

Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators  
for Students with Disabilities: A Delphi Study

Zenia Burnett

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Carol S. Cash, Chair

Patricia A. Addison

Ted S. Price

Valija C. Rose

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**Abstract**

Historically, there are persistent diploma gaps permeating between general education students and students with disabilities. In comparison to their peers, there are fewer youth with disabilities graduating from high school with regular diplomas. Regular diploma attainment is of critical importance because this credential is viable to postsecondary outcomes such as higher education and meaningful employment.

An analysis of graduation outcomes in Virginia from 2010-2013 revealed that 19 of 132 school divisions met or exceeded statewide performance expectations for youth with disabilities. In alignment with the Elementary and Secondary Education Act of 2010, the Virginia Department of Education monitors and reports Indicator 1: Percent of youth with Individualized Education Programs graduating from high school with a regular diploma using the adjusted four-year cohort graduation rate. Indicator 1 is among four secondary education and transition data indicators that are federally monitored, collected, and analyzed to determine progress or lack of progress.

The purpose of this study was to identify the policies and practices that special education directors perceived as contributing to meeting the state graduation performance measures for youth with disabilities in 10 Virginia school divisions during the 2010-2013 school terms. A three-round Delphi method was employed to seek consensus from a panel of Special Education Directors whose divisions are consistently meeting Indicator 1 performance measures. Investigated were their perceptions of best practices and strategies that are paramount in graduating students with disabilities with a regular diploma or higher. Panelists identified 70% or greater agreement on the importance of six (60%) strategies contributing to regular diploma attainment for this population of students. These statements of practice were determined to be of considerable importance (rated as critically effective or somewhat effective), and in rank order were: 1) providing targeted interventions such as remediation, tutoring, and credit recovery options; 2) conveying high expectations; 3) tracking and monitoring; 4) IEP development with emphasis on Transition, student family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status; 5) promoting learning,

attendance, and a positive school environment; and 6) policies that support all students. Further, a theme emerged as it relates to implementation on four of the six statements of practice on which consensus was reached in the final Delphi round. The data provided evidence that student engagement, parental involvement, and building positive relationships with an adult are important factors in support of the identified strategies toward graduating these youth with a regular/standard diploma. Implications for practice were recommended for school and division leaders, and state policymakers.

## **Dedication**

This dissertation is dedicated to students with disabilities and the committed professionals that change their lives. I am hopeful that the results of this study will be meaningful for the practitioner willing to maximize the potential of the exceptional learner. It has been truly an honor to serve students with disabilities, their families, and the educators that work with them.

## Acknowledgements

God surely is awesome, and he has moved mountains! He has sustained me through such a significant personal and professional experience. I am proud to have studied and received a world-class education at Virginia Tech. What a blessing it is to have run this race and finished in less than three years!

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## Chapter 1

### Introduction

#### Statement of the Problem

Federal and state attention has been devoted to changes in graduation policies and requirements because there is an association between completing high school with a standard diploma and experiencing success as an adult (Johnson, Thurlow, & Stout, 2007). Graduation from high school is a predictor of adulthood outcomes, including psychosocial well-being (Liem, Dillon, & Gore, 2001), physical health (Freudenberg & Ruglis, 2007), longevity (Molla, Madans, & Wagener, 2004), employment (National Center for Education Statistics, 2002), and earnings (U.S. Census Bureau, 2011). The U.S. Department of Education's (USDOE) Office of Special Education Programs reported (as cited in National Center on Education Outcomes & Achieve, 2013) that on a national level during the 2010-11 school year, 64% of students with disabilities (SWD) graduated with a standard high school diploma. During that same year, approximately 48% of Virginia's SWD received regular diplomas (Virginia Department of Education [VDOE], 2013d). What does this mean for SWD, and how might graduating with less than a regular diploma impact postsecondary outcomes and other aspects of their future?

Traditionally for all students, diploma type, rigor of coursework, guidance, and support from educators have been factors in a student experiencing success in college preparation and career readiness (National Center on Educational Outcomes & Achieve, 2013). "Obtaining a high school diploma and postsecondary degree or certificate has an important economic impact on individuals" (McLaughlin, Smith, & Wilkinson, 2012, p. 370). However, when compared to general education peers, SWD historically have had lower enrollment and completion rates in higher education programs (National Center on Educational Outcomes & Achieve, 2013.) Postsecondary outcomes for SWD often depend upon the quality and effectiveness of special education and transition services received in high school (Turnbull, Turnbull, Wehmeyer, & Park, 2003); and quality of life remains obscure for a high number of students with high-incidence disabilities (Carter, Trainor, Sun, & Owens, 2009) in comparison to general education peers (Test, Mazzotti, & Mustian, 2012). In 2009, the USDOE reported "students with learning disabilities represent 46% of the total population of students with disabilities, students with speech/language impairments represent 19%, students with intellectual disabilities represent 9%,

students with emotional disturbance represent 9%, and students with another health impairment represent 9%” (Schifter, 2011, p. 410). Students found eligible for special education services under these disability categories are the most prevalent among children and youth with disabilities in America’s schools, and are referred to as having high-incidence disabilities (Gage, Lierheimer, Goran, 2012; Sabornie, Evans, & Cullinan, 2006).

The Individuals with Disabilities Education Act (IDEA) requires monitoring of 20 accountability indicators for improving educational results and functional outcomes for children with disabilities, and ensuring that states meet the IDEA program requirements (USDOE, 2014). The 2004 reauthorization of IDEA advanced policy to improve collective transition efforts for SWD (Johnson, Thurlow, & Schuelka, 2012). Transition outcomes are 4 of 20 federally monitored indicators that are reported by State Education Agencies (SEA) in a State Performance Plan (IDEA, 2004; Test et al., 2012; VDOE, 2014i). Secondary education and Transition indicators measure graduation, dropouts, secondary Individualized Education Program (IEP) goals and Transition services, and postsecondary outcomes. These indicators are described in Table 1.

While graduation rates for general education students is a significant problem for the U.S., even more of a problem are the rates of high school completion for at-risk populations such as youth with disabilities (Christenson & Thurlow, 2004). The National Dropout Prevention Center for Students with Disabilities (NDPC-SD) (2010) acknowledged that most states recognize negative trends in their data performance among IDEA’s secondary Transition Indicators 1, 2, 13, and 14. Therefore, NDPC-SD suggested that in order for states to achieve targeted outcomes on these federally monitored indicators, efforts in promoting effective secondary Transition practices to keep students engaged and participating in school-related activities are most essential (NDPC-SD, 2010). Further, “the use of research-based/evidenced-based strategies and interventions as well as promising practices around school completion” should be implemented (NDPC-SD, 2010, p. 10).

Table 1

*IDEA Secondary Education and Transition Indicators*

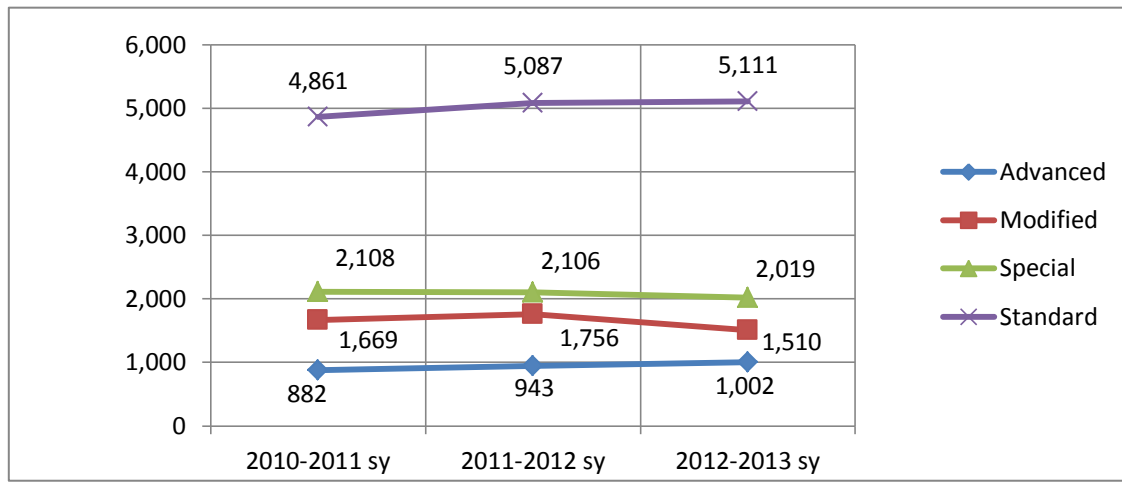
Indicator	Measure	Description
1	Graduation	Graduation of students with IEP from high school with a regular diploma
2	Dropouts	Students with disabilities grades 7-12 who dropped out
13	Secondary IEP Goals and Transition Services	Youth with IEPs age 16 and above must have measurable postsecondary goals related to students' needs based upon transition assessment, services, course of study; student and agency representatives must be invited as participants
14	Postsecondary Outcomes	14 a. Enrolled in higher education within one year of leaving high school  14 b. Enrolled in higher education or competitively employed within one year of leaving high school  14 c. Enrolled in higher education or some other postsecondary education or training program; or competitively employed in some other employment within one year of leaving high school

*Note.* Adapted from “Special Education Performance Report,” by the Virginia Department of Education, 2014.

### **Justification of the Study**

During an address to special education administrators attending the Virginia Council of Special Education Administrators (VCASE) spring 2013 conference, Virginia’s Assistant Superintendent of Special Education and Student Services, John Eisenburg, announced no progress on state Indicator 1, graduating SWD with a regular diploma. Assistant Superintendent Eisenberg also proclaimed a persistent diploma outcome gap among general and special education populations. As a result, Virginia is in the process of reforming ideas and directions by critically focusing and improving the number of SWD who obtain regular or advanced diplomas (Eisenberg, 2013). Consistent with national trends for SWD (Cortiella & Horowitz, 2014), Figure 1 shows that Virginia has steadily increased graduating the number of youth with IEPs with regular and advanced diplomas, while the number of SWD receiving other types of

diplomas has decreased (VDOE, 2013d). However, collected evidence showed that over 80% of Virginia’s school divisions did not meet Indicator 1 during 2010-2013 (VDOE, 2014f).



*Figure 1. Virginia’s Graduation Trends for Students with Disabilities by Diploma Type. Adapted from “State of the Commonwealth,” by J. Eisenberg, 2013, Virginia Department of Education. These figures represent the total number of SWD by diploma types. SY=School Year*

There are 132 school divisions in the Commonwealth of Virginia (VDOE, 2014c). Each division is responsible for reform and results driven accountability in student achievement for all and for narrowing gaps among subgroups (USDOE, 2010; IDEA, 2004). Annual monitoring and reporting activities during the 2010-2011, 2011-2012, and 2012-2013 school terms indicated that only 16 of Virginia’s school divisions met or exceeded benchmarks for graduating students with disabilities with a regular diploma (VDOE, 2014h). This statistic indicated that approximately 12% of Virginia’s school divisions achieved in this area while the other approximate 88% did not experience consistent success. Divisions that have consistently performed well on Virginia’s graduation indicator may serve as a model for divisions struggling to improve the performance of SWD in this target area.

### **Significance and Purpose of the Study**

Given the challenges in meeting graduation outcomes for SWD across the Commonwealth, it is important to analyze what has been effective in performing divisions, and to consider whether or not their strategies might be useful for SWD statewide. A study of best practices in graduating SWD with regular diplomas is of critical importance because this

credential is viable to postsecondary outcomes such as higher education and meaningful employment (Cortiella, 2013). Therefore, the purpose of this study is to identify the policies and practices that special education directors perceive as contributing to meeting the state graduation performance measures for youth with disabilities in Virginia school divisions during the 2010-2013 school terms. Soliciting opinions on best practices from field experts representing divisions that have met or exceeded graduation outcomes for SWD may be beneficial to other divisions and to the Virginia Department of Education (VDOE) in order to improve practices, policies and decision-making, and/or generate a need for future research.

### **Overview of the Study and Research Question**

This study will investigate the policies and practices employed by Virginia's school divisions that met or exceeded graduation state performance measures for SWD during the 2010-11, 2011-12 and 2012-13 school terms. An analysis of graduation outcomes in Virginia from 2010-2013 revealed that 16 of 132 school divisions met or exceeded statewide performance expectations for SWD. Three additional school divisions had fewer than 10 graduating students during the 2012-13 school term, and are included in this study based on consistently meeting graduation performance targets in previous years. Thus, 19 divisions were invited to participate in the proposed research. This study addressed the following research question: What do Special Education Directors for divisions that consistently met or exceeded Indicator 1 during the 2010-2013 school years indicate are the policies and practices that contributed (to meeting or exceeding Indicator 1 expectations) or (to their success in meeting that goal)?

### **Overview of the Methodology**

This study employed three rounds of the Delphi technique. Delphi is a method by which a panel of experts gain consensus on a given topic or problem through iterative processes (Hsu & Sandford, 2007; Linstone & Turoff, 1975). Linstone and Turoff (1975) indicated that the Delphi technique is useful for exploratory research and planning, and qualitative and quantitative practices are suitable to be applied with Delphi (Skulmoski, Hartman, & Krahn, 2007). This exploratory study employed two open-ended questions to investigate special education directors' perceptions of best practices and strategies that are seen as paramount in graduating SWD with a standard diploma or higher. Panelists were asked:

1. What are the *policies* implemented in your division that contribute to regular diploma attainment for SWD?
2. What are the *practices* implemented in your division that contribute to regular diploma attainment for SWD?

### **Operational Definitions and Acronyms**

**At-risk indicators.** Benz, Lindstrom and Yovanoff (2000) suggested the following as barriers to success for youth with disabilities: primary identification of an emotional disability; history of suspensions and chronic absenteeism; high school dropout; unstable living conditions; history of criminal offenses and jail time served; history of substance abuse; and pregnancy and child rearing responsibilities as a teen.

**Credit accommodations.** Credit accommodations provide alternatives for students with disabilities in earning the standard and verified credits required to graduate with a Standard Diploma. Credit accommodations for students with disabilities may include: alternative courses to meet the standard credit requirements; modifications to the requirements for locally awarded verified credits; additional tests approved by the Board of Education for earning verified credits; adjusted cut scores on tests for earning verified credits; and allowance of work-based learning experiences through career and technical education courses (VDOE, 2013b).

**Delphi technique.** A research technique that utilizes iterative processes with a group of experts in order to reach consensus on a topic or issue (Linstone & Turoff, 1975).

**Division/district.** In the Commonwealth of Virginia, a school division is a geographic area over which a school board has jurisdiction. The terms school division and district often are used interchangeably.

**Free Appropriate Public Education (FAPE).** Eligible students have the right to special education and related services provided at public expense; services must meet the standards of the SEA; and must provisions conform with the student's IEP and meet IDEA requirements (Yell, Thomas, & Katsyannis, 2012).

**Graduation rate.** The VDOE (2014d) determined the on-time graduation rate as the percentage of students who graduate with a Board of Education approved diploma within four years of entering high school.



**High-incidence disability.** High prevalence youth with disabilities participating in the general population; students found eligible for special education and related services under the following disability categories: learning disability, emotional/behavioral disability, other health impairment, and/or speech and language impairment (Sabornie, Evans, & Cullinan, 2006; Schifter, 2011; Shogren, Kennedy, Dowsett, & Little, 2014; VDOE, 2014a).

**Highly qualified.** Under the federal requirements of the Elementary and Secondary Education Act (ESEA) also known as No Child Left Behind (NCLB) teachers are highly qualified with at least a bachelor's degree, full state licensure, and competency in each subject taught (VDOE, 2014j).

**Individualized Education Program (IEP).** A written plan created for a student with disabilities by the student's teachers, parents or guardians, the school administrator, and other interested parties. The plan is tailored to the student's specific needs and abilities, and outlines attainable goals (VDOE, 2014d).

**Individuals with Disabilities Education Act (IDEA).** Federal law governing special education and related services for students with disabilities in public schools, which includes the guarantee of a "free and appropriate public education" (VDOE, 2014d).

**Indicator 1.** Percent of youth with IEPs graduating from high school with a regular diploma (VDOE, 2014g).

**Modified standard diploma.** A Virginia diploma option that ended during the 2012-13 school year. This diploma was available only for SWD who were unlikely to meet credit requirements for a standard diploma (VDOE, 2014e). Students who pursued this option prior to the 2013-14 school year were required to earn 20 credits and obtain proficient scores on eighth grade literacy and numeracy assessments.

**Regular diploma.** Virginia's Standard, Advanced Studies, or International Baccalaureate diplomas (VDOE, 2014d).

**Slippage.** Lack of progress toward an indicator target (VDOE, 2014g).

**Special education.** IDEA (2004) defined special education as specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and instruction in physical education. The VDOE (2014d) defined special education as a

service specially designed that adapts the curriculum, materials, or instruction for students identified as having disabilities provided at public expense.

**Student with a disability/students with disabilities (SWD).** A child evaluated and determined eligible for special education and related services for an intellectual disability, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), an emotional disability, an orthopedic impairment, autism, a traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, multiple disabilities and/or a developmental delay (VDOE Division of Special Education and Student Services, 2010).

**Special education director.** Public school personnel who work in divisions to direct, lead, supervise, and manage the provision of special education and related services for students with disabilities (Lashley & Boscardin, 2003).

**Standard diploma.** A student must earn at least 22 standard units of credit by passing required courses and electives, and earn at least six verified credits by passing end-of-course tests or other assessments approved by the Board of Education (VDOE, 2014d).

**Transition.** Planning and implementation of services within a results oriented process for SWD age 16 or younger. The IEP process includes preparation for postsecondary outcomes in education, employment, community participation, and independent living (as appropriate) (IDEA, 2004; Test et al., 2012; VDOE Division of Special Education and Student Services, 2010).

**Verified credit.** To earn a verified credit towards obtaining a standard diploma or higher in Virginia, a student must pass a course and the associated end-of-course test (also referred to as Virginia's Standard of Learning assessment) or substitute evaluation approved by the Board of Education (VDOE, 2015d).

## **Delimitations**

Roberts (2010) explained that delimitations clarify boundaries of the study that are controlled by the researcher. This study was limited to include only Special Education Directors representing the 19 divisions in Virginia identified as having met or exceeded graduation outcomes for SWD during consecutive reporting years 2010-2013. Within the Commonwealth,

considering the opinions of experts who have experienced success could provide guidance to divisions that have had less success in meeting the graduation expectations.

Participant selection for this study included the 19 divisions that met or exceeded the statewide performance graduation indicator for SWD during three consecutive reporting years 2010-2013. There were three school divisions that graduated fewer than 10 students during the 2012-13 school terms. School divisions having 10 or fewer graduates are not evaluated on Indicator 1 (VDOE, 2014f). However, those three divisions were included in this study based on their consistency in meeting graduation performance targets in previous years.

### **Limitations**

The following conditions were beyond the control of the researcher and have been carefully considered as potential limitations. VDOE's longitudinal data sets and reports were utilized to obtain information for this study. The data were collected and compiled by parties other than the researcher. "State reports are generally considered reliable and authoritative, but the potential for human error and/or skewed reporting by divisions should be acknowledged" (Kassner, 2012, p.10). This study was limited to only 19 of Virginia's Special Education Directors selected as participants, and there is no assurance that respondents did not receive assistance from other sources while participating in the Delphi rounds. The final results were the collective judgments, beliefs and opinions of the 19 participants. Further, due to the limited sample size and geographical range, transferring or generalizing findings from this study beyond Virginia are discouraged.

### **Organization of the Study**

This dissertation is organized into five chapters that will address critical aspects of this study. Chapter 1 provided an introduction to the topic, including an overview, statement of historical and conceptual issues, importance, research question, operational definitions, potential limitations, and delimitations pertaining to the study. Chapter 2 will review extant literature about effective practices leading toward graduation outcomes for students with disabilities. Chapter 3 outlines the methodology and provides a description of the overall Delphi design and data analysis employed. Chapter 4 will share the results from Delphi I, II, and III. Chapter 5 will

provide a summary of findings, implications, findings, recommendations for future research, and the researcher's reflections.

## **Chapter 2**

### **Literature Review**

This chapter includes a review of selected quantitative and qualitative literature pertaining to graduation outcomes and surrounding factors for students with disabilities. The research presented in this chapter spans over 15 years, and lends specific attention to standard diploma attainment for youth identified with high-incidence disabilities. The primary intent and relevancy of this review was to examine existing empirical, theoretical, and commentary literature to develop a practical foundation for the topic under study.

#### **Search Process**

This literature review began by accessing Virginia Tech's library search engines using a combination of keywords such as graduation outcomes and special education yielding over 10,100 results; standard diploma and students with disabilities resulting in approximately 2,500 sources; and regular diploma, students with disabilities, and Virginia with 800 findings. The search was limited to scholarly and peer-reviewed literature published in the last 12 years. Computerized databases such as ERIC, PSYCHINFO, Google Scholar, and Proquest Dissertation Abstracts International were utilized. The second strategy involved hand or electronic searches of table of contents and references in dissertations, journal articles, technical reports, and chapters in books. Sources were further examined and limited to literature pertaining to standard or regular high school diplomas as opposed to alternate options such as modified and special education diplomas, and certificates of completion or attendance. Also, studies that failed to specify the diploma type were excluded from this literature review. An additional strategy for proper selection and review included comprehensive policy briefs from education and research organizations reporting statistical data, including longitudinal data systems from national and state departments of education. These approaches narrowed the overwhelming results to approximately seven studies overall, including the most recent empirical research from scholars and practitioners spanning the last several decades. Refer to Appendix A for a summary of the literature strands.

## **Federal Accountability and Reform for Students with Disabilities**

Over 13% of the student population in the United States are SWD (National Center on Education Statistics, 2008). Extant research indicated that SWD are not as successful in achievement outcomes as their nondisabled peers (Martin, Little, Miller, & Gourwitz, 2014). Historically, SWD have demonstrated lower graduation rates and standard diploma attainment than general education students (Moore, 2012; Test et al., 2012). Thus, education policy such as the Individuals with Disabilities Education Improvement Act (IDEIA) 2004, NCLB 2001, and more recently the ESEA 2010, have emphasized a need to improve academic outcomes for SWD (Huberman, Navo, & Parrish, 2012). In fact, these federal priorities have significantly increased attention to both graduation and dropout rates. These mandates require schools to address and improve these persistent achievement gaps for SWD which will serve as evidence of school performance and student engagement (Pyle & Wexler, 2012).

As a result of school improvement and accountability requirements, there are also expectations nationwide for schools to narrow achievement gaps for all students in reading and mathematics (Burdette, 2008). SWD experience difficulty with high stakes testing created for general education students, and this is a factor that can impede potential standard diploma attainment (Clayton-Prince, 2007). In the Commonwealth of Virginia, different measurement outcomes have been established for the SWD subgroup on Standards of Learning (SOL) assessments which are end-of-course tests, that are also considered as competency exams or high stakes assessments. The VDOE (2013a) established the following provisions:

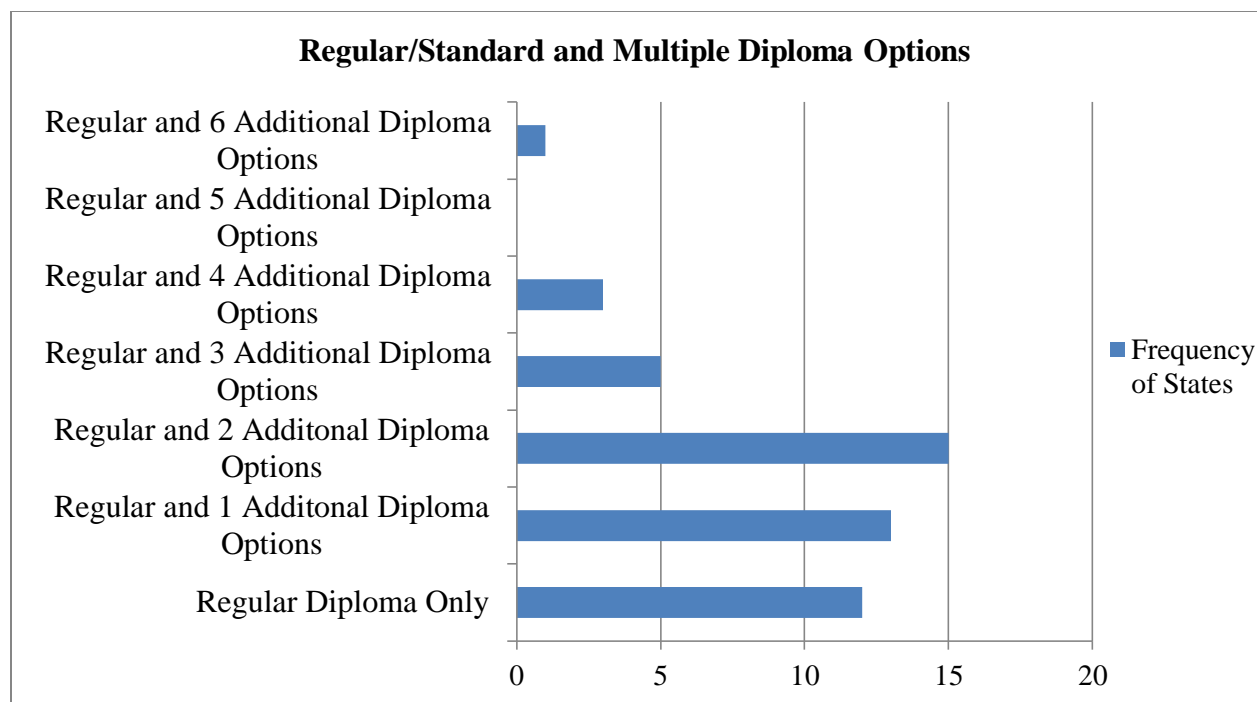
Separate Annual Measurable Objectives have been set for student subgroups, including Proficiency Gap Groups comprising students who historically have had difficulty meeting the commonwealth's achievement standards. The benchmarks are set with the goal of reducing by half the proficiency gaps in reading and mathematics between students in the lowest-performing and highest-performing schools within six years. (p.3)

Further, various states have established multiple graduation policies, diploma requirements, and options for SWD, however some of these alternative practices may not lead to meaningful postsecondary outcomes (Center on Education Policy, 2012; Cortiella, 2013; National Center on Educational Outcomes & Achieve, 2013). Cortiella (2013) asserted "states that have multiple diploma options and low graduation rates for SWD and/or significant

graduation gaps should closely examine the impact of multiple diploma options, graduation requirements and exit exam policies” (p. 2). Therefore, it is critical that SEAs align graduation policies for consistency and provide SWD access to the college and career ready standards necessary for standard diploma attainment that will lead to viable employment and post-secondary education outcomes (Johnson et al., 2007; National Center for Education Outcomes & Achieve, 2013). Additionally, in *A Blueprint for Reform*, President Obama stressed as a nation the need for schools to raise high school graduation expectations in order for every student to be prepared for college and a career-ready skills irrespective of income, race, ethnic or language background, or disability status (USDOE, 2010).

### **Diploma Options**

Significant variations in graduation rates for SWD across the United States are largely attributed to different diploma options, graduation requirements, and high school exit exams for SWD (Center on Education Policy, 2012; Cortiella, 2013). Figure 2 shows the number of diploma options available to SWD ranging from one to six across the 50 states. In 2011, Nevada had six diploma options for SWD in addition to a standard diploma (IDEA Data Center, 2014). Two other states, including Virginia, had four additional diploma options. Fifteen states having one or more diploma options fell below the nationwide graduation rate (68%) for students with learning disabilities in 2010-11 (Cortiella, 2013). In that same year, the percentage of students exiting special education programs with a regular diploma ranged from over 90% in Minnesota to approximately 25% in Nevada.



*Figure 2.* Frequency of States with Regular and Multiple Diploma Options

Source: [www.IDEAdata.org](http://www.IDEAdata.org)

### **Virginia's Diploma Options**

Virginia's SEA offers multiple diploma options for general education and special education graduates. All students may pursue an Advanced Studies or Standard Diploma. Only individuals who are of age 18 and have exited without a diploma may pursue a General Achievement Diploma by obtaining a prescribed number of credits and passing the General Educational Development (GED) Exam.

Prior to the 2013-14 school year, the VDOE offered a diploma option with modified achievement standards for SWD who otherwise may not have been able to meet the requirements for a standard diploma (VDOE, 2014e). The Modified Standard Diploma option required completion of coursework determined by the VDOE in order to earn 20 standard credits and demonstrated proficiency on Grade 8 SOL assessments or comparable literacy and numeracy assessments. The Modified Standard Diploma ended and is no longer an option for SWD in Virginia who entered the ninth grade for the first time during the 2013-2014 school year. Instead, credit accommodations allow SWD who previously would have pursued a Modified Standard



Diploma to earn a standard diploma. A Special Diploma is another option for SWD who complete IEP requirements and do not meet the criteria for other diploma options.

### **Standardizing Graduation Rates**

Although differences in graduation requirements, diploma options, and high school exit exams still vary from state to state, two federal reform efforts that have minimized elusive disparities are that SWD are required to participate in statewide assessments, and graduation rates have been standardized. NCLB (2001) legislation described a state's graduation rate as "the percentage of students who graduate from a secondary school with a regular diploma in a standard number of years" [NCLB 2001, second 1111 (b)(2)(C)(vi)]. In 2005, the National Governors Association (NGA) adopted a four year adjusted cohort graduation rate as a unified measure applicable to all states (National Governors Association, 2005). This measure was created and implemented in an effort to accurately and consistently calculate state high school graduation rates. Beginning in school year 2011-12, graduation rates were determined using the following formula:

$$\text{Graduation rate} = [\text{on-time graduates in year } x] \div [(\text{first-time entering ninth graders in year } x - 4) + (\text{transfers in}) - (\text{transfers out})] \text{ (NGA, 2005, p. 7)}$$

Even though these policies exist, the IDEA permits youth with disabilities to receive specialized services through age 21 inclusive. Therefore, under the IDEA legislation, states have the option of offering extended-year graduation expectations (Schifter, 2011).

### **Virginia's Graduation Requirements**

State Boards of Education determine graduation requirements for their local education agencies. In order to meet graduation requirements to earn an Advanced Studies Diploma in Virginia, a student must earn 26 standard units of credit by passing required courses and electives, and earn at least nine verified credits by passing end-of-course SOL tests or other approved assessments (VDOE, 2015c). If a Standard Diploma is pursued, a student must earn at least 22 standard units of credit by passing required courses and electives, and earn at least six verified credits by passing end-of-course SOL tests or other approved assessments (VDOE, 2015c). Standards units of credit are 140 instructional hours in coursework in each of the

following disciplines: English, Mathematics, Laboratory Science, History and Social Science, Health and Physical Education, Fine Arts or Career and Technical Education (CTE), Economics and Personal Finance, and Electives. Verified credits are end-of-course tests and are often referred to in literature as competency exams, high school exit exams, and/or high stakes testing. To earn the Advanced Studies or Standard Diploma, a student must pass the following SOL assessments: English, Math, Laboratory Science, History and Social Science, including one student selected test. For first time 9<sup>th</sup> graders entering the 2013-14 school year and beyond, students must also earn a CTE credential and pass one virtual course.

Credit accommodations provide alternative pathways for SWD toward coursework and SOL credits. Students eligible for credit accommodations options must be working towards obtaining a standard diploma. To meet credit requirements in earning standard and verified credits, these credit accommodations may include alternative coursework, modifications to requirements for locally awarded verified credits, approval of additional assessments, adjusted cut scores, and/or approval of work-based learning through CTE coursework (VDOE, 2013b).

### **High School Exit Exams**

The Center on Education Policy (2012) reported that 25 states require students to pass exit exams in order to earn a high school diploma, and Rhode Island began implementing exit exams in 2014. Controversy permeates over exit exams because graduation decisions can be contingent upon exams, which in turn, affect post-graduation outcomes (Wilkinson, 2012). Such tests require a minimum level of proficiency for graduation, and are referred to as “exit exams, certification exams, high stakes assessments, or competency exams” because of their consequences for the children that take them. Although, McGee’s (2011) study on high school exit options found that in states with flexibility in graduation requirements, such as exemption from exit exams for SWD, and the option of obtaining a diploma based on IEP completion, students with learning disabilities were more likely to graduate from high school than they were in states without such flexibility in high school exit requirements.

### **High School Diplomas and Post-Secondary Outcomes**

High schools are credited and blamed for students’ post-school outcomes (Fowler, Test, Cook, Toms, Bartholomew, & Scroggins, 2014). The literature on post-secondary outcomes

depicts long-term consequences of exiting high school without a diploma. U.S. Secretary of Education Arnie Duncan stated, “those students without high school diplomas face a bleak life of poverty and misery” (Layton, 2014, p. A3).

Turnbull, Turnbull, Wehmeyer, and Park (2003) argued that disability policy ensuring equal opportunity, full participation, independent living, and economic self-sufficiency for positive post-school outcomes for students with disabilities is still problematic and can impact a person’s quality of life. Students with disabilities enroll in college at a significantly lower rate than their peers, and similar with high school graduation rates, there are wide completion gaps when comparing the two populations (Fowler et al., 2014). Findings from the National Longitudinal and Transition Study-2 2007 (NLTS-2) revealed that youth with disabilities who exit high school without a diploma are likely to find gainful employment, but are less likely to earn competitive wages, vote, or obtain a driver’s license (Test, Mazotti, Mustian, Fowler, Kortering, & Kohler, 2009). Approximately 70% of SWD from that study continued to live with their parents after high school, 9% lived independently, and less than 1% lived in group homes or assisted living facilities. It was also predicted that those same students were at-risk for future arrests, frequent job changes, and may have children earlier in life. Therefore, Test and colleagues (2009) further recommended continued research in secondary transition and improving postsecondary outcomes in the areas of employment, education, and independent living for SWD.

### **Virginia’s Graduation Rates and Post-Secondary Outcomes**

Education Week (2014) reported that for the first time in our nation’s history, the percentage of all students who earned a high school diploma exceeded 80% in 2012. Further, national trends showed that high school completion rates have consistently risen by seven percentage points for all states with the exception of Michigan, South Dakota, and Rhode Island. Although Virginia’s trends are consistent with the nation, disparities in graduating SWD in comparison to their peers with a standard diploma still exist.

In 2012, Virginia graduated over 82,000 students with standard and advanced studies diplomas. In comparison to general education peers, a diploma gap existed in graduating SWD with standard and advanced studies diplomas (Eisenburg, 2013). Figure 3 shows the disparity in

diploma type in Virginia between the percentage of general education students and SWD who earned advanced and standard diplomas in 2012.

### Virginia's Diploma Gap 2012

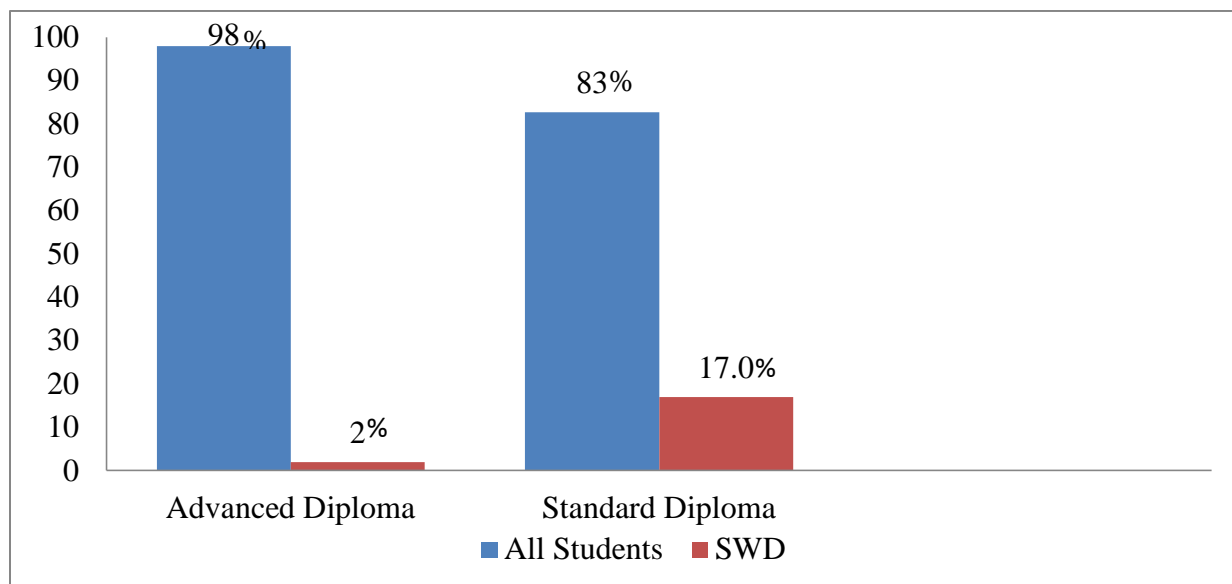


Figure 3. Virginia's Diploma Gap, 2012.

Adapted from "State of the Commonwealth," by J. Eisenburg, 2013, *Virginia Department of Education*, p. 3, and "Graduation, Completion, Dropout, and Post-Secondary Data: Virginia Cohort Reports" VDOE, 2015e.

Although, Virginia had increased graduates with disabilities who attained regular or advanced diplomas during school years 2010-13, Virginia had not consistently met state graduation targets as reported in the State Performance Plan. Table 2 shows that Virginia had only met its graduation target once between 2010-2013.

Table 2

#### Virginia's Graduation Report on Indicator 1: Graduation

Year	Total Membership	Graduation Percentage	State Target Percentage	State Target Met
2012-13	161,890	49.12	53.57	No
2011-12	161,988	48.41	49.96	No
2010-11	163,143	52.76	44.40	Yes

Note. Adapted from "Special Education State Performance Plan" and "December 1 Child Count," Virginia Department of Education, 2014.

The VDOE collects and reports post-school data outcomes specifically for students with disabilities to determine the percent of youth who had IEPs and are enrolled in higher education within one year of leaving high school, are enrolled in higher education or competitively employed within one year of leaving high school, or are enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school (VDOE, 2015b). Table 3 shows data for these measures during reporting years 2010-2013. Virginia met their intended post-secondary outcomes for youth with disabilities.

Table 3

*Indicator 14: Post-secondary Outcomes for Students with Disabilities*

Indicator Description	2010-2011	Target Met	2011-2012	Target Met	2012-2013	Target Met
a- enrolled in higher education within one year of leaving high school	35.90	Yes	34.94	Yes	34.90	Yes
b- enrolled in higher education or competitively employed within one year of leaving high school	62.90	Yes	62.74	Yes	62.20	Yes
c- enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school	72.00	Yes	72.20	Yes	71.60	Yes

*Note.* Adapted from “Special Education State Performance Report,” Virginia Department of Education, 2015b.

**Improvement Activities for Indicator 1**

When SEAs fail to meet state targets, improvement strategies and activities are required and are reported in an Annual Performance Report (APR) to the USDOE’s Office Special Education Programs (National Dropout Prevention Center for Students with Disabilities [NDPC-SD], 2012; USDOE, 2014). The NDPC-SD (2013) collected and analyzed national data

describing several common interventions and activities employed by states to improve graduation rates for SWD. Table 4 shows the evidence-based and promising practices reported by states in an effort to improve Indicator 1 in 2009 and 2010. Table 5 shows specific improvement activities that states employed to meet Indicator 1 in 2009 and 2010.

Table 4

*Evidence-based and Promising Practices Reported to Improve Indicator 1*

Nature of Intervention	N of States 2009	N of States 2010
One or More Research or Evidence- based Practices	48	48
Positive Behavior Supports	31	32
Literacy Initiatives	18	0
Response to Intervention	22	44
Mentoring Programs	8	9
Recovery/Reentry Programs	6	6
Parental/Family Engagement Efforts	0	28
Academic Initiatives	0	27
Vocational Education/CTE	0	17
Credit Recovery Programs	0	11

Note. Adapted from “Part B SPP/APR 2011 Indicator Analyses-(FFY 2009 and FFY 2010),” *National Dropout Prevention Center for Students with Disabilities*.

Table 5

*Frequency of States that Met Indicator 1 and Engaged in Improvement Activities 2009*

Improvement Activity	<i>N</i> of States 2009	<i>N</i> of States 2010
Priority on Graduation & Dropout	6	11
Data-based Decision Making	15	15
Transition-related Activities	22	17
Used One or More Evidence-based Programs	19	16
Statewide Initiative Related to School Completion	0	8

Note. Adapted from “Part B SPP/APR 2011 Indicator Analyses-(FFY 2009 and FFY 2010),” *National Dropout Prevention Center for Students with Disabilities*.

### **School Completion and Indicator I**

Discussed in Chapter 1 and described in Table 1, are the Secondary Education and Transition Indicators that pertain to graduating youth with disabilities with a standard diploma, reducing the dropout rate, and providing effective Transition services for education, employment, and adult living outcomes. The NDPC-SD (2012) strongly urged states to evaluate their State Performance Plan improvement activities and advance the work necessary pertaining to school completion for SWD. Extant research on school completion interventions requires a conceptual shift in practice from predicting dropout factors to preventing school dropout and promoting school completion (Christenson & Thurlow, 2004; Kortering & Christenson, 2009). Much of the comprehensive research in dropout prevention has been predictive or descriptive (Lehr, Hanson, Sinclair, & Christenson, 2003), which has provided more information about who is leaving school and why (Christenson et al., 2004). As cited by Christenson and colleagues (2004),

Conceptually, promoting school completion encompasses more than preventing dropout. For example, it is characterized by school personnel emphasizing development of students' competencies rather than dwelling on their deficits. Successful programs are comprehensive, interfacing family, school, and community efforts rather than offering a single, narrow intervention in one environment; are implemented over time rather than at

a single period in time; and make an effort to tailor interventions to fit individual students rather than adopting a programmatic “one size fits all” orientation. School-completion programs have a longitudinal focus, aiming to promote a “good” outcome, not simply prevent a “bad” outcome for students and society. (p.37)

Much of the research on school completion emphasizes its positive orientation and focus on student engagement and progress. Kortering and colleagues (2009) recommended the following practical strategies reported by students with high-incidence disabilities that fosters student engagement: 1) provide students access to age-appropriate Transition assessment; 2) academics should be relevant between learning and life; 3) provide students with opportunities to exercise choice; 4) encourage engagement in non-academic activities; and 5) encourage engagement in academic learning.

Test, Fowler, White, Richter and Walker (2009) conducted a literature review of evidence-based secondary strategies in Transition, also known to show promise in school completion for students with high-incidence disabilities. The practices identified in 11 studies were associated with Kholer’s Taxonomy for Transition Programming developed from research and evaluation of students in the late 1990s and early 2000s. As cited by Test and colleagues (2009), Kholer’s Taxonomy for Transition Programming entails student-focused planning, student development, interagency collaboration, family involvement, and program structures. The authors determined that student development and program structure were identified the most as strategies or interventions implemented that may increase school completion rates for SWD. Ten studies provided an evidence-base for student development in the context of developing independent living skills, vocational, and career related curricular including work experiences. Six articles provided evidence that school structures and policies supporting Transition education such as flexible programming, access, and creative approaches also may increase school completion rates for SWD.

### **Virtual School Options**

Beginning in the 1990s, virtual school options had become increasingly popular for at-risk students, including SWD (Repetto, Cavanaugh, Wayer, & Liu, 2010). Virtual schools experience similar challenges as public schools with closing achieving gaps, school completion, and increasing graduation rates. Repetto, Cavanaugh, Wayer, and Liu (2010) affirmed that in



addition to strengthening early warning data systems, increasing student engagement, tutoring, creating conducive environments, providing specific disability related services, and differentiating media, virtual schools have also adopted efforts to increase graduation rates for SWD by adding credit recovery options and remediation. These strategies encompass an approach to increasing graduation rates for SWD in virtual schools by also employing effective components of transition such as “career development, community experiences, self-determination, interagency collaboration, vocational and technical education in order to make a connection between school and future plans” (Repetto et al., 2010, p. 93).

### **Critical Literature Review**

Although there have been studies pertaining to SWD and graduation outcomes, there is sparse empirical research investigating effective practices in graduating SWD with standard/regular diplomas. Articles in peer-reviewed publications explored predictors on and strategies for retention and decreasing attrition, including evidenced-based and best practices to improve graduation rates. However, researchers of those articles did not specify the diploma type or indicated the inclusion of multiple diploma options such as the special education diploma. Dissertations that were located examined factors affecting graduation rates (Jukes, 2007), the effects of high school exit exams (Wilkinson, 2012), accountability standards and graduation rates (Moore, 2012), and IEP decisions and diploma attainment (Hybl, 2010). Presented in a chronological format, the literature included in this review specifically investigated SWD and standard diplomas. Recommendations from researchers include academic or transition related findings.

Benz et al. (2000) examined student and program factors that predicted graduation for SWD with a standard diploma. Their sample consisted of 709 secondary SWD who were served in Oregon Public Schools and were participants in a Youth Transition Program (YTP) during the 1993-94 through 1997-98 school years. The YTP was a collaborative partnership between Oregon’s SEA, Vocational Rehabilitation, local education agencies, and the University of Oregon. YTP served “youth with disabilities who require support beyond the services available typically through a district’s traditional general education, special education, and school-to-work programs to achieve their secondary and postsecondary employment and continuing education goals” (Benz et al., 2000, p. 511). Using logistic regression, results indicated three statistically

significant associations among predictor and outcome variables that aid in SWD graduating with a standard diploma. First, when students participated in YTP for one year or more, they were two times more likely to graduate with a standard diploma than peers who were in the program less than 12 months. Second, YTP participants who held two or more jobs with compensation, and students that completed four or more Transitions goals were two times as likely to graduate with a standard diploma. Third, students who participated in YTP and were considered as having one or more at-risk behaviors were more than three times likely to graduate with a standard diploma than students who did not experience at-risk indicators. Despite these factors, Benz et al. (2000) concluded when students have experience and support such as YTP, career-related work experience, and completion of student identified transition goals they were highly associated with improved graduation outcomes for youth with disabilities.

Legislation has influenced an increase in graduation accountability for all students, including those with disabilities. Cavendish conducted a study investigating ways in which schools in Florida could improve graduation rates within the context of NCLB and IDEA (Cavendish, 2009). The researcher identified declining graduation rates overall, but specifically in 2005, rates for SWD earning a standard diploma was at a low of 36%. During a five-year longitudinal study with a sample population of 154 10<sup>th</sup> graders attending 26 urban high schools, Cavendish studied student perceptions of factors hypothesized to increase the likelihood of standard diploma attainment. The predictors were: school commitment, self-determination, student involvement, gender, special education status, and graduation track. The researcher's findings supported that youth with disabilities school commitment, and the schools efforts to encourage their involvement have an impact on standard diploma attainment.

Federal legislation mandates that all students participate in exit examinations to earn a standard diploma. Thurlow, Cormier, and Vang (2009) examined alternative routes to a standard diploma using publicly available data from SEA websites. During summer and fall 2008, the researchers verified the data they accessed. Their analysis and verification process revealed that all but seven states (Alabama, Arizona, Arkansas, Nevada, Oklahoma, South Carolina, and Tennessee) had no alternative routes to standard diploma attainment for general or special education populations. During the time of this study, 26 states implemented exit examinations or high stakes assessments, and if students had not passed, it could have affected graduation from high school. Thus, alternative ways for SWD to demonstrate their knowledge and skills were

created (Krentz, Thurlow, Shyyan, & Scott, 2005). Thurlow and colleagues (2009) found that across the 26 exit examination states, 46 alternative routes were identified, with 23 each for all students or only for SWD. These alternative routes were described as waivers, substitute assessments (such as career, SAT, ACT, International Baccalaureate, grade level, modified achievement standards), projects/portfolios/other evidence, score adjustments, and IEP driven determinations. The passing criteria ranged from approved scores, acceptable evidence, and/or score adjustments. The researchers emphasized that in most cases, scoring criteria reflected an expectation of comparable knowledge and skills (Thurlow et al, 2009). A statistical analysis between the number of alternative routes to a standard diploma (for general and special education populations) and high school graduation rates for states with alternative routes were determined to be very small.

Students with disabilities are increasingly participating in inclusive settings (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Inclusion is the amount of time spent in general education classrooms. Federal and state monitoring indicators evaluate the percentage of time SWD participate in regular classrooms (VDOE, 2014h; USDOE, 2014). Goodman, Hazelkorn, Bucholz, Duffy, and Kitta (2011) studied the effects of inclusion on graduation rates of SWD. Over a period of six years, Goodman et al. (2011) examined records for approximately 67,000 students in Georgia that participated in inclusion for 80% or more of their school day. Researchers defined the high school graduation rate as the number of 12<sup>th</sup> grade youth with disabilities who graduated with standard diplomas. The population of youth with disabilities in which they studied were students eligible for special education under the disability categories of specific learning disability, emotional/behavioral disorder, mild intellectually disability, and other health impairment. Findings indicated a 62% increase in students with disabilities participating in inclusion over the six year period, and graduation rates relatively remained stable, less than 30%, for all disability categories except students with other health impairments (Goodman et al., 2011). Further, statistical analysis indicated a weak positive relationship between inclusion and graduation rates for SWD that participated in general education classrooms 80% more of the day in public school programs in Georgia. As a result of the findings, Goodman and colleagues suggested further examination of the supports and curriculum available to students with mild disabilities that would produce better outcomes and practices.

Smith, Manuel, and Stokes (2012) compared differences in diploma and graduation rates among general and special education students, and also analyzed differences in various graduation options by disability category in 12 southern states. Publicly available diploma and graduation data for the 2005-06 school years were analyzed for Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri, Mississippi, North Carolina, Tennessee, and Virginia. Data for South Carolina were analyzed for the 2004-05 school term. Consistent with national trends, researchers found that in these 12 states, general education peers had higher graduation diploma attainment rates in comparisons to SWD. The results of this study indicated that 26% of SWD graduated with diplomas, 16% dropped out of school, and 14.7% obtained certificates of completion (Smith et al., 2012). Differences in graduation existed among disability category. In the twelve states, students with emotional and behavioral disabilities had lower graduation rates in comparison to other SWD. Further, it was reported that other high-incidence categories such as students with learning disabilities graduated with a diploma less often than students with orthopedic, speech/language, and visual impairments. Smith and colleagues (2012) recommended the following strategies to improve graduation rates for SWD:

- evaluate core classes to ensure that students are enrolled in prerequisite courses that allow access to higher level coursework and rigorous curriculums and preparation for post-secondary entrance exams;
- expand inclusion of SWD in general education settings;
- develop Individualized Learning Plans;
- expand initiatives empirically proven to reduce dropouts;
- provide access to worksite readiness;
- implement Turnaround School Models to improve graduation rates; and
- implement graduation coaches and mentors to improve diploma graduation rates.

Elbaum, Myers, Raymond, and Sharpe (2014) urged that socioeconomic factors be considered when evaluating district graduation rates against state performance targets. Elbaum and colleagues (2014) examined the extent by which district variability in graduation rates for SWD in Florida could be attributed to characteristics such as poverty, ethnicity, district size, and the number of students in districts identified as having a disability. Graduation rates and socioeconomic data from 2006 through 2009 were analyzed using multilevel modeling.

Graduation for SWD was defined as graduating with a standard diploma. Researcher's found statistically significant associations among high district poverty and the proportion of SWD with lower graduation rates. Poverty yielded a negative impact for SWD when compared to other subgroups. As poverty rates increased, the graduation rate for SWD decreased. Results also revealed statistically significant associations with SWD identified as Black and Hispanic with lower graduation rates. Controlling for socioeconomic factors and higher percentages of minority students, districts with larger special education populations achieved about the same graduation rates as districts that served a smaller population of SWD. Also controlling for other variables, district size was not significantly associated with a decrease in graduation rates for SWD. Thus, Elbaum and colleagues encouraged readers to analyze several factors that may positively or negatively impact division performance on Indicator 1. Their findings suggested that school divisions may be successful in implementing effective strategies to graduate SWD with standard diplomas if they face fewer socioeconomic demographics, and have lower percentages of minority students receiving special education services.

Beginning during the 2009-2010 school term and over a four year period, the West Virginia Department of Education Office of Special Programs (WVDOESP) collaborated with and received technical assistance from the National Dropout Prevention Center for Students with Disabilities (NDPC-SD) for training in evidenced-based practices in school completion initiatives and interventions. Wilkins, Ruddle, Paitzel, Duffield, Minch, Hesson, Baker, Harper and Jennings (2014) described that the NDPC-SD Dropout Intervention Framework was implemented in the following five phases: 1) SEA and local education agency leadership teams were composed; 2) data were analyzed; 3) target areas for intervention were identified; 4) improvement plans were developed; and 5) plans were implemented, monitored, and evaluated. Although WVDOESP and NDPS-SC partnered with 12 districts during this initiative, reported in these case studies were five rural districts that successfully decreased the dropout rate and increased the graduation rate among SWD (Wilkins et al., 2014). Table 6 features a profile of each district, and areas of focus or interventions implemented to increase graduation rates.

Table 6

*West Virginia Public Schools District Profiles*

County	High Schools	Graduation Rate 2008-09	Graduation Rate 2012-13	%Net Change	Interventions
Daniel	3	55.2	66.2	+11.0	graduation coach, student/parent engagement, clubs during school hours, emphasis on teacher/student relationship building, school completion and graduation rites of passage activities, truancy diversion efforts, mentorships, social skills support, counseling academic tutoring
Potter	1	51.6	61.0	+9.4	integrated CTE curriculum and academic co-taught classes, integrated sciences and co-taught classes, changes in instructional design/delivery, attendance incentives, advisory program (case management/mentorship), parental involvement incentives
Stone	3	48.4	73.0	+24.7	increased co-taught classes, teacher coaches, virtual class options, remediation programs, on-site apprenticeships, emphasis on student/family engagement, mentorships
Cleveland	1	48.2	78.3	+30.0	truancy efforts, peer mediation, mentorships, tracking and monitoring, tutoring, credit recovery core content/electives, test preparation, after school/weekend programs, specific reading interventions, increased employment training sites
James	1	56.0	80.0	+24.0	obtained legislative school exit waiver, prevention policy exercised before withdrawal, expanded credit recovery options, student engagement emphasis, mentorship, clubs, partnership law enforcement and juvenile court

*Note.* Adapted from “Increasing Graduation Rates for Students with Disabilities: Success Stories from West Virginia.” by *Wilkins et al.*, 2014.

## **Special Education Leadership and Outcomes for Students with Disabilities**

Improved academic outcomes have been an important emphasis for special education policy over the past ten years. Since the inception of the Education for All Handicapped Children's Act, P.L. 94-142 in 1975, the role of the special education administrator has evolved from advocate to one that monitors compliance and legal counsel (Boscardin, 2004). Due to legislation such as NCLB and the 2004 reauthorization of the IDEA (formerly the Education for All Handicapped Children's Act, 1975), standards-based school reform requires transformation in the role of special education administrators (Boscardin, 2004; Hehir, 1999; Lashley et al., 2003; Pazez & Yates, 2012). These administrators are now charged with promoting and supporting use of evidence-based instructional practices, collaborating among general education and special education such as site-based administrators and instructional staff, including related services personnel and district leaders while ensuring that high quality programs are accessible to all students with disabilities regardless of ability (Boscardin, 2004; Boscardin, 2005; Lashley et al., 2003; Voltz & Collins, 2010). The connection to leadership and educational outcomes for students with disabilities would require student-focused instructional dimensions to improve instructional practices. Therefore, district-level special education administrators can no longer function in the realm of managers, and instead, should assume some responsibility in instructional leadership by collaborating closely with principals and teachers, curriculum directors, school psychologists, guidance counselors, and other personnel, to coordinate effective evidence based programs and practices (Boscardin, 2005).

Huberman and colleagues (2012) used a qualitative approach with special education directors in four high performing school districts in California to identify the policies and practices they had put in place that were attributed to successful academic outcomes for SWD. Districts selected for this study demonstrated higher than predicted achievement in the special education subgroup on statewide performance measures in English/Language Arts and Mathematics. Directors articulated high yield strategies for academic improvement as: inclusion and access to the core curriculum; collaboration between special education and general education personnel; continuous assessment and use of Response to Intervention; targeted professional development; and use of explicit direct instruction. Other researchers have documented these practices in other states, schools, and districts (Cortiella & Burnette, 2008;

Donahue Institute, 2004). Additionally, effective schools literature for general education is similar in practice for special education students and includes: an emphasis on curriculum alignment with curriculum frameworks; effective systems to support curriculum alignment, emphasis on inclusion and access to the curriculum; culture and practices that support high standards and student achievement; a well-disciplined academic and social environment; use of student assessment data to inform decision-making; unified practice supported by targeted professional development; access to resources to support key initiatives; effective staff recruitment, retention, and deployment; flexible leaders and staff who work effectively in a dynamic environment; and effective leadership (Huberman et al., 2012; Thurlow, Quenemoen, & Lazarus, 2012).

### **Synthesis and Conclusion**

Obtaining a high school diploma can determine the success of a student's future employment, economic security, and career choices. There is a persistent diploma outcome gap among the general and special education populations. Although national trends indicate a rise in standard diploma attainment for youth with disabilities, these students continue to graduate at levels well below their peers (Gwynne, Lesnick, Hart, & Allensworth, 2009; National Center for Education Statistics, 2002). This has been recognized as a problem by various professional and policy organizations.

Across Virginia's divisions, schools are experiencing challenges narrowing diploma outcome gaps between SWD and their peers. More than 80% of Virginia's local divisions have experienced challenges in meeting state performance measures in graduating youth with disabilities with a standard diploma. Thus, gaining an understanding of what policies and practices special education leaders credit for their divisions' success in meeting or exceeding Indicator 1 measures are pertinent. Analyzing what the successful divisions have done to sustain performance over a period of time, and considering if their strategies might work for students with similar learning profiles statewide may serve as a model for struggling divisions.

This literature review revealed that from a national perspective, there are wide variations in graduation outcomes for SWD among states. Prior to implementing a standard graduation rate for all, graduation rates were difficult to determine because of the differences in diploma options, graduation and exit exam requirements among states. Data indicated common interventions and



activities employed by states to improve secondary education measures impacting graduation and dropout rates, including Transition for SWD. Studies specifically investigating effective practices contributing toward standard diploma attainment for SWD were common in emphasizing Transition practices, academic initiatives, increasing student engagement and parental involvement, in addition to employing interventions consistent with school completion literature. Research yielding a marginal influence were inclusion, and the number of alternative routes, in terms of exit examinations, to obtaining a standard diploma for general education and special education students.

## **Chapter 3**

### **Methodology**

This chapter describes the research methodology and design for this study. The Delphi technique integrates a hybrid of data collection and analysis that are characteristic of both qualitative and quantitative research design. This convergent methodological approach is pragmatic in a researcher's worldview of understanding as it integrates mixed methods approaches. Creswell (2014) stated, "pragmatism arises out of actions, situations and consequences. There is a concern with applications-what works-and solutions to problems" (p. 10). An apparent diploma gap exists among SWD and their general education peers as indicated by a limited number (12%) of school divisions in Virginia that met or exceeded graduation indicators during the 2010-2013 school terms. Thus, this study investigated the policies and practices employed by Virginia's school divisions that met or exceeded graduation state performance measures for SWD during the 2010-11, 2011-12 and 2012-13 school terms in order to potentially identify effective strategies that may be beneficial in this problematic area. The methods that were chosen to conduct this study were helpful in exploring a critical issue and emerging trends in education, and also generating possible implementation considerations.

### **Background of Study**

An analysis of graduation outcomes in Virginia from 2010-2013 revealed that 19 of 132 school divisions met or exceeded statewide performance expectations for SWD. Annually, IDEA requires each SEA to report the public state and division level data indicating whether the state and school divisions have met targets indicated in State Performance Plans (IDEA, 2004). Therefore, the VDOE annually reports to the public 14 indicators in a Special Education Performance Report that compare state and division-level performance to Virginia's target goals (VDOE, 2014g).

In alignment with ESEA measures, VDOE monitors and reports Indicator 1: Percent of youth with IEPs graduating from high school with a regular diploma using the adjusted four-year cohort graduation rate (VDOE, 2014i). In Virginia, a regular diploma includes Virginia's Standard, Advanced Studies, or International Baccalaureate diploma. Indicator 1 is among four secondary education and transition data indicators that are monitored, collected, and analyzed to determine progress or slippage.

## **Purpose of the Study and Research Question**

The purpose of this study was to identify the policies and practices that special education directors perceived as contributing to meeting the state graduation performance measures for SWD in 19 Virginia school divisions. A study of best practices in graduating SWD with regular diplomas was of critical importance because this credential is viable to postsecondary outcomes such as higher education and meaningful employment (Cortiella, 2013). The following research question was investigated: What do Special Education Directors for divisions that consistently met or exceeded Indicator 1 during the 2010-2013 school years indicate are the policies and practices that contributed (to meeting or exceeding Indicator 1 expectations) or (to their success in meeting that goal)?

## **Study Design and Rationale**

This study employed the Delphi method to seek consensus from a panel of special education directors' perceptions of best practices and strategies that are seen as paramount in graduating SWD with a standard diploma or higher. The Delphi technique is a group communication and consensus building process that utilizes a method of gathering data from experts (Hsu et al., 2007). Developed by Norman Dalkey and Olaf Helmer of the RAND Corporation in the 1960s, this analysis includes multiple processes of data collection to develop and achieve consensus of opinion on a specific topic or problem. Key features of Delphi involves participant anonymity, iteration, controlled feedback, and statistical aggregation of group responses (Rowe & Wright, 1999). Thus, subsequent iterations provides opportunity for respondents to reevaluate their initial opinions based on examination of group responses, give feedback, and eventually improve accuracy of results from a group perspective (Green, 2014).

Linstone and Turoff (1975) indicated that the Delphi technique is useful for exploratory research and planning. Although typically used in quantitative analysis (Rowe et al., 1999), qualitative practices can be applied with Delphi methodology (Skulmoski et al., 2007). Therefore, Delphi techniques are suitable for structured data analysis in qualitative, quantitative, or mixed methods studies (Skulmolski et al., 2007). Using aspects of the classical Delphi technique, procedures should reflect both qualitative and statistical processes to obtain consensus from a group of experts (Patton, 2002). Additionally, based on responses from iterative

processes, questionnaires are developed and disseminated to the same panel of experts (Linstone & Turoff, 1975).

### Setting

The Commonwealth of Virginia has 132 school divisions comprised of eight regions: Region 1-Central Virginia, Region 2-Tidewater, Region 3-Northern Neck, Region 4-Northern Virginia, Region 5-Valley, Region 6-Western Virginia, Region 7-Southwest Virginia, and Region 8-Southside (VDOE, 2014c). These regions include divisions that range from large to small student populations in suburban, city, and rural areas including townships (National Center for Education Statistics, 2015). Appendix B provides characteristics of division locale descriptions that are determined by census data. Participant selection for this study included the 19 divisions that met or exceeded the statewide performance graduation indicator for SWD during three consecutive reporting years 2010-2013. There were three school divisions that graduated fewer than 10 students during the 2012-13 school terms. School divisions having 10 or fewer graduates are not evaluated on Indicator 1 (VDOE, 2014f). However, those three divisions were included in this study based on their consistency in the meeting graduation performance targets in previous years. Table 7 shows the number of school divisions representing each region invited to participate in this study, including their locale descriptions. Region 4-Northern Virginia had the highest number of qualifying divisions that met Indicator 1 for three consecutive reporting years. Region 8-Southside did not have any divisions meet Indicator 1 targets during the 2010-2013 school terms.

Table 7

*Virginia's School Division Regions and Locale Descriptions*

Region	Number of Divisions that Met or Exceeded Indicator 1 2010-2013	Locale Description
1-Central Virginia	1	Division A: Rural, Fringe
2-Tidewater	1	Division B: Rural, Fringe

(continued)

Table 7 (continued)

Region	Number of Divisions that Met or Exceeded Indicator 1 2010-2013	Locale Description
3-Northern Neck	3	Division C: Rural, Fringe Division D: Rural, Fringe Division E: Town, Distant
4-Northern Virginia	5	Division F: City, Middle Division G: Suburb, Large Division H: Suburb, Large Division I: Suburb, Large Division J: Rural, Distant
5-Valley	4	Division K: Rural, Fringe Division L: Rural, Distant Division M: Rural, Remote Division N: Rural, Distant
6-Western Virginia	2	Division O: Suburb, Midsize Division P: Suburb, Midsize
7-Southwest Virginia	3	Division Q: Town, Distant Division R: Town, Fringe Division S: Rural, Fringe
8-Southside	0	
<b>TOTAL</b>	<b>19</b>	

*Note.* Adapted from “School Divisions Locale Descriptions,” by the Virginia Department of Education, 2009.

### **Permission to Conduct Research**

An application was submitted to Virginia Polytechnic Institute and State University’s (VT) Institutional Review Board (IRB) for approval to conduct the study. Refer to Appendix C for the researcher’s IRB training certification and Appendix D for IRB approval. Once IRB approval was obtained from VT, the selected expert panel was contacted to solicit participation in the study.

After IRB approval, the researcher contacted Special Education Directors in the 19 divisions that met or exceeded graduation outcomes for SWD, as measured by Indicator 1 for state reporting, during the 2010-2013 school terms. The researcher retrieved Virginia’s Directory

of Local Special Education Directors (VDOE, 2014b) to identify contact information for the 19 selected school divisions invited to participate in this study. Through electronic mail, the researcher provided an overview of the potential study and solicited information to gain an understanding of the Special Education Director's respective division's policies and procedures to conduct research. Also included in this initial correspondence (Appendix E) was Informed Consent (Appendix F) and instructions about how to return forms. Many school divisions have sensitive computer firewalls and may block or redirect unknown mail senders to miscellaneous folders. Therefore, a copy of all correspondence included in the electronic mailing was also sent by U.S. mail with a reply-paid envelope for prospective participants to return the Informed Consent documentation.

### **Selection of Expert Panel**

Purposive sampling was used in the selection of Special Education Directors in the Commonwealth of Virginia. McMillan and Schumacher (2001) described purposive sampling as the selection of a limited number of cases suitable for in depth study to yield rich data and insight. Nworie (2011) contended that provided the right conditions, a group of four, 10-18, or even up to 50 panelists can participate in a Delphi study.

Only divisions that met or exceeded the state target for Indicator 1 during consecutive reporting years, 2010-2013, were included in this study. Three school divisions had fewer than 10 graduating students during the 2012-13 school term, and were included in this study based on consistently meeting graduation performance targets in previous years. The average performance in these divisions on Indicator 1 from 2010-2013 ranged from 54 to 71 percent (VDOE, 2014h). Refer to Table 8 for Indicator 1 state targets and division performance during the 2010-2013 reporting years.

Table 8

*Special Education Performance Report, Graduation Indicator*

Year	State Target Percentage	Participating Division Performance Percentage Range
2010-2011	52.76	54.39-83.33
2011-2012	49.96	52.30-100.00
2012-2013	53.57	55.20-81.80

*Note.* Adapted from “Special Education Performance Report,” by the Virginia Department of Education, 2014.

Delphi “allows educators, amongst others, to communicate and effectively develop trends, needs, or other factors relative to a particular area of education” (Stitt-Ghodes & Crews, 2004, p. 56). Participants in this study were considered expert practitioners in special education administration and were working in the capacity of Special Education Director, or a comparable title, at the central administration level in their respective divisions. For this study, special education administrators are those public school personnel who work in divisions to direct, lead, supervise and manage the provision of special education and related services for students with disabilities (Lashley & Boscardin, 2003).

Although NCLB mandated highly qualified requirements for special education teachers, there is no specific reference of what constitutes a highly qualified special education director (Lashley & Boscardin, 2012). Interpretation of licensure requirements for these educational leaders is implied or determined by the SEA and districts. The VDOE does not have documented licensure requirements for education directors or district leadership personnel other than a school superintendent (VDOE, 2013c). However, professional standards for administrators of special education have been developed by the Council for Exceptional Children (CEC) in collaboration with the Council of Administrators of Special Education (CEC, 2012). These national performance-based standards are described as advanced leadership competencies and dispositions that address: Assessment, Curricular Content Knowledge, Program Services and Outcomes, Research Inquiry, Leadership and Policy, Professional and Ethical Practice, and Collaboration.

As cited in Skulmoski et al. (2007), “Adler and Ziglio (1996) recommended that Delphi participants meet four expertise requirements: 1) knowledge and experience with the issues

under investigation; 2) capacity and willingness to participate; 3) sufficient time to participate in the Delphi; and 4) effective communication skills” (p. 4). Further, experts should have related backgrounds, specialized knowledge about current information and perceptions of the investigated topic, and a willingness to remain open-minded about the findings (Hsu et al., 2007; Jairath & Weinstein, 1994). Skulmoski and colleagues (2007) suggested that true field experts have great insight. Therefore, solicitation of the opinions of best practices from these experts representing divisions that are achieving in graduation outcomes for SWD may be beneficial to other divisions and the VDOE.

### **Informed Consent**

The American Educational Research Association (2011) encouraged that education researchers demonstrate basic ethical tenets when conducting scientific research using human populations. Thus, researchers must design informed consent (Appendix E) procedures when utilizing human subjects. The researcher abided by a protocol of ethics and compliance requirements established by the university’s IRB. Virginia Tech’s IRB (2014) outlined the informed consent process as: information, comprehension, and voluntariness.

Special Education Directors were provided adequate study information to make an informed decision about their participation with the understanding that they were free to withdraw from this research project at any time. Communication was organized and purposeful, outlined with procedures, timelines, and any potential risks or benefits. The researcher did not engage participants in any coercive recruitment activities.

### **Delphi I-First Round**

“Qualitative researchers tend to use open-ended questions so that the participants can share their views” (Creswell, 2014, p. 9). Nworie (2011) suggested many Delphi studies begin by asking panelists to generate responses to issues or challenges that confront the field in which they are familiar. After IRB approval, the first Delphi Round included a topic overview and completion of an open-ended questionnaire that was distributed to the expert panel. Panelists answered the following questions:

1. What are the *policies* implemented in your division that contribute to regular diploma attainment for SWD?



2. What are the *practices* implemented in your division that contribute to regular diploma attainment for SWD?

Panelists were given a two week period of time to complete the questionnaire. A notification reminder was sent three days prior to the date that the questionnaire was due. Keeping participants engaged and receiving data timely using the Delphi process is especially essential in the first round to analyze responses and construct the Delphi II questionnaire (Hsu, 2006).

### **Delphi II-Second Round**

Delphi I responses were used to formulate the structured questionnaire for the Delphi II Round. Upon distribution, participants rated the effectiveness of the reported policies and practices contributing to standard diploma attainment for SWD as least or most effective. A five-point Likert-type scale was used with 1 indicating “critically ineffective”, 2 indicating “somewhat ineffective”, 3 indicating “neither ineffective nor effective”, 4 indicating “somewhat effective”, and 5 indicating “critically effective”. Participants were asked to state their rationales concerning rating priorities among items, if applicable. Panelists were given a two week period of time to complete the questionnaire. A notification reminder was sent three days prior to the date that the questionnaire was due. Once the second Delphi Round closed, data were exported from the VT survey application software into Microsoft Excel to calculate descriptive statistics, and prepare for Delphi III.

### **Delphi III-Third Round**

Feedback from Delphi II responses were helpful in analyzing results to determine convergence on consensus. Each panelist received the final questionnaire including statistics (percentages on ratings and median scores) on each statement in order to gain an understanding of how close their opinions may or may not have been with other members of the panel. As an email attachment, panelists also received individual copies of their responses submitted during Delphi II. Delphi III provided panelists a final opportunity to clarify information, revise their judgments, or specify reasons for remaining outside the consensus.

School division demographics and participant educational background questionnaires followed the Delphi questionnaire. Panelists were given one week to complete these

questionnaires since they had already gained familiarity with the items in the last Delphi Round. A notification reminder was sent three days prior to the date that the questionnaires were due. Once the third and final Delphi Round closed, data were exported from the VT survey application software into Microsoft Excel to calculate descriptive statistics.

### **Data Analysis**

The researcher utilized qualitative and quantitative analyses to answer the research question. Simon and Francis (2001) stated that qualitative studies derive knowledge primarily from the contextual perceptions of participants. In such studies, the data collected are open-ended as the researcher strives to develop associated themes, theories, and patterns (Creswell, 2009). Therefore, responses from study participants using the Delphi technique were analyzed manually using the constant comparative method (Creswell, 2013; Patton, 2002) in order to identify recurring trends, patterns, and themes for the coding of data and to understand special education directors' perceptions of the policies and practices effective in graduating SWD with a regular diploma or higher. In subsequent Delphi rounds, Powell (2003) suggested quantification of earlier findings through use of ratings or ranking techniques in order to reach convergence and consensus of opinion by the final round (Powell, 2003). Stitt-Ghodes and Crews (2004) suggested that achievement of group consensus is calculated using descriptive statistics with maximum, minimum, and range scores for each reporting. Further, Miller (2006) suggested that consensus on a topic is determined by a certain percentage that of group responses falls within a specified range.

Nworie (2011) indicated decision rules must be established to interpret the judgments of Delphi subjects. Therefore, in this study consensus on a statement was considered to have been reached when 70% of the ratings from the Delphi panel of experts, who responded to each questionnaire, fell within one rating category on the five-point Likert-type scale. Descriptive statistics were run using Microsoft Excel in order to determine measures of central tendency and levels of dispersion. To determine rankings or levels of importance among items, the mean score represented group opinion and the standard deviation represented disagreement. Keeney, Hasson, and McKenna (2011) suggested encouraging convergence by reporting the median, standard deviation and/or interquartile range. In this study, statistical feedback was reported on the structured questionnaire using the median.

## **Data Collection and Management**

For purposes of expediency, storage, processing, and transcription of raw data, all correspondence to participants was submitted through electronic mail; questionnaires and results were resubmitted through the VT web-based survey application. Further, Witkin and Altschuld (1995) recommended electronic technology to maintain respondent's anonymity during the Delphi process. Therefore, to ensure confidentiality, data were maintained on a password protected computer that only the researcher could access.

## **Reliability and Validity**

Rudestam and Newton (2014) asserted that although validity and reliability are discussed in quantitative research, all research carries the responsibility of ensuring procedures for critical investigation. Keeney and colleagues (2011) described reliability in a Delphi study as an examination of stability in the research conditions and procedures; and validity as the measure of the content of the construct that is currently under study. Keeney and colleagues (2011) contended that the Delphi method assumes reliability by avoiding group-think, as each questionnaire is administered individually to panelists and collected without group discussion. In this study, panel members were anonymous to one another, which provided opportunity to reduce bias.

Hasson, Keeney, and Mckenna (2000) encouraged researchers to ensure the following factors to strengthen validity: a minimum number of successive Delphi rounds, a description of the expert panel, criteria for consensus; and report response rates. In order to develop a clear definition of the construct, the researcher asked participants to validate their initial responses to ensure the researcher's understanding in preparation for subsequent Delphi rounds. Response rates were reported in a three-round Delphi study of Special Education Director's perceptions of effective best practices in graduating SWD with a regular diploma. Using descriptive statistics, criteria for consensus were finalized by ratings and rankings from Delphi III, using the mean as a measure of group opinion and the standard deviation representing disagreement.

Creswell (2014) contended that an external auditor might be a provider of objective assessment in qualitative research to enhance the overall validity of a study. During all qualitative aspects of Delphi I, the researcher reorganized and repeated all processes and

procedures while utilizing an external auditor. A professional colleague who is a doctoral student with expert knowledge in qualitative research served in the capacity of an external auditor.

### **Summary**

The purpose of this chapter was to identify the methodology that was used in this study. This chapter described the design of the study, methodology for data collection, sources of data, and data analysis procedures that were employed in order to understand the policies and practices that Special Education Directors perceived to have contributed in graduating SWD with a regular diploma.

## Chapter 4

### Analysis of Data

The purpose of this study was to identify the policies and practices that special education directors perceived as effective in having met state graduation performance measures for SWD Virginia's school divisions. Nineteen school divisions consecutively met or exceeded Virginia's statewide performance graduation indicator during reporting years 2010-2013, and were invited to participate in this study. Twelve of the divisions responded, and 10 participated in the three Delphi rounds. This chapter is organized in terms of the specific research question posed in Chapter 1: What do Special Education Directors for divisions that consistently met or exceeded Indicator 1 during the 2010-2013 school years indicate are the policies and practices that contributed (to meeting or exceeding Indicator 1 expectations) or (to their success in meeting that goal)?

This study employed a three-round Delphi method used to reach a level of agreement and consensus with a panel of Special Education Directors about their perceptions of best practices and strategies that were seen as paramount in graduating SWD with a standard diploma or higher. First, the panelists developed a list of policies and practices that aided in graduating SWD with a standard diploma. Then, in two separate rounds, panelists rated their levels of agreement about each statement of practice. The results from the practitioners who agreed to participate are presented in this chapter.

#### **Delphi I**

Delphi I consisted of qualitative aspects whereby participants were asked to brainstorm and generate unlimited ideas in response to an issue (Keeney et al., 2011). Refer to Appendix G, Delphi I Correspondence to Participants, which includes instructions for the questionnaire. This panel of special education directors answered the following two open-ended questions (see Appendix H) using VT online survey web-based applications:

1. What are the *policies* implemented in your division that contribute to regular diploma attainment for students with disabilities?
2. What are the *practices* implemented in your division that contribute to regular diploma attainment for students with disabilities?

Although the primary aspect in the first Delphi round was to generate data, content analysis was equally important in this stage and remaining Delphi rounds. Keeney et al. (2011) suggested that any qualitative framework to code content may work well for the Delphi process. Therefore, responses from study participants using the Delphi technique were analyzed manually using the constant comparative method (Creswell, 2013; Patton, 2002) in order to identify recurring trends, patterns and themes for the coding of data and to understand special education directors' perceptions of the policies and practices effective in graduating SWD with a regular diploma or higher. In order to code data during this process, a hard copy of all responses was copied into a matrix by question and participant. Saldaña (2013) recommended when coding manually with small-scale studies, manipulating data on paper might allow more transference and handling control prior to using technology. The researcher read responses multiple times individually while bracketing and chunking information in margins for descriptive coding (Saldaña, 2013) by writing terms or phrases to identify units of meaning. Once this task had been completed for all participants, and for visual purposes, this information was transferred to color coded sticky notes in order to build a semantic map of significant units. Similar topics were clustered together using a process of continual revision, modification, and amendments until all units were placed into appropriate categories (Rudestam & Newton, 2014). As a final validity strategy, the researcher reorganized and repeated the described processes while utilizing an external auditor. Creswell (2014) contended that an external auditor might be a provider of objective assessment in qualitative research to enhance the overall validity of a study.

In response to question 1, referencing policies implemented that may have contributed to standard diploma attainment for SWD, panelists generated 28 responses that were collapsed into three themes. In response to question 2, referencing practices implemented that may have contributed to standard diploma attainment for SWD, panelists generated 75 responses that were collapsed into seven themes. A total of 103 responses were collapsed into 10 themes or descriptors. Refer to Appendix I for the number of the panelists who contributed a response or descriptor collapsed into a theme. Figure 4 depicts the themes that were constructed into three policy statements represented in blue, and seven practice statements represented in red.

The final step in concluding Delphi I processes involved constructing a questionnaire for Delphi II. The researcher reread all original raw data and merged participant responses with the researcher's words and phrases to develop statements of practice reported by the panel in Delphi

I. “The researcher should consider the nature and profile of the expert panel in deciding on how specific to keep the statements or on how rigorously to collapse them” (Keeney et al., 2011, p.85). Further, Keeney et al. (2011) suggested sharing raw data and collapsed descriptors with a critical friend to ensure meaning is not misconstrued. The external auditor helped to oversee this process and gave feedback. Further, prior to releasing the questionnaire to the panel, the researcher submitted the tallied descriptors of collapsed categories and themes to the chair of the dissertation committee and consulting faculty for feedback about the procedural steps that had been followed and final review of the draft survey.

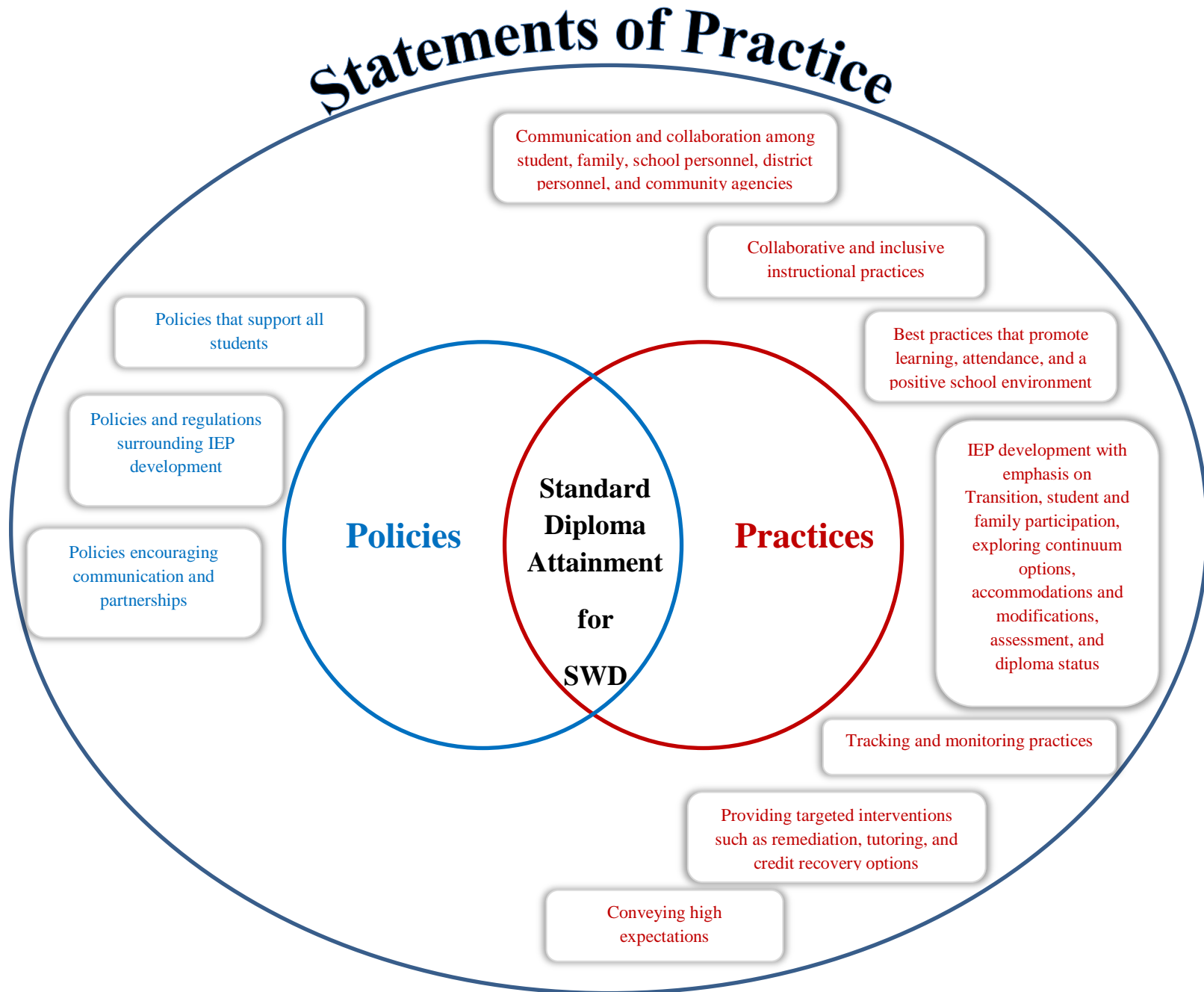


Figure 4. Reported Policies, Practices, and Standard Diploma Attainment



## **Delphi II**

Subsequent Delphi rounds included structured questionnaires incorporating feedback to and from panel members, if applicable. The purpose of these rounds was for the panel to reach a level of agreement or consensus. Nworie (2011) opined two or more Delphi questionnaires could show a pattern of consensus. “The consensus level will have been decided by the researcher or research team at the outset of the study and will be important when considering the returned Round II questionnaire responses” (Keeney et al., 2011, p. 86). The researcher established the consensus level at 70%.

The final 10 descriptors collapsed from the cumulative 103 Delphi I responses were used to develop a structured questionnaire for the second round. Thus, the questions that were created for the structured questionnaire were developed directly from the descriptors and themes. Refer to Appendix J for correspondence to panelists including instructions for the questionnaire (Appendix K). Panel members were asked to read and rate each statement of practice using a five-point Likert-type scale ranging from critically effective to critically ineffective. Ten panelists responded to Delphi II using VT online survey software. Data were exported into Microsoft Excel to calculate descriptive statistics.

### **Statistical analysis.**

Once the Delphi II questionnaire ended for data collection, the VT survey application populated a summary of statistics. All questionnaire items were rated in the effective range by the majority of participants which indicated high inter-rater reliability. For each question, this statistical summary reported cumulative participant ratings in percentages using the five-point Likert-type scale as shown in Table 9. Out of the 10-item questionnaire, four of the statements (40%) reached consensus. Table 10 shows descriptive statistics for Delphi II, including items that reached consensus. The four statements that reached consensus were considered practices, and were rated in the critically effective range. Figure 5 shows the four items that reached consensus in this Delphi round. None of the items were policies.

Table 9

*Delphi II Panel Response by Question*

1-Critically Ineffective	2-Somewhat Ineffective	3-Neither Ineffective nor Effective	4-Somewhat Effective	5-Critically Effective
Q1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	60%	30%
Q2. Policies and regulations surrounding IEP development aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
	10%		60%	30%
Q3. Policies encouraging communication and partnerships among schools and families aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	60%	30%
Q4. Communication and collaboration among student, family, school personnel, district personnel, and community agencies are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	40%	50%
Q5. Collaborative and inclusive instructional practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			40%	60%
Q6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			40%	60%
Q7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	10%	80%
Q8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
	10%			90%

(continued)

Table 9 (continued)

1-Critically Ineffective	2-Somewhat Ineffective	3-Neither Ineffective nor Effective	4-Somewhat Effective	5-Critically Effective
Q9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
				100%
Q10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			30%	70%

*Note.* There were 10 participants ( $n=10$ ). No missing data.

Table 10

*Delphi II Descriptive Statistics and Consensus*

Statement of Practice	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Low/High	Consensus
Q1. District policies that support all students	4.20	4	0.63	3,5	No
Q2. Policies and regulations related to IEP development	4.10	4	0.87	2,5	No
Q3. Policies encouraging communication and partnerships among schools and families	4.20	4	0.63	3,5	No
Q4. Communication and collaboration among stakeholders	4.40	4.5	0.69	3,5	No
Q5. Collaborative and inclusive instructional practices	4.60	5	0.51	4,5	No
Q6. Best practices that promote learning, attendance, and a positive school environment	4.60	5	0.51	4,5	No
Q7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status	4.70	5	0.67	3,5	Yes, 80%

(continued)

Table 10 (continued)

Statement of Practice	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Low/High	Consensus
Q8. Tracking and monitoring	4.70	5	0.94	2,5	Yes, 90%
Q9. Targeted interventions such as remediation, tutoring, and credit recovery	5.00	5	0.00	5,5	Yes, 100%
Q10. Conveying high expectations	4.70	5	0.48	4,5	Yes, 70%

*Note.* There were 10 participants ( $n=10$ ).

The primary statistics used in Delphi analyses are measures of central tendency (mean, median and mode) and level of dispersion (standard deviation) (Keeney et al., 2011). To determine the level of importance or ranking, the researcher used the mean to rank statements reaching consensus from high to low, sorting through the average scores in descending order. The ratings ranged from 4.70-5.00. The average mean score for items that met consensus was 4.70. Since three items averaged the same mean, the level of importance or ranking, was further determined by the standard deviation. The standard deviations for all items that met consensus ranged from 0.48-0.94. In rank order, Table 11 shows descriptive statistics on the statements of practice that reached consensus in Delphi II.

Four out of 10 statements reached consensus in Delphi II. The statement of practice with the highest mean rating of 5.00 on a five-point Likert-type scale was *providing targeted interventions such as remediation, tutoring, and credit recovery aid in graduating students with disabilities with a regular/standard diploma*. One hundred percent of the panelists rated this practice as a 5, critically effective.

Since three other statements averaged identical means, standard deviations were utilized to determine further rankings. The second statement of practice with the highest mean rating and lowest standard deviation in Delphi II was *conveying high expectations aids in graduating students with disabilities with a regular/standard diploma*. The mean score was 4.70 on a five-point Likert-type scale. The standard deviation was 0.48. Of the 10 panel members, 70% rated this statement as a 5 on the Likert-type scale, as critically effective. The remaining 30%, rated this item as a 4, somewhat effective.

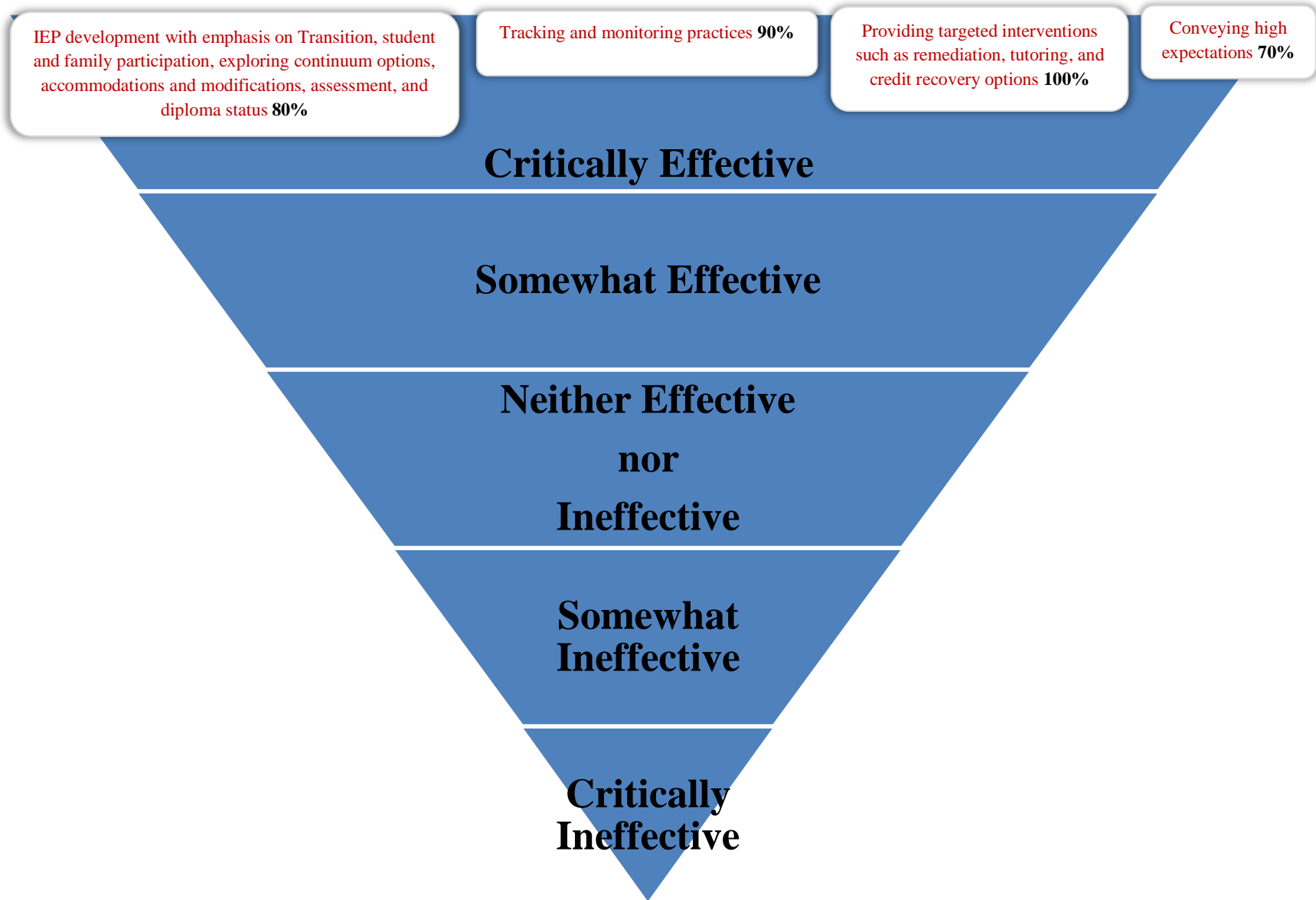


Figure 5. Delphi II Consensus Statements and Percentages

The third highest ranking statement of practice as determined by the mean and standard deviation was *IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status aids in graduating students with disabilities with a regular/standard diploma*. The mean score was 4.70 on a five-point Likert-type scale. The standard deviation was 0.67. Eighty percent of the panelists rated this practice as a 5, critically effective, and also 10% rated it as somewhat effective. One panel member (10%) rated this statement as 3, neither ineffective nor effective.

The fourth ranking statement as determined by the mean and standard deviation was *tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma*. Using a five-point Likert-type scale, the mean score was 4.70 and standard deviation 0.94. Ninety percent of the panelists rated this statement as a 5, critically effective. One panel member (10%) rated this practice as a 2, somewhat ineffective.

#### **Statistical feedback to panel.**

To move further towards consensus, providing statistical feedback is relevant in the Delphi process (Miller, 2006). As a general practice to encourage convergence, researchers using the Delphi methodology report the median, standard deviation and/or interquartile range (Keeney et al., 2011). This allows participants to gain an understanding of how close their opinions may or may not be aligned with the panel (Hasson et al., 2000). In preparation for Delphi III, descriptive statistics were prepared using Microsoft Excel to determine measures of central tendency and levels of dispersion. In this study, statistical feedback was provided on the structured questionnaire using the median. As cited in Miller (2006) “Dalkey (1967) argued that the median of individual responses was the most useful index” (p. 5). Refer to Appendix L for a copy of the Delphi III questionnaire that reported statistical feedback from Delphi II.

Table 11

*Delphi II Statements of Practice in Rank Order by Mean*

Statement of Practice	<i>N</i>	<i>M</i>	<i>SD</i>	<i>s</i> <sup>2</sup>	Ranking	Consensus
Q9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	5.00	0.00	0.00	1 <sup>st</sup>	100%
Q10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.70	0.48	0.23	2 <sup>nd</sup>	70%
Q7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.70	0.67	0.45	3 <sup>rd</sup>	80%
Q8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma.	10	4.70	0.94	0.90	4 <sup>th</sup>	90%

*Note.* This table shows, in order of identified priority, the mean score and standard deviation for each statement of practice. There are four items that reached consensus in Delphi II. The mean is used to rank the order of importance. The higher the mean, the higher the level of priority. Since items 10, 7, and 8 all have the same mean, the standard deviation and variance were analyzed among items. Less variance indicates greater consensus.

**Exclusion of items with consensus.**

Various Delphi researchers have suggested removing items that have already gained consensus (Hasson et al., 2000; Keeney et al., 2011). However, after further discussion with consulting VT faculty and the dissertation chair, all statements were resubmitted to panel members. Keeney et al. (2011) encouraged, “by keeping all statements in for all three rounds of classical Delphi, every statement is getting an equal chance to gain the highest importance rating and level of consensus as each other” (p. 88).

**Delphi III**

Rice (2009) asserted that in Delphi studies, the same questionnaire is used in Rounds II and III to illustrate changes, stabilization, and convergence. In the present study, in the second and final Delphi rounds, panelists were presented with the same questionnaire and procedures from Delphi II. Although, in this third Delphi round, statistical data were provided for panelists to gain an awareness of the majority ratings in comparison to their own. Refer to Appendix M for correspondence to panelists, and Appendix L for a copy of the Delphi III questionnaire. In addition, panelists were provided copies of their individual responses from Delphi II. The essential aspects of Delphi III were to allow participants opportunity to revise their judgments, to provide clarifications with their ratings, and/or to specify reasons for remaining outside of the consensus. The 10 panel members participating in the previous Delphi Rounds responded to Delphi III using the VT web-based survey application. Data were exported into Microsoft Excel to calculate descriptive statistics when the questionnaire window closed in order to determine final consensus on statements of practice special education directors deemed as important in graduating students with disabilities with a regular diploma.

**Analysis of the final round.**

Theorists recommend a maximum of three, but usually no more than four Delphi rounds if only a few statements reached consensus (Hasson et al., 2000; Keeney et al., 2011). In this study, 40% of the statements reached consensus in the second round and maintained consensus in the third round. Additionally, by the third round, two additional statements of practice (20%) identified by special education directors as contributing to graduating SWD with a regular



diploma also reached consensus. Therefore, 60% of the items reached consensus and were determined as effective strategies by the expert panel.

A structured questionnaire was also provided in this round, and panelists were encouraged to provide clarifications or give feedback with their responses. On four of the six items that reached consensus, it is noteworthy to mention an emerging theme reported by five expert panelists in Delphi III, “staff make the difference with implementation, implement with fidelity,...and they must be utilized and implemented, know how to it apply properly.”

### **Statistical analysis.**

Once the Delphi III questionnaire ended for data collection, the VT survey application populated a summary of statistics. All questionnaire items were rated in the effective range by the majority of participants which indicated high inter-rater reliability. For each question, a statistical summary reported cumulative participant ratings in percentages using the five-point Likert-type scale as shown in Table 12. Out of the 10 item questionnaire, six (60%) of the statements reached consensus. Table 13 shows descriptive statistics for Delphi Round III, including items that reached consensus. In order to reach consensus, 70% or more of the respondents rated the same response on an item, therefore agreement was achieved. Five of the statements were considered as practices, and were rated in the critically effective range. Four statements were the same that had reached consensus in Delphi II. The additional items reaching consensus were a practice, and one was considered a policy. The new statement of practice was rated by panelists in the critically effective range, and the policy rated in the somewhat effective range. Refer to Figure 6 depicting practices in red and policies in blue.

Table 12

#### *Delphi III Panel Response by Question*

1-Critically Ineffective	2-Somewhat Ineffective	3-Neither Ineffective nor Effective	4-Somewhat Effective	5-Critically Effective
Q1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	70%	20%
(continued)				

Table 12 (continued)

1-Critically Ineffective	2-Somewhat Ineffective	3-Neither Ineffective nor Effective	4-Somewhat Effective	5-Critically Effective
Q2. Policies and regulations surrounding IEP development aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
	10%	10%	30%	50%
Q3. Policies encouraging communication and partnerships among schools and families aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	50%	40%
Q4. Communication and collaboration among student, family, school personnel, district personnel, and community agencies are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	40%	50%
Q5. Collaborative and inclusive instructional practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			40%	60%
Q6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			30%	70%
Q7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%	10%	80%
Q8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
		10%		90%
Q9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
				100%

(continued)

Table 12 (continued)

1-Critically Ineffective	2-Somewhat Ineffective	3-Neither Ineffective nor Effective	4-Somewhat Effective	5-Critically Effective
Q10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?				
			10%	90%

*Note.* There were 10 participants ( $n=10$ ). No missing data.

Table 13

*Delphi III Descriptive Statistics and Consensus*

Statement of Practice	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Low/High	Consensus	Consensus Change Delphi II to III
Q1. District policies that support all students	4.10	4	0.56	3,5	Yes, 70%	Yes; non-consensus to consensus
Q2. Policies and regulations related to IEP development	4.20	4.5	1.03	2,5	No	No
Q3. Policies encouraging communication and partnerships among schools and families	4.30	4	0.67	3,5	No	No
Q4. Communication and collaboration among stakeholders	4.40	4.5	0.69	3,5	No	No
Q5. Collaborative and inclusive instructional practices	4.60	5	0.51	4,5	No	No
Q6. Best practices that promote learning, attendance, and a positive school environment	4.70	5	0.48	4,5	Yes, 70%	Yes, non-consensus to consensus
Q7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status	4.70	5	0.67	3,5	Yes, 80%	No, level of consensus remained
Q8. Tracking and monitoring	4.80	5	0.63	3,5	Yes, 90%	No, level of consensus remained

(continued)

Table 13 (*continued*)

Statement of Practice	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Low/High	Consensus	Consensus Change Delphi II to III
Q9. Targeted interventions such as remediation, tutoring, and credit recovery	5.00	5	0.00	5,5	Yes, 100%	No, level of consensus remained
Q10. Conveying high expectations	4.90	5	0.31	4,5	Yes, 90%	Yes, level of consensus increased

*Note.* There were 10 participants ( $n=10$ )

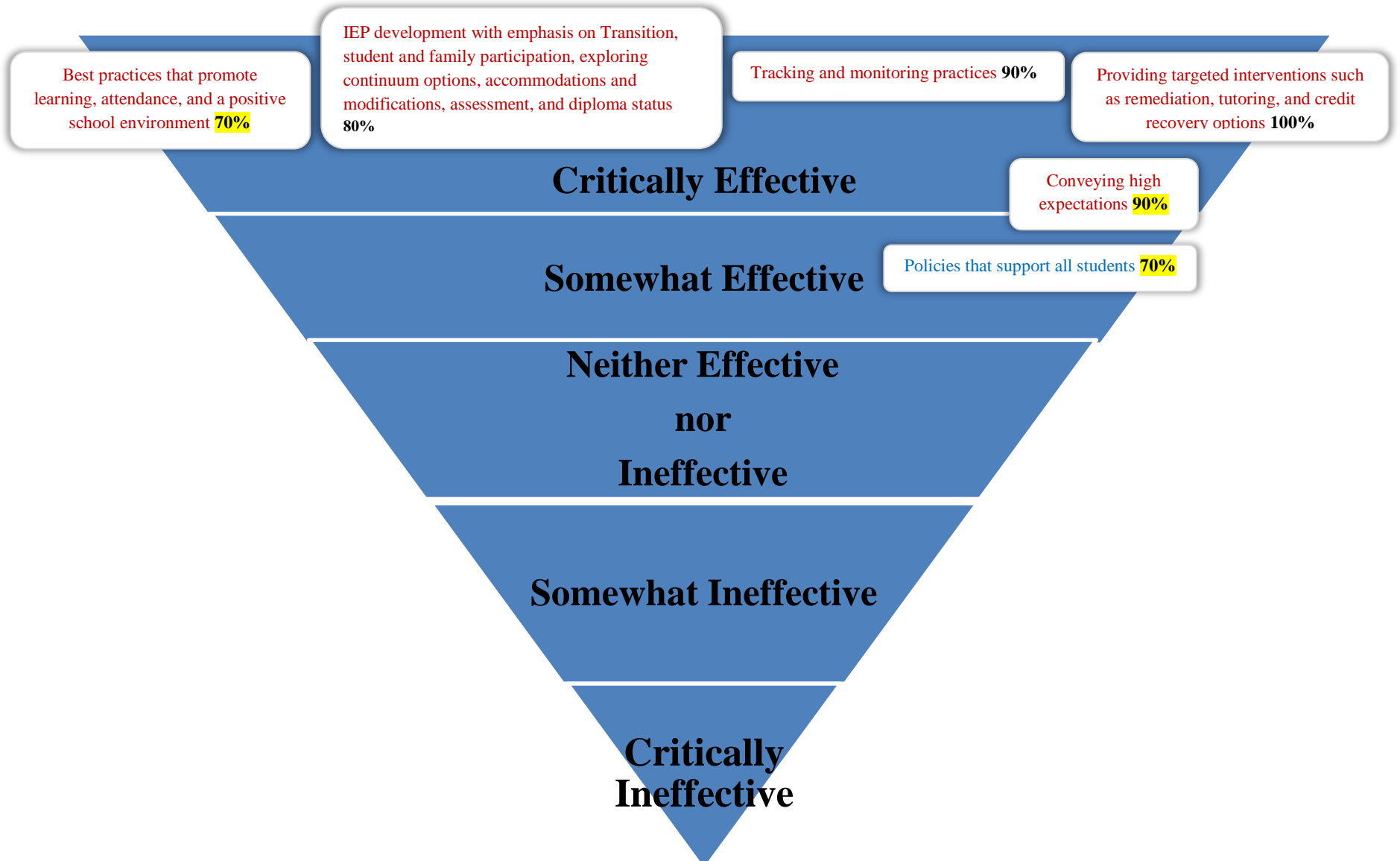


Figure 6. Delphi III Consensus Statements and Percentages

Using the same procedures in Delphi II, measures of central tendency and level of dispersion were calculated for reporting. The level of importance on an item was determined by ranking the mean score in descending order. Mean scores indicated a level of agreement whereas standard deviations indicate variability or disagreement among panelists' ratings. In rank order, Table 14 shows descriptive statistics on the statements of practice that reached consensus in Delphi III. For items that reached consensus, the mean scores ranged from 4.10-5.00. The average mean score for these items was 4.57. Since two items averaged the same, the level of importance or ranking, was further determined by the standard deviation. The standard deviation for all items that met consensus ranged from 0.31-0.56.

Six statements of practice reached consensus in Delphi III. The statement of practice with the highest mean rating of 5.00 on a five-point Likert-type scale was *providing targeted interventions such as remediation, tutoring, and credit recovery aid in graduating students with disabilities with a regular/standard diploma*. One hundred percent of the panelists rated this practice as a 5, critically effective. This item maintained stability from Delphi Round II to Delphi Round III, indicating the same level of importance (5.00 mean) and consensus level (100%).

The second statement of practice with the highest mean rating of 4.90 on a five-point Likert-type scale was *conveying high expectations aids in graduating students with disabilities with a regular/standard diploma*. The standard deviation was 0.31. Among the 10 expert panelists, 90% rated this statement as a 5 on the Likert-type scale, as critically effective. The remaining panelists, 10%, rated this item as a 4, somewhat effective. Although this item had already reached consensus in Delphi II, it increased 20 percentage points in level of agreement from Delphi II to Delphi III. As shown in Table 15, there was also a slight net increase in the mean between the two Delphi rounds.

The third ranking statement with the highest mean rating of 4.80 on a five-point Likert-type scale was *tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma*. The standard deviation was 0.63. Ninety percent of the panelists rated this statement as a 5, critically effective. One panel member (10%) rated this practice as a 3, neither ineffective nor effective. Although this item had already reached consensus in Delphi II, its ranking or level of importance as determined by the mean score, changed from fourth to third. As shown in Table 15, there was also a slight net increase in the mean between the two Delphi Rounds.

The fourth highest ranking statement as determined by the mean and standard deviation was *best practices that promote learning, attendance and a positive school environment aid in graduating students with disabilities with a regular/standard diploma*. Using the five-point Likert-type scale, the mean score was 4.70 and the standard deviation was 0.48. Seventy percent of the panelists rated this statement as a 5, critically effective. Three panel members (30%) rated this statement as a 3, somewhat effective. Although this statement had not reached consensus in Delphi II, it was already close to convergence with 60% of the panel rating this item as 5, critically effective. In Delphi Round III, one panelist (10%) revised his/her judgment. There was also a slight net increase in the mean between the two Delphi Rounds as shown in Table 15.

The fifth highest ranking statement of practice as determined by the mean and standard deviation was *IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status aid in graduating students with disabilities with a regular/standard diploma*. The mean score was 4.70 on a five-point Likert-type scale. The standard deviation was 0.67. Eighty percent of the panel rated this practice as a 5, critically effective, and also 10% rated it as 4, somewhat effective. One panel member (10%) rated this statement as 3, neither ineffective nor effective. The statistics on this item remained exactly the same in Delphi Rounds II and III. However, the level of importance decreased in the third round from the third to fifth ranking as shown in Table 14.

The sixth ranking statement of practice with the highest mean rating of 4.10 on a five-point Likert-type scale was *district policies that support all students aid in graduating students with disabilities with a regular/standard diploma*. The standard deviation was 0.56. Seventy percent of the panel rated this item as a 4, somewhat effective. Two panel members (20%) rated this statement as a 5, critically effective, and one panel member (10%) indicated a rating of 3, neither ineffective nor effective. Although this statement had not reached consensus in Delphi II, it was already close to convergence with 60% of the panel rating this item as a 4, somewhat effective. In Delphi Round III, one panelist (10%) revised his/her judgment. There was also a slight net decrease in the mean score between the two Delphi Rounds as shown in Table 15.



Table 14

*Delphi III Statements of Practice in Rank Order by Mean*

Statement of Practice	<i>N</i>	<i>M</i>	<i>SD</i>	<i>s</i> <sup>2</sup>	Ranking	Consensus
Q9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	5.00	---	---	1 <sup>st</sup>	100%
Q10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.90	0.31	1.10	2 <sup>nd</sup>	90%
Q8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.80	0.63	0.40	3 <sup>rd</sup>	90%
Q6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.70	0.48	0.23	4 <sup>th</sup>	70%

(continued)

Table 14 (continued)

Statement of Practice	<i>N</i>	<i>M</i>	<i>SD</i>	<i>s</i> <sup>2</sup>	Ranking	Consensus
Q7. IEP development with emphasis on Transition, student and family participation exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	10	4.70	0.67	0.45	5 <sup>th</sup>	80%
Q1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice	10	4.10	0.56	0.32	6 <sup>th</sup>	70%

*Note.* There are six items that reached consensus in Delphi III. The mean is used to rank the order of importance. Two of the means are the same. Therefore, determine the ranking by analyzing the standard deviation. If there is less variance, the consensus is greater.

Table 15

*Comparison of Consensus Items, Delphi Rounds II and III*

Statement of Practice	Round II <i>M</i>	Round III <i>M</i>	<i>M</i> Difference
Q9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma.	5.00	5.00	0
Q10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma.	4.70	4.90	+0.2
Q8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma.	4.70	4.80	+0.1
Q6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?	4.60	4.70	+0.1
Q7. IEP development with emphasis on Transition, student and family participation exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma.	4.70	4.70	0
Q1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma.	4.20	4.10	-0.1

*Note.* The data from round three are considered final results, but the results from round two can be used to illustrate potential convergence between rounds. This table displays the mean scores for items that reached consensus from Delphi Round II to Round III. Three mean scores of six statements of practice reaching consensus slightly increased. One of the statement's mean scores slightly decreased.

### Demographic questionnaire.

In this final Delphi round, all participants were asked to complete a two-part questionnaire. In the first part of the questionnaire (Appendix L), panelists were asked to review a series of statements they had already seen for the purpose of revising judgments, providing clarifications with their ratings and/or specifying reasons for remaining outside of the consensus. The second section of the questionnaire (Appendix N) included school division demographics information and questions related to participants' educational backgrounds and work experience.

Ten study participants represented six of eight Superintendent Regions in Virginia. Seventy percent of the divisions are located in the suburbs, and the three divisions are located in a city, town, or rural area. As of December 2014, the average daily membership for these participating divisions ranged from 300 to 20,000 or more students. During the 2010-2013 school years, the average special education child count for these participating divisions ranged from 100 to 5,000 (VDOE, 2015a). Table 16 captures division demographics for the panelists.

Table 16

#### *Delphi Panelist's School Division Demographics*

Division Demographics	(n=10)	%
Superintendent's Region		
1-Central Virginia	1	10
2-Tidewater	0	0
3-Northern Neck	3	30
4-Northern Virginia	2	20
5-Valley	1	10
6-Western Virginia	2	20
7-Southwest Virginia	1	10
8-Southside	0	0
Missing Data	0	0
Locale Description		
City	1	10
Rural	1	10
Town	1	10
Suburb	7	70
Missing Data	0	0

(continued)

Table 16 (continued)

Division Demographics	(n=10)	%
Average Daily Membership 2014-2015		
300-2,500	2	20
2,501-5,000	2	20
5,001-10,000	1	10
10,001-15,000	1	10
15,001-20,000	1	10
20,001+	3	30
Missing Data	0	0
Special Education Child Count 2010-2013 Average		
100-500	3	30
501-1,000	2	20
1,001-2,500	3	30
2,500-5,000	2	20
5,001+	0	0
Missing Data	0	0

*Note.* Data for Special Education Child Count adapted from “Special Education Child Count by Division,” by the Virginia Department of Education, 2015.

### **Educational background questionnaire.**

The ten study participants representing school divisions in Virginia were three males and seven females. All were administrators of special education with the role of Special Education Director except two panelists. One participant’s official title was Assistant Superintendent, and the other participant’s title was Executive Director of Special Programs. Both participants confirmed that their leadership functions included the oversight and administration of special education programming and/or monitoring. All of the panel members have obtained a minimum of a Master’s degree for Postgraduate Professional Licensure in Virginia (VDOE, 2014k); and two panelists have doctoral degrees. Years of education for this panel of experts ranged from 6 to 26 or more years, with 60% of the participants having experience as a special education director between 6 and 10 years. Ninety percent of the expert panelists have served in this position in their respective divisions for five years or more. At the high school level, 70% percent of the panel had been special education teachers, and 20% had been general education teachers. These panelists also have held other administrative, special education and teacher related roles throughout their careers. Table 17 provides a summary of panelists’ educational backgrounds.

Table 17

*Delphi Panelist's Educational Background*

Educational Background	(n=10)	%
Gender		
Female	7	70
Male	3	30
Missing Data	0	0
Years of Service		
1-5	0	0
6-10	1	10
11-15	2	20
16-20	1	10
21-25	4	40
26+	2	20
Missing Data	0	0
Teacher Experience		
General Education		
Elementary School	1	10
Middle School	1	10
High School	2	20
Special Education		
Elementary School	4	40
Middle School	6	60
High School	7	70
Missing Data	0	0
Special Education Director Experience		
1-5	2	20
6-10	6	60
11-15	0	0
16-20	0	0
21-25	0	0
26+	0	0
Missing Data	0	0

(continued)

Table 17 (continued)

Educational Background	(n=10)	%
Years as Special Education Director in Current Division		
1-5	5	50
6-10	3	30
11-15	1	10
16-20	0	0
21-25	0	0
26+	0	0
Missing Data	1	10
Highest Degree Obtained		
Bachelors		
Masters	8	80
Doctorate	2	20
Missing Data	0	0
Previous Positions Held in Current Division		
Assistant		
Director of Special Education	1	10
Principal	3	30
Superintendent	1	10
Coordinator		
Homebound	1	10
Special Education	1	10
504	1	10
Director		
Special Education	2	20
Student Services	1	10
Testing	1	10
Supervisor		
Career and Technical Education	1	10
Special Education Supervisor	2	20
Other		
Executive Director	1	10
Principal	2	20

(continued)

Table 17 (continued)

Educational Background	(n=10)	%
Other		
Speech Language Pathologist	1	10
Special Education Specialist	1	10
Special Education Teacher	2	20
Missing Data	1	10
Previous Positions Held Serving Students with Disabilities		
Assistant Principal	1	10
Exceptional Education Specialist	1	10
Principal	1	10
School Psychologist	1	10
Special Education Coordinator	1	10
Special Education Director	1	10
Speech Language Pathologist	1	10
Teacher		
General	1	10
Special	5	50
Missing Data	3	30

*Note.* Educational Background data adapted from “Teacher and Educator Licensure Query,” by the Virginia Department of Education, 2014.

## Summary

Throughout Chapter 4, qualitative and quantitative data were presented to answer the research question posed in the study. The perceptions of the selected Delphi participants were studied as a means of identifying the strategies seen as paramount in graduating SWD with a standard diploma. Panelists identified 70% or greater agreement on the importance of six (60%) strategies contributing to regular diploma attainment for youth with disabilities. These statements of practice were determined to be of considerable importance (rated as critically effective or somewhat effective), and in rank order were: 1) providing targeted interventions such as remediation, tutoring, and credit recovery options; 2) conveying high expectations; 3) tracking and monitoring; 4) IEP development with emphasis on Transition, student family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status; 5) promoting learning, attendance, and a positive school environment; and 6) policies that



support all students. Further, participants provided feedback pertaining to implementation of these approaches on four of the six items that reached consensus. Chapter 5 will include a discussion of these findings, implications, and recommendations for further research.

## **Chapter 5**

### **Summary and Conclusions**

This chapter provides a summary of the study and important conclusions drawn from the data presented in Chapter 4. A discussion of the implications for action and recommendations for further research are also included. The chapter concludes with the researcher's reflections pertaining to this dissertation.

#### **Brief Overview of the Problem**

Although graduation rates in the U.S. are rising, there is still a persistent diploma gap among youth with disabilities and their general education peers in regular/standard diploma attainment. Graduating from high school with a diploma is an important credential to access post-secondary outcomes that will affect further education, career, and economic stability. Expected consequences of stagnant or decreasing graduation rates for SWD could potentially lead to increased dropout rates.

An analysis of accountability data over three consecutive school terms showed vast differences in graduation rates for SWD among Virginia's 132 school divisions. The VDOE monitors and reports annually Indicator 1: Percent of youth with IEPs graduating from high school with a regular diploma using the adjusted four-year cohort graduation rate. During the 2010-2013 school years, only 19 of the 132 school divisions consistently met or exceeded the expectations in graduating youth with disabilities with a regular diploma or higher. Given the challenges in meeting graduation outcomes across the state, and in narrowing widening diploma gaps, it was important to analyze what has been effective in divisions meeting this indicator, and consider whether or not their strategies might be useful for students with high-incidence disabilities (learning disability, emotional/behavioral disability, other health impairment, and/or speech and language impairment) statewide.

#### **Purpose of the Study and Research Question**

The purpose of this study was to identify the policies and practices that special education directors perceived as contributing to meeting the state graduation performance measures for SWD in 19 Virginia school divisions. A study of best practices in graduating SWD with regular diplomas is of critical importance because this credential is viable to postsecondary outcomes

such as higher education and meaningful employment (Cortiella, 2013). The following research question was investigated: What do Special Education Directors for divisions that consistently met or exceeded Indicator 1 during the 2010-2013 school years indicate are the policies and practices that contributed (to meeting or exceeding Indicator 1 expectations) or (to their success in meeting that goal)?

### **Review of Methodology**

The Delphi technique entails research methods that allow an opportunity to gather expert opinion, to forecast trends, and/or to engage participants in group communication processes to reach consensus about a real-world issue or topic (Hsu & Sandford, 2007; Keeney et al., 2011; Miller, 2006, Nworie, 2011). The three main features of Delphi are participant anonymity, controlled feedback, and multiple iterative processes. Specific to this study, a three-round Delphi method was employed to reach a level of agreement and consensus with a panel of special education directors about their perceptions of best practices and strategies that were seen as paramount in graduating SWD with a standard diploma or higher.

For purposes of expediency, storage, processing, and transcription of raw data, all correspondence to participants was submitted through electronic mail. Questionnaires and results were resubmitted, collected, and managed through the VT web-based survey application. The researcher utilized qualitative and quantitative analyses in order to answer the research question. First, in response to an open-ended questionnaire in Delphi I, expert panelists generated a list of policies and practices that aided in graduating SWD with a regular diploma. To develop a structured questionnaire for Delphi II, a content analysis process was applied to identify recurring trends, patterns, and themes among participant's Delphi I responses. In subsequent Delphi rounds, panelists completed a structured questionnaire rating their levels of agreement about the effectiveness of each statement of practice in standard diploma attainment for youth with disabilities.

Descriptive statistics were run using Microsoft Excel to determine measures of central tendency and levels of dispersion. In this study, consensus on a statement was reached when 70% of the ratings from the Delphi panel of experts, who responded to each questionnaire, fell within one rating category on the five-point Likert-type scale. In order to determine rankings or levels of importance among items, the mean score represented group opinion and the standard

deviation represented disagreement. A higher mean indicated a higher level of priority or ranking among items, and less variance was also an indicator of greater consensus among panelists.

It is notable to mention that in the final Delphi round, all 10 statements of practice generated by the expert panelists as approaches to graduate youth with disabilities with a regular diploma were rated in the effective range. However, when applying the consensus rule, expert panelists identified 70% or greater agreement on the importance of six (60%) strategies contributing to regular diploma attainment for this population of students. These statements of practice were determined to be of considerable importance (rated as critically effective or somewhat effective), and in rank were order: 1) providing targeted interventions such as remediation, tutoring, and credit recovery options; 2) conveying high expectations; 3) tracking and monitoring; 4) IEP development with emphasis on Transition, student family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status; 5) promoting learning, attendance, and a positive school environment; and 6) policies that support all students. Further, participants provided feedback pertaining to implementation of these approaches on four of the six items.

### **Summary of Findings**

**Finding 1. Panelists indicated that teachers and (other school personnel) are an important source of support within the school context. A teacher (or other staff person) is the conduit in influencing other factors for desirable graduation outcomes for SWD.**

In this study, the six statements of practice that reached consensus in Delphi Round III with 70% or greater levels of importance were rated in the effective to critically effective range, and are all influenced by school personnel. Consistent with research on school completion, Christenson and Thurlow (2004) emphasized that school personnel are essential in coordinating, facilitating, and implementing practical and multifaceted strategies to graduate students with disabilities. Features of state and district policies, practices, and other characteristics interact with one another and exert an influence on what school personnel do. These features also influence conditions in schools, classrooms, and the professional community of teachers. However, the most direct and linear relationship influencing student achievement is teachers (Leithwood, Louis, Anderson, & Wahlstrom, 2004).

**Finding 2. Expert panelists indicated that fostering student engagement is essential in the educational planning process towards graduation outcomes.**

Rated as critically effective by panelists, statements of practice reaching 80% (*IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status*); and 70% (*best practices that promote learning, attendance, and a positive school environment*) levels of agreement emphasized keeping students vested and interested in their education. IDEA (2004) requires that youth with disabilities are involved and take an active role in their education beginning at age 14 or younger. Teacher and administrative efforts and actions of student involvement are relevant in developing a student's school commitment and the active facilitation of person-centered planning. Consistent with research on school completion, increasing students' engagement by having them take an active leadership role in their education will help them to build academic and social competence (Christenson & Thurlow, 2004; Kortering & Christenson, 2009) through the Transition IEP planning process (Test et al., 2009). Students' involvement in decisions concerning courses, diploma options, and other post-secondary or employment preparation are factors that impact achievement and post-school outcomes (Cavendish, 2013).

**Finding 3. Expert panelists indicated that parental involvement is important in a student's education.**

There was 80% consensus among Delphi panelists that *IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status* contributed to standard diploma attainment for SWD. This statement of practice was rated in the critically effective range. IDEA (2004) requires that parents are involved in their child's education. In a recent report created for USDOE, over 26 states indicated that as a component of their improvement activities and initiatives for Indicator 1, parental involvement was an essential focus as a component of improvement efforts (NDPC-SD, 2012). Expert panelists emphasized practices that strengthened the parent's role, actively included them in the IEP process, and considered them as partners in educational decision making. Wilkins and colleagues (2014) attributed multiple interventions and initiatives towards an increase in graduation rates, and one in particular was the importance of engaging families.

**Finding 4. Expert panelists indicated that building relationships with students is important in their school success.**

Ninety percent of the panel rated *conveying high expectations aids in graduating students with disabilities with a regular/standard diploma* as critically effective. Also, 70% of the panel rated *best practices that promote learning, attendance and a positive school environment aid in graduating students with disabilities with a regular/standard diploma* as critically effective. Both statements of practice can influence developing positive relationships with students. Supportive teacher-student relationships are important in the lives of youth with high-incidence disabilities, and can be enhanced through school and classroom structures, teachers' beliefs, behaviors, and actions and by developing student's prosocial skills (Murray & Pianta, 2007). Benz and colleagues (2000) affirmed students want personal and trusted relationships with adults that care so that they are encouraged, validated, and celebrated. Wilkins and colleagues (2014) attributed multiple interventions and initiatives towards an increase in graduation rates, and one in particular was the importance of building relationships through mentorships.

**Finding 5. Expert panelists indicated that in addition to effective instruction, academic and behavioral achievement is enhanced by cyclical progress monitoring and timely intervention.**

During Delphi Rounds II and III, 100% of the panelists rated *providing targeted interventions such as remediation, tutoring, and credit recovery aid in graduating students with disabilities with a regular/standard diploma* as critically effective. Also, *tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma* was rated as critically effective by 90% of the panel members. Systematically monitoring student performance, understanding who is at-risk, and what they specifically need is pertinent for student success. This requires consistency in efforts so that students in jeopardy are identified timely in order to establish targeted interventions. Wilkins and colleagues (2014) described academic instruction and interventions as rigorous and relevant in efforts to increase graduation rates. Researchers in tracking and monitoring practices have recommended the development of early warning systems to monitor attendance, discipline, and course failure (Cavendish, 2009; Wilkins et al., 2014).

**Finding 6. Expert panelists articulated that the reported strategies beneficial in graduating SWD with a regular diploma are bound by the fidelity of implementation.**

On four of the six statements of practice that reached consensus, a theme emerged related to implementation (its effectiveness and fidelity). Five panelists commented, “staff make the difference with implementation, implement with fidelity, . . . and they must be utilized and implemented, know how to it apply properly.” The statements of practice are *providing targeted interventions such as remediation, tutoring, and credit recovery options; IEP development with emphasis on Transition, student family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status; promoting learning, attendance, and a positive school environment; and policies that support all students.*

Research supports that even the most effective intervention will not yield the desired outcomes when they lack effective implementation (Cook & Odom, 2013). In fact, the critical formula that Fixsen, Blasé, Metz, and Van Dyke (2013) endorsed is “effective interventions x effective implementation=improved outcomes” (p. 214). Thus, if both the chosen intervention and method in which it will be implemented are not suitable, the likelihood of the intended outcome will be undesirable.

**Finding 7. Expert panelists reported more practices as strategies that are effective towards standard diploma attainment for youth with disabilities than policies and regulations.**

In Delphi Round I, expert panelists generated 10 statements of practice. Seven items were reported as practices, and three items were considered as policies towards contributing to regular/standard diploma attainment for SWD. The items reaching consensus (40%) in Delphi Round II were all practices. In Delphi Round III, 60% of the original statements of practice reached consensus. Fifty percent of the items were practices, and were rated in the critically effective range. One item (10%) was a policy, and was rated in the somewhat effective range.

Special education research has evolved over the last several decades, and there is a greater expectation to put research into practice. It is essential that special education leaders are able to articulate knowledge into practice. Hehir (1999) emphasized “increasingly, all special education administrators will have to be as conversant in effective practices as we have been in the law” (p. 7). This statement suggests a shift in emphasis from compliance to understanding and conveying knowledge of effective interventions for access to the general curriculum and improved achievement outcomes for SWD (Boscardin, 2004).

**Finding 8. Data confirmed that general education practices are beneficial for youth with disabilities regarding standard diploma attainment.**

All statements of practice in Delphi Round III that reached a level of importance at 70% or greater as identified by expert panelists, with the exception of *IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status*, pertain to the general education population as well. The following practices and policies reached consensus and are applicable to all students. These statements were rated in the effective to critically effective range in contributing to regular/standard diploma attainment for SWD: *providing targeted interventions such as remediation, tutoring, and credit recovery options; conveying high expectations; tracking and monitoring; promoting learning, attendance, and a positive school environment; and policies that support all students.*

Factors affecting graduation rates are widespread, and are not isolated to SWD. Research on school completion and drop-out prevention was primarily intended for populations at-risk. Effective schools literature for general education is similar in practice for special education students and includes cultures and practices that support high standards and student achievement; and a well-disciplined academic and social environment (Huberman et al, 2012; Thurlow et al., 2012).

**Implications for Practice**

Based on the findings from this study, there are potential implications for school and division-leaders, including state policymakers.

School leaders should:

- provide staff ongoing professional development opportunities related to student engagement strategies in order to increase academic and behavioral achievement;
- provide staff ongoing and meaningful professional learning about ways to build positive relationships with students and their families;
- ensure that there is open communication and timely regular contact between schools, students, and families;
- ensure that staff who provide services for SWD are actively involving students and parents in the IEP development process; and ensure that Transition planning occurs so



that the student's post-school goals for education, employment, and independent living (as appropriate) drive the content of the IEP; and

- ensure staff selection, training, coaching, and program evaluation in selecting and supporting effective intervention and implementation for desirable outcomes.

Division leaders should:

- ensure that special education directors have an active role in the school division's instructional program, and special education directors should offer input in how instructional practices will impact students who receive special education services;
- continually assess stakeholders through surveys and focus groups regarding what/how resources (human and material) are used to support instructional programs, in particular, those associated with graduating SWD with a regular/standard diploma or higher; and
- develop infrastructures that will support the implementation capacity of effective interventions and programs for SWD.

State policymakers should:

- organize opportunities to promote cross division dialogues between districts that are meeting Indicator 1 and those that are not;
- celebrate progress publicly and highlight areas where growth occurs;
- provide local Special Education Advisory Committees training and technical assistance to improve parental involvement, membership, and meeting the essential functions of the board;
- ensure equity of support for school divisions with different needs including those with high minority enrollment and socioeconomic factors that potentially impact standard diploma attainment for SWD; and
- keep local districts informed of effective programs and implementation methods deemed as evidence-based and beneficial for SWD.

## **Suggestions for Future Research**

To further verify empirical data on promising practices that aid in graduating youth with disabilities with a regular/standard diploma or higher, it may be beneficial to:

- conduct a qualitative study using SWD as the subjects to investigate their perceptions on the effectiveness of the statements of practice identified in this study;
- replicate this study by expanding it to other states to see if these findings are transferable, and can be duplicated;
- increase the expert panel beyond the participation of Special Education Directors to include other practitioners who work with SWD. Suggested high school personnel may include, but are not limited to: administrators, school counselors, general and special education teachers, and the special education department chair/lead to ascertain if their perceptions of promising practices converge or diverge with that of the expert panel of special education directors;
- investigate the role of Parent Resource Centers and effective ways to encourage parental involvement for youth with disabilities;
- interview special education directors to gain an understanding of their instructional leadership role and contributions pertaining to each statement of practice identified in this study towards standard diploma attainment for youth with disabilities;
- design case studies to investigate in-depth the treatment fidelity and application on each statement of practice in divisions that have been consistently successful in meeting Indicator 1 performance measures for SWD; and/or
- conduct a study in Virginia's divisions that are not meeting Indicator 1 to determine if they are implementing the statements of practice identified in this study; and also investigate the perceptions of the possible barriers that are preventing success in graduating SWD with a regular/standard diploma or higher.

## **Conclusions**

This study contributes to the knowledge base on secondary SWD, and provides empirical data on promising practices that have been implemented to aid in these youth attaining a regular/standard diploma in Virginia. As state and local education agencies seek strategies to

improve their State Performance Plan and Annual Performance Report data for Indicator 1, this study has begun the process in providing an understanding of what these performing districts are doing that might inform others. Finally, education researchers, practitioners, and policy makers should give greater considerations to the substantial variation in Indicator 1 results for SWD across the state. Some districts are producing much higher educational outcomes for their students receiving special education services. The expert panel's consensus items delivered direct, straightforward, pragmatic approaches for educational professionals to consider in implementation and practice for youth with disabilities. These multiple component strategies should provide information that can be used to develop, expand, and evaluate current programming in order to improve the quality of IEP development and implementation.

### **Reflections**

While investigating such a profound issue, I have acquired skills in organizing and leading a practical methodology that can be utilized in educational settings for a variety of purposes to gather expert opinion, forecast trends, and/or engage participants in group communication processes to reach consensus about a real-world issue or topic. Considering the Delphi technique more often in my practice may contribute to the responsibilities I hold in facilitating communication among stakeholders, resolving conflict, as well as building consensus. Further, as I am immersed in gathering raw data and leading discussions, both the quantitative and qualitative aspects of this methodology may lend itself towards solutions and recommendations for the topic at hand.

Overall, this dissertation process has afforded me a reflective opportunity to analyze with colleagues my division's Indicator 1 data. The research literature has helped me to gain a salient understanding of factors and effective approaches in improving regular/standard diploma attainment for SWD. Lastly, I have recognized my growth from practitioner to practitioner scholar, and further realize the urgency in narrowing the diploma gap for a capable population of youth that will enter society with less meaningful post-school options unless this trend is minimized. Thus, my responsibility as a practitioner scholar lies in bringing scholarship into action!

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**Appendix A**  
**Literature Review Summary by Strand**

Strand	Source	Summary
Federal Accountability and Reform for SWD	IDEA 2004, ESEA 2010, NCLB 2001	legislation emphasized a need to improve outcomes for SWD (reading, math, graduation)
	Martin et al., 2014; Moore, 2012; Test et al., 2012	historically SWD have demonstrated lower graduation rates than general ed. peers
Diploma Options	Center on Education Policy, 2012; Cortiella, 2013; IDEA Data Center, 2014	multiple diploma options (in addition to the regular/standard diploma) for SWD and graduation options across the U.S.
Graduation Rates	National Governors Association, 2005; Shifter, 2011	standardized graduation rates for all states beginning 2011-12; extended year graduation options
Exit Exams	Center on Education Policy, 2012; McGhee, 2012	26 states implementing exit exams; findings from a study indicated students with learning disabilities were more likely to graduate from high school when there is flexibility in exit exam requirements
Post-Secondary Outcomes	Fowler et al., 2014; Test et al., 2009; Turnbull et al., 2003	quality of life impacted (economic, career, education, social, health, independent living) wide gaps in college enrollment and completion between SWD and general ed. peers

(continued)



Literature Review Summary by Strand (*continued*)

Strand	Source	Summary
Indicator 1 Improvement	NDPC-SD, 2013	national Indicator 1 data collected/2009-10 interventions and improvement activities
School Completion	Christenson & Thurlow, 2004; Kortering & Christenson, 2009; Test et al., 2009	promote school completion strategies that encompass student engagement; transition programming may increase school completion rates for SWD
Virtual School Options	Repetto et al., 2010	virtual school options combined w/ transition efforts, student engagement, early warning systems, tutorials, remediation, credit recovery, conducive environments, disability related services, and differentiated media increase graduation rates for SWD
Empirical Research on Regular/Standard Diploma Attainment for SWD	Benz et al., 2000	logistic regression study examined student transition program factors for SWD and regular diploma; when students participate in effective transition programs, are exposed to career related work experience, and complete their identified transition goals, improved graduation outcomes are high
	Cavendish, 2009	studied student perceptions of factors to increase standard diploma attainment; SWD school commitment and the school's efforts to encourage student involvement have an impact

(continued)

Literature Review Summary by Strand (*continued*)

Strand	Source	Summary
Empirical	Thurlow et al., 2009	investigated alternative routes to standard diploma attainment in the U.S.; 46 alternative routes were identified, 23 specifically for SWD (waivers, substitute assessments, projects, portfolios, score adjustments, and IEP driven determinations)
	Goodman et al., 2010	studied the effects of inclusion on graduation rates by disability category in Georgia; weak positive relationship, increase in inclusion participation, stability in graduation rates that were relatively low (30%), except OHI
	Smith et al., 2010	compared differences in diploma and graduation rates among SWD and general ed. peers, also analyzed graduation options by disability category in 12 southern states; general ed. students graduated at a higher rate and with a standard diploma than SWD, students with EBD had lower graduation rates when compared to other SWD
	Elbaum et al., 2014	evaluated district variability in graduation rates (Indicator 1) for SWD in Florida; high levels of poverty and minority enrollment are factors, district size and the number of SWD in the district are not

(continued)

Literature Review Summary by Strand (*continued*)

Strand	Source	Summary
Empirical	Wilkins et al., 2014	collaboration among West Virginia SEA, NDPC-SD, and local rural districts decreased dropout rate and increased graduation rates for SWD; over a four year period districts increased graduation rates between a range of 9 and 30 percentage points
Special Education Leadership and Outcomes for SWD	Boscardin, 2004; Hehir, 1999; Lashley et al., 2003; Pazey & Yates, 2012, Voltz & Collins, 2010	the role of the special education administrator has transformed from advocate and compliance monitor to a collaborative instructional leader
	Huberman et al., 2012	interviewed special education directors in high performing districts in California to identify the policies and practices attributed to successful academic outcomes for SWD

## Appendix B

### Metro and Urban Centric Locale Code Categories: Definitions and Comparison

Locale Code	Description
City, Large	Territory inside an urbanized area and inside a principal city with population of 250,000 or more
City, Midsize	Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000
City, Small	Territory inside an urbanized area and inside a principal city with population less than 100,000
Suburb, Large	Territory outside a principal city and inside an urbanized area with population of 250,000 or more
Suburb, Midsize	Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000
Suburb, Small	Territory outside a principal city and inside an urbanized area with population less than 100,000
Town, Fringe	Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area
Town, Distant	Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area
Town, Remote	Territory inside an urban cluster that is more than 35 miles from an urbanized area
Rural, Fringe	Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster
Rural, Distant	Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster
Rural, Remote	Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster

*Note.* Adapted from “Metro and Urban Centric Locale Code Categories,” by the National Center for Education Statistics, 2015.

**Appendix C**  
**Training in Human Subjects Protection Certification**



## Appendix D

### IRB Approval Letter



Office of Research Compliance  
 Institutional Review Board  
 North End Center, Suite 4120, Virginia Tech  
 300 Turner Street NW  
 Blacksburg, Virginia 24061  
 540/231-4806 Fax 540/231-0959  
 email irb@vt.edu  
 website <http://www.irb.vt.edu>

#### MEMORANDUM

**DATE:** October 13, 2014  
**TO:** Carol S Cash, Zenia Burnett  
**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)  
**PROTOCOL TITLE:** Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators for Students with Disabilities: A Delphi Study  
**IRB NUMBER:** 14-973

Effective October 13, 2014, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

#### PROTOCOL INFORMATION:

Approved As: Exempt, under 45 CFR 46.110 category(ies) 2,4  
 Protocol Approval Date: October 13, 2014  
 Protocol Expiration Date: N/A  
 Continuing Review Due Date\*: N/A

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

#### FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

*Invent the Future*

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY  
 An equal opportunity, affirmative action institution

**Appendix E**  
**Recruitment Letter for Potential Panelist**

October 22, 2014

Dear Special Education Director,

I am a fellow Virginia colleague and also a graduate student at Virginia Tech in the Educational Leadership and Policy Studies doctoral program. As a current practitioner and researcher, I am interested in understanding the policies and practices employed by the school divisions in Virginia that have met Indicator 1 and have graduated students with disabilities (SWD) with a regular diploma or higher during the 2010-13 school terms.

As you are aware, narrowing gaps and disparities between SWD and their nondisabled peers is a critical issue in our nation. At the spring VCASE Conference in May 2013, our Assistant Superintendent for Special Education and Student Services, Mr. John Eisenberg, affirmed the need for educators to close the diploma gap and increase the number of SWD who obtain regular or advanced studies diplomas. Further, Virginia's data over the past several years indicates that over 80% of the school divisions have not met state targets for Indicator 1.

Therefore, as you represent one of Virginia's school divisions that have met or exceeded state performance measures for Indicator 1 during reporting years 2010-2013, I am requesting your participation as an expert panelist to identify best practices credited towards your district's successful graduation outcomes for SWD. The National Center for Learning Disabilities indicated that a study of best practices in graduating SWD with regular diplomas is of critical importance because this credential is essential for postsecondary outcomes such as higher education and meaningful employment. Further, soliciting opinions on best practices from field experts representing divisions that are high achieving in graduation outcomes for SWD may be beneficial to other divisions and the VDOE in order to improve practice, policy and decision-making, or generate a need for future research.

This study will be conducted using the Delphi technique, a method by which a panel of experts will gain consensus on a given topic or problem through iterative processes. This process will consist of an open-ended questionnaire (round one) and two subsequent opportunities (rounds two and three) to prioritize and rate responses. The results of this study will be used for a dissertation.

For your convenience, expediency and anonymity, all correspondence will be submitted through electronic mail, and your participation will occur through web-based survey applications that should not exceed more than 20-30 minutes per Delphi round. If you would prefer not to utilize web-based survey options, the researcher can be available by telephone to collect your responses. No school division or individuals will be identified. The study will refer to the participants as

special education leaders in school divisions that have consistently demonstrated successful graduation outcomes for SWD on state performance measures.

I've identified you as a strong potential panelist as a representative of a Virginia school division that has consistently yielded high performance graduation outcomes for SWD. Your expertise in the field will provide invaluable information for this study. Please consider participation and respond to this email with your intent no later than Thursday, October 30, 2014. I would greatly appreciate any further information necessary to gain permission for your participation in this research study.

This study will begin in October and end in December. Should you have any questions, please feel free to contact me or my advisor, Dr. Carol Cash, using the contact information below. Thank you in advance for your consideration! I look forward to your response.

Sincerely,

Zenia Burnett  
Doctoral Candidate  
zeniab@vt.edu  
804-864-1725

Carol Cash, EdD  
Clinical Associate Professor  
ccash48@vt.edu  
804-662-7288

Attachment: Informed Consent for Participants in Research Projects Involving Human Subjects



**Appendix F**  
**Informed Consent**

**VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY**  
**Informed Consent for Participants**  
**in Research Projects Involving Human Subjects**

**Title of Project: Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators for Students with Disabilities: A Delphi Study**

<b>Investigator(s):</b>	<u>Zenia Burnett</u> Name	<u>zeniab@vt.edu/804-864-1725</u> E-mail / Phone number
	<u>Carol Cash, EdD</u> Name	<u>ccash48@vt.edu/804-662-7288</u> E-mail / Phone number

### **I. Purpose of this Research Project**

The purpose of this study is to identify the policies and practices that special education directors perceive as contributing to meeting the state graduation performance measures for students with disabilities (SWD) in 19 Virginia school divisions. Soliciting opinions in best practices from field experts representing divisions that are high achieving in graduation outcomes for SWD may be beneficial to other divisions and the Virginia Department of Education (VDOE) in order to improve practice, policy and decision-making or to generate a need for future research. The results of this study will be used for a dissertation.

### **II. Procedures**

This dissertation study will be conducted using the Delphi technique, a method by which a panel of experts will gain consensus on a given topic or problem through iterative processes. This process will consist of an open-ended questionnaire (round one) and two subsequent opportunities (rounds two and three) to prioritize and rate responses. Should you agree to participate in this e-Delphi study, for your convenience, expediency and anonymity, all correspondence will be submitted through electronic mail, and your participation will occur through web-based survey applications that should not exceed more than 20-30 minutes per Delphi round. If you would prefer not to utilize web-based survey options, the researcher can be available by telephone to collect your responses.

### **III. Risks**

No school division or individuals will be identified. The dissertation study will refer to the participants as special education leaders in school divisions that have consistently demonstrated successful graduation outcomes for SWD on state performance

measures. The researcher is not aware of any intended or potential risk in your participation.

#### **IV. Benefits**

No promise or guarantee of benefits has been made to encourage you to participate. Participants will receive no tangible or intangible benefits for participation. Anticipated benefits include the identification of potentially effective practices which practitioners may access to improve graduation outcomes (regular/standard diploma attainment) for SWD.

#### **V. Extent of Anonymity and Confidentiality**

For purposes of expediency, storage, processing, and transcription of raw data, all correspondence to participants will be submitted through electronic mail, and results will be resubmitted through web-based survey applications. Data will be coded and known only to the researcher. Personally identifiable information will not be collected. The survey of demographics will be voluntary and kept separate from responses. Electronic technology will be utilized to maintain your anonymity during the Delphi process. Therefore, to ensure confidentiality, data will be maintained on a password protected computer in which the researcher only has access.

The Virginia Tech (VT) Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

#### **VI. Compensation**

You will not receive compensation for participating in this dissertation study.

#### **VII. Freedom to Withdraw**

It is important for you to know that you are free to withdraw from this dissertation study at any time without penalty. You are free not to answer any questions that you choose or respond to what is being asked of you without penalty.

Please note that there may be circumstances under which the investigator may determine that a subject should not continue as a subject.

In accordance with the compensation section of this document, you will not be compensated for participation in this study.

#### **VIII. Questions or Concerns**

Should you have any questions about this dissertation study, you may contact one of the research investigators whose contact information is included at the beginning of this

document or my advisor, Dr. Carol Cash at [cash48@vt.edu](mailto:cash48@vt.edu).

Should you have any questions or concerns about the study's conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the VT IRB Chair, Dr. David M. Moore at [moored@vt.edu](mailto:moored@vt.edu) or (540) 231-4991.

### IX. Subject's Consent

I have read the Consent Form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

\_\_\_\_\_ Date \_\_\_\_\_  
Subject signature

\_\_\_\_\_  
Subject printed name

***\*You may return this document by scanning and emailing the consent page to [zeniab@vt.edu](mailto:zeniab@vt.edu), or by U.S. Mail.***

-----  
*(Note: each subject must be provided a copy of this form. In addition, the IRB office may stamp its approval on the consent document(s) you submit and return the stamped version to you for use in consenting subjects; therefore, ensure each consent document you submit is ready to be read and signed by subjects.)*

## Appendix G

### Delphi Round I Correspondence to Participants

#### Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators for Students with Disabilities: A Delphi Study

October 31, 2014

Dear Special Education Director,

I am hopeful that you will agree to serve as a panel member in a study to explore the most effective practices in graduating students with disabilities with a regular diploma. Delphi I (round one) of the study consists of two open-ended questions, and is the brainstorming phase of this process. You may list as many responses that come to mind for each of the questions, using phrases and/or complete sentences.

By now you should have received a copy of the informed consent document by mail with a self-addressed/stamped envelope. For your convenience, you may return the informed consent signature page by mail or email. Verbal consent is also an option, or consent will be implied upon completion and return of the survey. You may use the following link <https://survey.vt.edu/survey/entry.jsp?id=1414713628979> to access and respond to the survey questions by Friday, November 14, 2014. The password is **delphone**.

Should you have any questions, please feel free to contact me by email at [zeniab@vt.edu](mailto:zeniab@vt.edu) or by telephone at [804-864-1725](tel:804-864-1725). I appreciate your time and thoughtful responses!

Sincerely,

Zenia Burnett  
Doctoral Candidate  
Virginia Tech

**Appendix H**  
**Delphi Round I Questionnaire**

Check all of the following that apply to this study's consent process:

- As it relates to this dissertation study, I have read the *Informed Consent for Participants in Research Projects Involving Human Subjects* document.
- I have given verbal or written consent to participate in this study.
- I have not given verbal or written consent, therefore consent will be implied upon return of the completed questionnaire.

What are the policies implemented in your division that contribute to regular diploma attainment for students with disabilities?

What are the practices implemented in your division that contribute to regular diploma attainment for students with disabilities?

What are the first three letters of your division?

Thank you for your participation!

Date November 11, 2014

Follow up email communication:

Dear Panel Member,

This is a friendly reminder that Delphi I (round one) will close on Friday, November 14, 2014. I realize that this is a busy time of year, and I am most appreciative of your participation. If you have already completed the survey please disregard this notice, or let me know if you need more time.

Thanks,

Zenia

**Appendix I**  
**Delphi I Collapsed Themes**

Question 1: What are the policies implemented in your division that contribute to regular diploma attainment for SWD?

Panel Entry Division Code	Theme 1 General district policies that support all students	Theme 2 IEP development	Theme 3 Family/school communication and partnerships
1-A	x		
2-P	x		
3-R	x	x	x
4-C	x		
5-D	x	x	
6-N	x	x	
7-O			
8-G	x	x	
9-E	x		
10-H	x	x	
Total	9	5	1

11/19-20/14

Question 2: What are the practices implemented in your division that contribute to regular diploma attainment for SWD?

Panel Entry Division Code	Theme 1 Communication and collaboration among stakeholders	Theme 2 Collaborative and inclusive instructional practices	Theme 3 Instructional best practices for all students
1-A	x		
2-P	x	x	x
3-R			
4-C		x	x
5-D			x
6-N	x		
7-O	x		x
8-G			x
9-E			x
10-H	x		x
Total	5	2	7

## Question 2 cont.

Panel Entry Division Code	Theme 4 IEP development	Theme 5 Tracking and monitoring	Theme 6 Targeted interventions	Theme 7 High expectations
1-A				
2-P	x	x	x	
3-R	x			
4-C			x	
5-D	x	x	x	x
6-N	x	x	x	x
7-O	x		x	x
8-G	x		x	
9-E			x	
10-H	x	x	x	
Total	7	4	8	3

11/19-20/14



## Appendix J

### Delphi Round II Correspondence to Participants

#### Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators for Students with Disabilities: A Delphi Study

December 21, 2014

Dear Study Participant,

Thank you for your timely response and participating in Delphi I (round one), the brainstorming phase of the study, which explored the most effective practices in graduating SWD with a regular diploma. Based on participant's collective responses, Delphi II (round two) contains a series of statements in which you will rate your level of agreement. You may provide clarification with your ratings.

Please use the following link <https://survey.vt.edu/survey/entry.jsp?id=1416446501010> to access and respond to the questionnaire by Friday, December 5, 2014. The password is **delphitwo**.

Should you have any questions, please feel free to contact me by email at [zeniab@vt.edu](mailto:zeniab@vt.edu) or by telephone at [804-864-1725](tel:804-864-1725). I appreciate your time and thoughtful responses. Thank you for your continued participation, and enjoy the Thanksgiving holiday!

Sincerely,

Zenia Burnett  
Doctoral Candidate  
Virginia Tech

## Appendix K

### Delphi Round II Questionnaire

Delphi II (round II) of the study contains a series of statements in which you will rate your level of agreement. You may provide clarification and/or feedback with your ratings using phrases and/or complete sentences.

**1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**2. Policies and regulations surrounding IEP development aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**3. Policies encouraging communication and partnerships among schools and families aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**4. Communication and collaboration among student, family, school personnel, district personnel, and community agencies are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback**

**5. Collaborative and inclusive instructional practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective

4-somewhat effective

5-critically effective

**Comment/Feedback:**

**8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

1-critically ineffective

2-somewhat ineffective

3-neither ineffective nor effective

4-somewhat effective

5-critically effective

**Comment/Feedback:**

**9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

1-critically ineffective

2-somewhat ineffective

3-neither ineffective nor effective

4-somewhat effective

5-critically effective

**Comment/Feedback:**

**10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

1-critically ineffective

2-somewhat ineffective

3-neither ineffective nor effective

4-somewhat effective

5-critically effective

**Comment/Feedback:**

**What are the first three letters of your division?**

December 2, 2014

Follow up email communication:

Dear Panel Member,

This is a friendly reminder that Delphi II (round two) will close on December 5, 2014. I realize that this is a busy time of year, and I am most appreciative of your continued participation. If you have already completed the survey please disregard this notice, or let me know if you need more time.

Thanks,

Zenia

## Appendix L

### Delphi Round III Questionnaire

Delphi III (round III) is the final phase of the study. Based on your previous responses in Delphi II, you may reconsider or report your same level of agreement. Using phrases and/or complete sentences, you may also provide clarification and/or feedback with your ratings about why you have chosen to remain outside of the majority level of agreement.

*Please be sure to read your response from Delphi II/question 1. The majority of the panel members (60%) have rated this statement as a 4, somewhat effective.*

**1. District policies that support all students aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 2. The majority of the panel members (60%) have rated this statement as a 4, somewhat effective.*

**2. Policies and regulations surrounding IEP development aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 3. The majority of the panel members (60%) have rated this statement as a 4, somewhat effective.*

**3. Policies encouraging communication and partnerships among schools and families aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 4. The majority of the panel members (50%) have rated this statement as a 4, critically effective.*

**4. Communication and collaboration among student, family, school personnel, district personnel, and community agencies are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback**

*Please be sure to read your response from Delphi II/question 5. The majority of the panel members (60%) have rated this statement as a 5, critically effective.*

**5. Collaborative and inclusive instructional practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 6. The majority of the panel members (60%) have rated this statement as a 5, critically effective.*

**6. Best practices that promote learning, attendance, and a positive school environment aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 7. The majority of the panel members (80%) have rated this statement as a 5, critically effective.*

**7. IEP development with emphasis on Transition, student and family participation, exploring continuum options, accommodations and modifications, assessment, and diploma status are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 8. The majority of the panel members (90%) have rated this statement as a 5, critically effective.*

**8. Tracking and monitoring practices aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**



*Please be sure to read your response from Delphi II/question 9. The majority of the panel members (100%) have rated this statement as a 5, critically effective.*

**9. Providing targeted interventions such as remediation, tutoring, and credit recovery options are practices that aid in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

*Please be sure to read your response from Delphi II/question 10. The majority of the panel members (70%) have rated this statement as a 5, critically effective.*

**10. Conveying high expectations aids in graduating students with disabilities with a regular/standard diploma. How would you rate this statement of practice?**

- 1-critically ineffective
- 2-somewhat ineffective
- 3-neither ineffective nor effective
- 4-somewhat effective
- 5-critically effective

**Comment/Feedback:**

**Are you interested in receiving a summary of the final results from this dissertation study of best practices in graduating students with disabilities with a standard diploma?**

- 1-yes
- 2-no

**What are the first three letters of your division?**

Thank you for your participation!

## Appendix M

### Delphi Round III Correspondence to Participants

#### Effective Policies and Practices of Virginia Districts Meeting Graduation Performance Indicators for Students with Disabilities: A Delphi Study

December 9, 2014

Dear Panel Member,

Thank you for your timely response and participating in Delphi II (round two). Delphi III (round three) consists of achieving final consensus about the most effective practices in graduating SWD with a regular/standard diploma. This last round contains a series of statements in which you have already seen. However, only statements that did not reach a certain level of agreement (based on pre-established criteria) are necessary to revisit in an effort to achieve final consensus. In this last phase of the study, you will rate your level of agreement once again. Attached are your Delphi II responses. Your previous responses may remain the same or you may revise judgments, provide clarifications with your ratings and/or specify reasons for remaining outside of the consensus.

Please use the following link <https://survey.vt.edu/survey/entry.jsp?id=1417990321756> to access and respond to the questionnaire by Wednesday, December 17, 2014. The password is **delphithree**.

Should you have any questions, please feel free to contact me by email at [zeniab@vt.edu](mailto:zeniab@vt.edu) or by telephone at 804-864-1725. I appreciate your time and thoughtful responses. Upon conclusion of this study, I will inform you of the final results. Again, thank you for your continued participation!

Sincerely,

Zenia Burnett  
Doctoral Candidate  
Virginia Tech

December 15, 2014

Follow up email communication:

Dear Panel Member,

This is a friendly reminder that Delphi III (round three) is the final phase of this study that will close on December 17, 2014. I realize that this is a busy time of year, and I am most appreciative of your continued participation. If you have already completed the survey please disregard this notice, or let me know if you need more time.

**Appendix N**  
**Demographic and Educational Background Questionnaire**

Dear Special Education Director,

Thank you for your participation in this dissertation study! The final task includes completion of a brief demographic and educational experience questionnaire.

1. Identify your school division's region:

<input type="checkbox"/> Region 1 Central Virginia	<input type="checkbox"/> Region 5 Valley
<input type="checkbox"/> Region 2 Tidewater	<input type="checkbox"/> Region 6 Western Virginia
<input type="checkbox"/> Region 3 Northern Neck	<input type="checkbox"/> Region 7 Southwest
<input type="checkbox"/> Region 4 Northern Virginia	<input type="checkbox"/> Region 8 Southside

2. Description of school division locale:

City       Rural       Town       Suburb

3. Average daily membership of school division:

<input type="checkbox"/> 300-2,500	<input type="checkbox"/> 2,501-5,000	<input type="checkbox"/> 5,001-10,000
<input type="checkbox"/> 10,001-15,000	<input type="checkbox"/> 15,001-20,000	<input type="checkbox"/> 20,001+

4. Total years of service in education:

<input type="checkbox"/> 1-5 years	<input type="checkbox"/> 6-10 years	<input type="checkbox"/> 11-15 years
<input type="checkbox"/> 16-20 years	<input type="checkbox"/> 21-25 years	<input type="checkbox"/> 26+ years

5. Do you have experience as a general education teacher?

at the elementary level

at the middle school level

at the high school level

6. Do you have experience as a special education teacher?

at the elementary level

at the middle school level

at the high school level

7. Total number of years as a Director of Special Education:

\_\_\_\_\_ 1-5 years                  \_\_\_\_\_ 6-10 years                  \_\_\_\_\_ 11-15 years  
 \_\_\_\_\_ 16-20 years                  \_\_\_\_\_ 21-25 years                  \_\_\_\_\_ 26+ years

8. Total years as a Director of Special Education in your current division:

\_\_\_\_\_ 1-5 years                  \_\_\_\_\_ 6-10 years                  \_\_\_\_\_ 11-15 years  
 \_\_\_\_\_ 16-20 years                  \_\_\_\_\_ 21-25 years                  \_\_\_\_\_ 26+ years

9. Have you held other positions serving students with disabilities?

Position(s):

\_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_

10. Have you held other positions in your current division/district?

Position(s):

\_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_  
 \_\_\_\_\_ total number of years: \_\_\_\_\_

Are you interested in receiving a summary of the final results from this dissertation study of best practices in graduating students with disabilities with a standard diploma?

1-yes

2-no