *76*(2), 213-233.

Lippman, L., & Goldberg, I. (1973). *Right to education: Anatomy of the Pennsylvania Case.* New York, NY: Teachers College Press.

Lipsky, D. K., & Gartner, A. (1989). Beyond special education: Quality for all. Baltimore, MD: Paul H. Brookes.

Mastropieri, M. A., & Scruggs, T. E. (1992). Science for students with disabilities. *Review of educational research*, *62*(4), 377-411.

Mathis, W. J. (2010). The "Common Core" Standards Initiative: An Effective Reform Tool? Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved from http://epicpolicy.org/publication/common-core-standards

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Los Angeles, CA: Sage Publications.

McDonald, J., Mathot-Buckner, C., Thorson, N., & Fister, S. (2001). Supporting the inclusion students with moderate and severe disabilities in junior high school general education classes: The effects of classwide peer tutoring, multi-element curriculum, and accommodations. *Education and Treatment of Children, 24*(2).

Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. San Francisco, CA: Jossey-Bass.

No Child Left Behind Act of 2001, 20 U.S.C. 6301 et seq.

Nolet, V., & McLaughlin, M. J. (Eds.). (2005). *Accessing the general curriculum: Including students with disabilities in standards-based reform*. Corwin Press.

Palmer, S. B., Wehmeyer, M. L., Gipson, K., & Agran, M. (2004). Promoting access to the general curriculum by teaching self-determination skills. *Exceptional Children, 70*(4), 427-439.

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage.

Patton, J. R., Cronin, M. E. Basset, D. S., & Koppel, A. E. (1997). A life skills approach to mathematics instruction: *Preparing students with learning disabilities for the real life demands of adulthood. Journal of Learning Disabilities, 30*, 178-187.

Pennington, J. L., Obenchain, K. M., Papola, A., & Kmitta, L. (2012). The Common Core: Educational redeemer or rainmaker. *Teachers College Record.* Retrieved from http://www.tcreord.org

Plank, D. (2012). Should California have second thoughts on Common Core? Retrieved From http://toped.svefoundation.org/2012/01/17/should-california-have-second-thoughts-on-common-core/

Pliner, S. M. & Johnson, J.R. (2010). Historical, theoretical, and foundational principles of universal instructional design in higher education. In M. Adams, W. Blumenfeld, C. Castaneda. H. Hackman, M. Peters. & X. Zuniga (Eds.). *Readings for diversity and social justice, second edition.* New York, NY: Routledge.

Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common core standards: The new U.S. intended curriculum. *Educational Researcher*, *40*(3), 103-116.

Pugach, M. C. (2005). Research on preparing general education teachers to work with Students with disabilities. In M. Cochran-Smith and K. Zeichner. Eds. *Studying teacher education: The report of the AERA panel on research and teacher education* (549-590). Mahwah, NJ: Lawrence Erlbaum Associates Publishers. Ravitch, D., & Mathis, W. J. (2010). A review of college-and career-ready students. *The Obama education blueprint: Researchers examine the evidence*, 9-22.

Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal design for learning.* Alexandria, VA: Association for Supervision and Curriculum Development.

Rueda, R. (2011). The 3 dimensions of improving student performance. New York, NY: Teachers College Press.

Ryndak, D. L., Moore, M. A., Orlando, A. M., & Delano, M. (2008). Access to the general curriculum: The mandate and role of context in research-based practice for students with extensive support needs. *Research and Practice for Persons with Severe Disabilities*, *33*(4), 199-213.

Ryndak, D. L., Morrison, A. P., & Sommerstein, L. (1999). Literacy prior to and after inclusion in general education settings. *Journal of the Association for Persons with Severe Handicaps, 24*, 5-22.

Satchwell, R. E., & Loepp, F. L. (2002). Designing and implementing an integrated mathematics, science, and technology curriculum for the middle school. *Journal of Industrial Teacher Education*, *39*(3).

Schick, B., Williams, K., & Kupermintz, H. (2005). Look who's being left behind: Educational interpreters and access to education for deaf and hard-of-hearing students. Retrieved October 11, 2012 from http://jdsde.oxfordjournals.org/

Schiro, M. S. (2013). *Curriculum theory: Conflicting visions and enduring concerns.* Thousand Oaks, CA: Sage Publications.

Schumaker, J. (2004). *Access to the general education curriculum: Research-based interventions for high school students with disabilities.* Transcript of National Center on Secondary Education and Transition conference call presentation presented August 17, 2004. Retrieved from http://www.ncset.org.

Scruggs, T. E., & Mastropieri, M. A. (1994). The construction of scientific knowledge by students with mild disabilities. *The journal of special education*, *28*(3), 307-321.

Soukup, J., Wehmeyer, M., Bashinski, S., & Bovaird, J. (2007). Classroom variables and access to the general curriculum for students with disabilities. *Exceptional Children, 74*(1), 101-120.

Spooner, F., Baker, J. N., Ahlgrim-Delzell, L., Browder, D., & Harris, A. (2007). Effects of training in universal design for learning (UDL) on lesson plan development.*Remedialand Special Education, 28*, 108-116.

Stanton-Salazar, R. D. (1997). A social capital framework for understanding the socialization of racial minority children and youth. *Harvard Educational Review, 67*(1), 1-40.

Stein, Carol Stuen, Douglas Carnine, Roger M. Long, M. (2001). Textbook evaluation and adoption. *Reading & Writing Quarterly*, *17*(1), 5-23.

Taba, H. (1962). Curriculum development: Theory and Practice. New York, NY: Harcourt, Brace, & World.

Thurlow, M. L. (2010). Common Core Standards: Implications for students with disabilities. Retrieved from https://ccsso.confex.com/ccsso/2010/webprogram/Presentation/Session1959/Thurlow

Thurlow, M. L. (2012). *Common Core State Standards: The promise and the peril for students with disabilities.* Retrieved from http://www.calstat.org/text/spEDge_eng/2012_Summer_Edge/

Tienken, C. H. (2011). Common Core standards: The emperor has no clothes, or evidence. *Kappa Delta Pi Record*, *47*(2), 58-62.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development

Tyler, R. W. (1949). Basic principles of curriculum and instruction. Chicago, IL: University of Chicago Press.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

Wagner, M., Newman, L., Cameto, R., Levine, P., & Marder, C. (2007). *Perceptions and expectations of youth with disabilities: A special topic report of findings from the National Longitudinal Transition Study-2.* Retrieved from www.nlts2.org/reports/2007_08/nlts2_report_2007_08_complete.pdf

Wehmeyer, M. L., Lattin, D., & Agran, M. (2001). Achieving access to the general curriculum for students with mental retardation: A curriculum decision-making model. *Education and Training in Mental Retardation and Developmental Disabilities*, *36*(4), 327-342.

Wehmeyer, M., Lattin, D., Lapp-Rinckner, G., & Agran, M. (2003). Access to the general curriculum of middle school students with mental retardation: An observational study. *Remedial and Special Education, 24*(5), 262-272.

Wehmeyer, M. L. (2006). Beyond Access: Ensuring Progress in the General Education Curriculum. *Research & Practice for Persons with Severe Disabilities*, *31*(4), 322-326.

Weston, T. (2004). Formative evaluation for implementation: Evaluating educational technology applications and lessons. *American Journal of Evaluation*, *25*(1), 51-64.

White, J., & Weiner, J. S. (2004). Influence of least restrictive environment and community based training on integrated employment outcomes for transitioning students with severe disabilities. *Journal of Vocational Rehabilitation*, *21*(3), 149-156.

Wiggins, G. (2011). A diploma worth having. *Educational Leadership*, *68*(6), 28-33.

Yell, M. L., & Shriner, J. G. (1997). The IDEA amendments of 1997: Implications for special and general education teachers, administrators, and teacher trainers. *Focus on Exceptional Children*, *30*(1), 1-19.

Yell, M. L. (1998). *The law and special education.* Upper Saddle River, NJ: Merrill/Prentice Hall.

Appendix A

Initial Survey

Survey Item **(Background knowledge and attitudes)**	**Answer**
1. How many years have you worked in special education?	
2. Describe the type of program you are currently teaching.	
3. On a scale of 1-4, what is your experience level with students in the moderate to severe category of cognitive disability? (4= high, 3=medium, 2=low, 1=none)	
4. What type of instructional program is most valuable for this population? a) life skills b) general curriculum with modifications c) a combination of general curriculum and life skills d) other (please specify)	
5. How do you define Life skills?	
6. How do you define Community-based instruction (CBI)?	
7. Where should the instructional program take place? a) In the general education classroom b) In the special education classroom c) In both the general education classroom and the special education classroom d) Across a variety of settings that afford educational experiences	
8. To your knowledge, how are the CCSS implemented for this population? (Short answer)	

9. How do you define access to the general curriculum? a) engagement in the general curriculum and CCSS b) exposure to the general curriculum and CCSS c) physical placement in general education settings d) any combination of the above	
10. Which of these choices best describes your core beliefs about students in the category of severe special needs? a) All students can progress in selected CCSS on the general curriculum with the proper supports and instructional approaches. b) Some students can progress in selected CCSS standards, depending on the nature of the disability and the supports/program provided c) These students cannot be expected to progress on the general curriculum d) These students should be included with typical peers in extracurricular activities	
11. In your estimation, what supports or services could increase the likelihood of success for this population? Select all that apply. a) more age-appropriate materials aligned with Common Core/general curriculum standards b) more teacher training on standards-based curriculum design/implementation c) more technology-based tools to access curriculum content d) more community service training for this population of students e) more emphasis on student self-help and personal responsibility	

Appendix B

Curriculum Evaluation Form Preface

Like all students, high school students with significant cognitive disabilities are entitled to a curriculum permitting their meaningful access to the Common Core State Standards (CCSS) in English language arts, math, and science. Yet, this population may also require a life skills approach contextualized in community-based instruction (CBI) to develop the functional competencies necessary for future success. The curriculum sample you have agreed to review is an attempt to integrate Common Core standards with life skills through learning experiences within the students' local community. Please take a moment to examine this evaluation form prior to viewing the curriculum sample and allow it to guide your review. Your responses will help determine teacher perceptions of the curriculum's utility in terms of its alignment with CCSS and implementation feasibility. A follow-up interview will be conducted to ensure a clear understanding of your positions on the issues addressed. Your participation will serve to inform an overall inquiry on curriculum design for the aforementioned special needs population, and you will be notified of the results.

Appendix C

Curriculum Evaluation Form

Curriculum Evaluation Survey Item	**Answer**
For questions 1-14, please rate the curriculum you have reviewed on a scale of 1-4 as follows: (4—entirely; 3—mostly; 2—somewhat; 1—minimally or not at all)	
1. Content is organized around central "big ideas" vs. a large number of topics to be covered (2001; Tyler, 1949).	
2. Curriculum materials provide opportunities for teachers to scaffold instruction to provide for differentiated needs.	
3. Skills and concepts are strategically integrated to promote understanding of adapted Common Core Standards (CCSS)	
4. The materials provide sufficient opportunities for ongoing formative assessment of CCSS-related skills acquisition	
5. The curriculum satisfies the student's educational and personal needs/interests.	
6. Instructional materials and objectives are aligned with the CCSS and state frameworks.	
7. Clear guidelines for successful implementation are provided.	

8. Curriculum as a whole applies application of principles of universal design for learning (UDL), including a wide array of adapted material and graphic, multi-media instructional formats.	
9. Curriculum activities promote the student as a contributing member of his or her community.	
10. This curriculum is an improvement over the ones I have seen or used before.	
11. I would use this curriculum or one with a similar structure geared toward the community of students within my local school district.	

12. What are the curriculum's shortcomings? (short answer)	

13. How should it be modified? (short answer)	
14. What supports are necessary to use it effectively? (short answer)	

Appendix D

Interview Protocol

The interview protocol, to be implemented following an evaluative review of the proposed curriculum, includes the following components based on Creswell (2009) and Merriam (2009):

- Heading: Respondent's name, position, school, assignment, time and duration
- Interview plan: Semi-structured, flexible approach to keep the interview systematic yet allow for description-rich differences; probes to deepen responses as necessary
- Questions and question types, following restatement of inquiry purpose, brief summary of previous interview statements, and brief synopsis of proposed curriculum design elements

11) Opinion: Is there a relationship between Common Core and life skills? Do you believe curriculum should emphasize that connection?

12) Opinion/Knowledge: What constitutes a desirable curriculum for this population? What supports are necessary to effect one?

13) Opinion: Could the proposed curriculum be useful? How so, or why not? Probe as necessary: Based on your experience, what are the potential benefits/impediments to its use?

14) Knowledge: Which population could it serve?

15) Experience/behavior: Focus on a particular student within this population, and his or her learning needs. How might this student respond to the objectives and learning experiences included in this curriculum?

16) Knowledge: How would you modify or adapt the curriculum to suit the needs of your learners?
17) Knowledge: How might the curriculum influence your approach to the Common Core?
18) Experience/behavior: How might the curriculum affect the organization of your school community?
19) Opinion/values: In your opinion, how could a student's participation in this curriculum affect his or her quality of life?
20) Opinion/values: How does this curriculum impact your beliefs about teaching and learning the Common Core State Standards for the targeted population?

Appendix E

Participant Recruitment Letter

Dear Special Educator,

My name is Arlene Platten, and I am a doctoral candidate at the University of Southern California. I am conducting a research study in the field of educational leadership, and my research interest is curriculum for high school students with moderate to severe cognitive disability. Specifically, I am studying ways that Common Core State Standards may apply to this population, and have created a community-based instructional program emphasizing the integration of Common Core and life skills. Your participation in this study is completely voluntary.

The study procedures include an 11-question survey on your baseline experiences, values, beliefs, and practices about teaching, which will be emailed as a word document attachment and should take approximately 10 minutes to complete. Next, when you return the survey by email, I will provide you with a voiced-over PowerPoint presentation—either on a personally delivered flashdrive, in Google drive, or as an online link based on your delivery preference—containing a representative cross-section of the above-referenced curriculum. You will also be emailed a survey-style curriculum evaluation guide of 14 questions, sent as a word document attachment, and to be returned just as the initial survey. The PowerPoint should take approximately 15 minutes to view, and the survey another 10 minutes to complete. Following your curriculum evaluation, you are also asked to participate in a 30-minute audio-recorded interview, to be arranged at your convenience. The purpose of the interview is to gather thick, rich description of your perceptions of teaching Common Core State Standards based on the curriculum you reviewed.

All comments and responses will be kept strictly confidential. You will be compensated for your time with a gift card.

If you have any questions or would like to participate in the study, please contact me via email at hacklpla@usc.edu

Thank you so much for you time.

Arlene H. Platten

Appendix F

Institutional Review Board Approval

From istar@istar.usc.edu
Sent Thursday, April 24, 2014 12:39 pm
To skaplan@usc.edu , hacklpla@usc.edu
Subject Study Approval Notice Sent

USC Children's Hospital Los Angeles LAC+USC iStar

UNIVERSITY OF SOUTHERN CALIFORNIA
UNIVERSITY PARK INSTITUTIONAL REVIEW BOARD
FWA 00007099

Exempt Review

Date:	Apr 24, 2014, 12:37pm
Principal Investigator:	Arlene Platten, MA ROSSIER SCHOOL OF EDUCATION
Faculty Advisor:	Sandra Kaplan ROSSIER SCHOOL OF EDUCATION
Co-Investigators:	
Project Title:	Common Core Access for Secondary Students with Severe Disabilities USC UPIRB # UP-14-00207

The iStar application and attachments were reviewed by UPIRB staff on **4/24/2014** .

The project was APPROVED.

Based on the information provided for review, this study meets the requirements outlined in 45 CFR 46.101(b)(1) & (2) and qualifies for exemption from IRB review. The study is not subject to further IRB review. IRB exemption of this study was granted on **4/24/2014**.

The following documents were reviewed and approved:
Certified Information Sheet, dated 04-10-2014
Certified Recruitment Script, dated 04-24-2014

Minor revisions were made to the application (section 26) and recruitment document by the IRB Administrator. The IRBA revised documents have been uploaded into the relevant iStar sections. If revisions are made to the application, and changes are required to the documents, please create an amendment, at which time the IRBA revised documents will become available to the study personnel. All current changes must be accepted using the track changes feature in Microsoft Word and the changes saved. The study personnel can then revise the documents, including the date in the footer. The PI/study staff revised documents must then be uploaded into iStar using the "upload revisions" function; thereby replacing the obsolete documents. Please do not remove the obsolete version from the application.

Social-behavioral health-related interventions or health-outcome studies must register with clinicaltrials.gov or other International Community of Medical Journal Editors (ICMJE) approved registries in order to be published in an ICJME journal. The ICMJE will not accept studies for publication unless the studies are registered prior to enrollment, despite the fact that these studies are not applicable "clinical trials" as defined by the Food and Drug Administration (FDA). For support with registration, go to www.clinicaltrials.gov or contact Jean Chan (jeanbcha@usc.edu, 323 442-2825).

To access IRB-approved documents, click on the "Approved Documents" link in the study workspace. These are also available under the "Documents" tab.

Researchers are reminded that some site/schools require permission to conduct research even if the research is exempt from IRB review.

Sincerely,

RoseAnn Fleming, CIP

Approved Documents: view

Funding Source(s): N/A - no funding source listed

This is an auto-generated email. Please do not respond directly to this message using the "reply" address. A response sent in this manner cannot be answered. If you have further questions, please contact your IRB Administrator or IRB/CCI office.

The contents of this email are confidential and intended for the specified recipients only. If