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A longitudinal study of States' Idea Part B School-family Partnership data

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A LONGITUDINAL STUDY OF STATES' IDEA PART B SCHOOL-FAMILY
PARTNERSHIP DATA

A thesis submitted to
The Graduate College of
Marshall University
In partial fulfillment of
The requirements for the degree of
Education Specialist
in
School Psychology

By

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ABSTRACT

In 2005, the Individuals with Disabilities Education Act (IDEA) mandated that the percent of parents who report that schools facilitated parental involvement as a means of improving services and results for children with disabilities be reported to the Office of Special Education Programs (OSEP). The purpose of this study was to analyze the variability in methodologies used by 20 different states over eight years. The findings indicated the gap between the higher and lower performing states were due primarily to the metric and standard chosen. States choosing measures and standards other than those recommended by National Center for Special Education Accountability Monitoring (NCSEAM) reported significantly higher percentages than those following the recommendations. Furthermore, modest growth rates were generally observed during the eight years for states calculating and reporting the same Rasch measure. These findings stress the need for parent involvement measures which are feasible, sensitive to growth, and provide normative data.

CHAPTER 1

LITERATURE REVIEW

Positive relationships with caring adults provide a foundation from which children develop into successful adults through the interaction of multiple reciprocal systems (Bronfenbrenner, 1977). Although it is evident that the relationship between a parent and a child has a lasting impact on the child throughout his/her life, there is now a growing body of research that argues that the relationship between the child and the school and therefore the family and the school also plays a crucial role in the child's success.

From the time children turn five until the age of eighteen, they will spend approximately six and one-half hours per day for 180 days in school annually (Reschly & Christenson, 2012). For this reason, the relationship forged between the family and the school is of utmost importance if both the family and educators are striving to improve educational results for children and adolescents. Throughout this review of the literature, the impact the school-family partnership has on a child's success will be examined through the lens of developmental theories and barriers to partnership efforts. However, the primary focus of this study is the coordinated measurement of parent involvement as an avenue to increase parent participation for students with disabilities, which is a frequently overlooked high-risk category. The investigator will extend the work of Elbaum (2012) and examine variability and efficacy of states' parent involvement accountability measures over time. An extension of Elbaum's research is significant because although parent involvement as a whole continues to receive increased attention, efforts to accurately measure parent involvement or evaluate efficacy of measurement techniques have not received similar emphasis.

Developmental Theories

The work of Epstein and Bronfenbrenner serves to broaden the understanding of the interaction among the family, child, and school relationships and how this ultimately affects child development. Epstein's theory states that there are three spheres (home, school, and community) which overlap to demonstrate the amount of support a child receives (as cited in Daniel, 2011). Bronfenbrenner (1986) further posits that there are five concentric circles that have continuous interplay, such that when an event occurs in one circle it impacts the others as well (Bronfenbrenner, 1986). The two circles, which will be most pertinent to this study, include the microsystems, contexts that directly affect child development, and the mesosystem, where microsystems such as schools and families are linked (Bronfenbrenner, 1986). The multilevel systemic interactions will next be discussed, as well as the states' effectiveness towards implementing school-family partnerships.

School-Family Partnerships

The mesosystemic level interaction between school and family microsystems is commonly known as the *school-family partnership*. This relationship is defined as “a child-centered connection between individuals in the home and school settings who share responsibility for supporting the growth and development of children” (Clarke, Sheridan, & Woods, 2010). Because children spend the majority of their time at home or school, it is imperative that the two entities interact for the benefit of the child. More often than not, there are unspoken rules about how parents and teachers are expected to behave and interact, and these conventions are often not optimally effective. What makes parental involvement so important in the school system is that it supports student beliefs and behaviors that are critical to their academic success. Research shows students whose parents are involved in their education,

regardless of their background, are more apt to “earn higher grades, pass their classes, attend school regularly, and graduate and go on to postsecondary education” (NCLB, 2001, p.4).

Broad Domains and Building Healthy Relationships

When schools or districts opt to implement improvement activities targeting school-family partnerships, there are fundamental concepts requiring consideration. Patrikakou & Weissberg (2007) and Rubenstein, Patrikakou, Weissberg, & Armstrong, (1999) identified three broad domains of school-family partnerships. These include reciprocal home-school communication (Hoover-Dempsey, Bassler, & Burrow, 1995), parent involvement in establishing a home environment conducive to learning, and family involvement at school (Eccles & Harold, 1993; Hoover-Dempsey & Sandler, 1997). Additionally, there are some basic principles that should also be considered: 1) a shared belief between schools and families that healthy relationships between the two parties are beneficial; 2) a shared commitment between families and schools to establish and maintain a positive relationship throughout the time the child is in school; and, 3) consistency between systems for optimal student growth (Clarke, et al., 2010). Furthermore, a successful parent involvement strategy should also consider trust, sensitivity, and equality so that each party feels as if the other is doing what is best for the child while considering cultural differences and making an effort to balance the power and authority (Adams & Christenson, 2000; Kewal Ramani, Gilbertson, Fox, & Provasnik, 2007; Lake & Billingsley, 2000). It is essential that the principles and elements of healthy relationships are understood by both the school and family before planning and implementing parent-school partnership efforts.

The aforementioned items are necessary to include in any measurement of school-family partnerships to make the measure worthwhile and to provide the feedback necessary to guide

improvement efforts. Initially, these central elements may be the areas where the relationship is lacking the most and where the most improvements need to be made; however, once these foundational pieces are in place the relationship forged will likely be a more productive one. When states choose not to measure and/or analyze their performance in these domains and principles, they may not be assessing their performance in key aspects of the family school relationship. Therefore the areas that may need improvement and the strategies that likely need to be implemented will be unknown. Since each of these areas are addressed in the preschool and school age NCSEAM validated surveys, it is most beneficial for all parties involved (family, school, child) if the school/district analyzes them in a way that provides feedback in each area and, therefore, implements more beneficial improvement strategies.

Federal Mandates and the Evaluation of Parent Involvement

Considering the importance of family school relationships in a child's success, laws have been established that mandate parental involvement within the school system. Title I, Part A, Sec. 1118 of the No Child Left Behind Act of 2001 mandates parental involvement policies and improvement activities for all local educational agencies (LEAs) across the nation which receive Title I funds. NCLB defines parent involvement as:

The participation of parents in regular, two-way, and meaningful communication involving student academic learning and other school activities, including ensuring, that parents play an integral role in assisting their child's learning; that parents are encouraged to be actively involved in their child's education at school; that parents are full partners in their child's education and are included, as appropriate, in decision-making and on advisory committees to assist in the education of their child; and that other activities are carried out, (NCLB, 2001, p.3).

Local Education Agencies (LEAs) and schools receiving funds must additionally make significant changes to their structure and policy such as informing parents of their rights in writing using clear and understandable terminology, encouraging parental involvement in school

improvement plans and policies, allotting 1% of their budget to increasing parent involvement, and providing parents with report cards concerning their school's performance (Downer & Myers, 2010). LEAs are also required to annually evaluate the efficacy of their parent involvement policy. The locally developed evaluation is frequently carried out by the LEA and its respective schools through parent surveys. Although model toolkits and resources are available to State Education Agencies (SEAs) and LEAs, such as SEDL's *A Toolkit for Title I Parent Involvement* (2010), the specific content of the annual survey is locally determined and administered. The survey and evaluation results, ultimately, are intended to inform future programming and are thereby incorporated into the LEA's Title I application or plan for state education agency review.

Similar to NCLB, the Individuals with Disabilities Education Act (IDEA 2004) stresses the importance of parental involvement and maintains requirements for annual assessment and reporting of parent involvement results through the State Performance Plan (SPP) / Annual Performance Report (APR) requirements under Section 616. By definition, however, the IDEA 2004 requirements for evaluation of parent involvement are narrower in scope in that they pertain only to parents of the high-risk and under researched category of children and adolescents with disabilities and are linked by a common indicator measurement. The Part B Parent Involvement Indicator (i.e., Indicator 8) measures the "percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities" (OSEP's Part B SPP APR Measurement Table, 2014, p. 7). In addition to the common measurement, IDEA Section 616 places the onus or burden of the annual data collection and reporting on the SEA, effectively ensuring consistency of the evaluation instrument among LEAs in a particular state. While this

may seem intuitive, it differs substantially from NCLB wherein parent involvement survey contents are locally determined and can widely vary from one LEA to another within the same state. By allowing individual LEAs to control their respective survey items and measures, programmatic changes can be made at the local level but results cannot be compared to other LEAs due to variability. Alternatively, ensuring consistency across LEAs as IDEA Part B does allows for comparison and greater accountability, which results in broader program improvements.

Although OSEP's Part B SPP / APR measurement table requires the use of a common definition and measurement across the states and territories, the specific: (1) data source or survey instrument, (2) sampling methodology, and (3) targets are determined by SEAs. As described in the IDEA 2004 Regulations (2006), the flexibility for each State to establish their own measurable and rigorous targets or establish its own indicators subsequent to the required indicators ensures the SPP APR is not a "one-size-fits-all approach" (p. 46732). Yet, due to the limited availability of parent involvement survey tools, particularly instruments for students with disabilities, many states' adopted *Schools' Efforts to Partner with Parents Scale* (SEPPS) for use during the first SPP / APR cycle from school year 2005-2006 through 2012-2013. The *Schools' Efforts to Partner with Parents Scale* was developed by the National Center for Special Education Accountability Monitoring (NCSEAM) and provided to states in 2005 for use (Elbaum, 2012).

NCSEAM's Parent Partnership Measurement

NCSEAM, a previously commissioned national technical assistance center for special education, was instrumental in the development and dissemination of the primary parent partnership measurement tools. NCSEAM established a Parent and Family Involvement

Workgroup in 2002 for the purposes of creating a tool to evaluate parent perceptions of school partnership efforts. The survey instruments were developed and became available during the course of the 2005-2006 school year. The survey items were coalesced into various scales, representing different dimensions of parent involvement. For example, the school age survey included scales measuring parent perceptions of parent participation in the special education process; school partnership efforts; and the quality and impact of special education services (Elbaum, 2005).

With the national validation sample (n=2,634), scores on the Part B SEPPS were found to range from 140 to 880, with a mean of 500. Moreover, Elbaum noted “within each scale, the items showed virtually the same order of agreeability for all items” (2005, p. 16). The Michigan Department of Education (MDE), Office of Special Education staff liken the consistency of parent responses to the survey items to a “Partnership Ladder,” wherein the probability of a parent agreeing to each subsequent item becomes less probable (MDE, 2015, p. 20). Thus, the first step or survey item is relatively easy for a climber to scale or a parent to report agreement with, whereas the higher rungs become increasingly more difficult to reach or for parents continue to note agreement. Figure 1, below, illustrates the Michigan Department of Education Parent Partnership Ladder for school age children and adolescents based upon Federal Fiscal Year (FFY) 2012-2013 survey results (MDE, 2015, p.22).

The STUDENTS Ages 6-26 Ladder and FFY 2013 Results

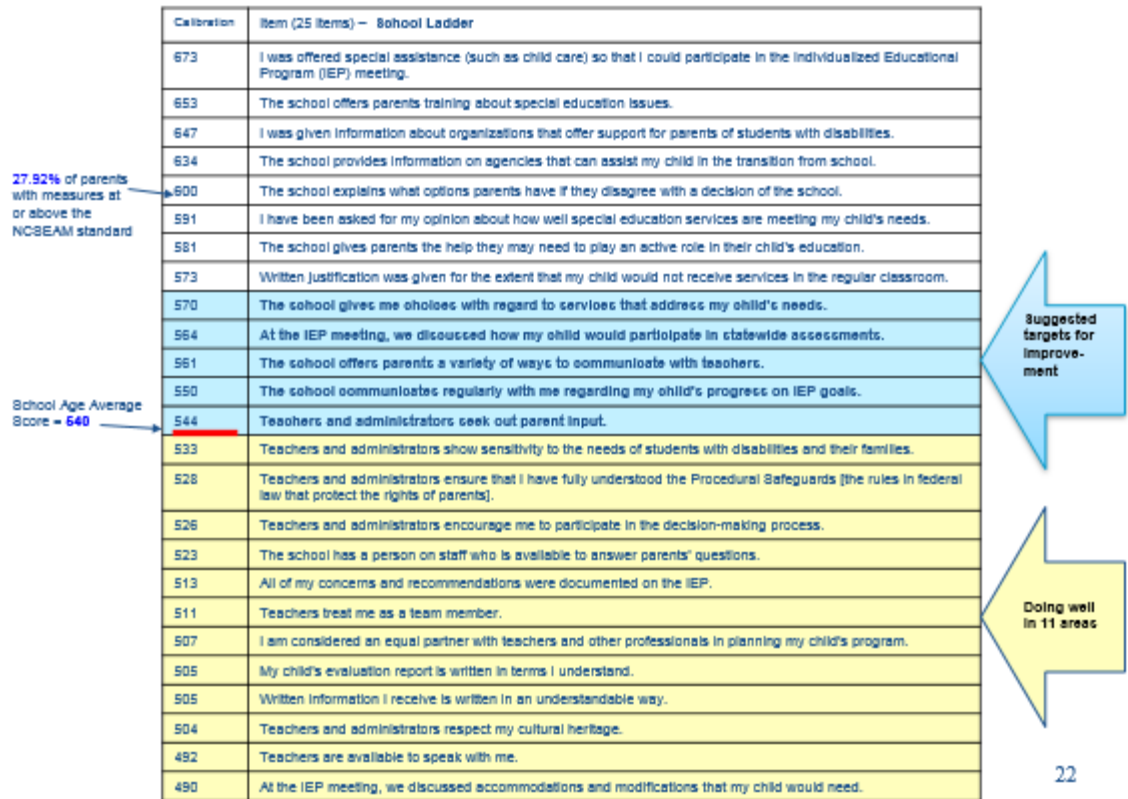


Figure 1: SEPPS calibration ladder and FFY 2013 Indicator 8 results for Michigan

In Figure 1, the NCSEAM national standard of 600 is highlighted in the upper, left hand quadrant. To set the national standard, a stakeholder group consisting of a broad representation of families, advocates, researchers and state and local agencies was established and the 25-items on the *Schools Efforts to Partner with Parents Scale* (SEPPS) were calibrated in order to determine the likelihood of a positive response (Elbaum, 2005). The group was then asked, “What is the highest item with which you would require an “agree” response in order to have confidence that the meaning of the indicator (i.e., schools are facilitating parent involvement) is being achieved?” (Elbaum, 2005, p. 30). Ultimately, the group came to consensus and selected the item: “The school explains what options parents have if they disagree with a decision of the school,” which had a calibration of 600. Thus, the standard was set at 600. The number reported

to the federal government by states using this measure is the percentage of parents who have scores better than or equal to the standard of 600.

States' use of the NCSEAM survey evolved throughout the initial SPP / APR cycle. The number of states' annually electing to use the measurement and the resulting performance data from the year of interest are described in OSEP's annual SPP/ APR Response Table publications. Elbaum (2012), the investigator who originally coordinated the instrument development for NCSEAM, conducted a comparative analysis of 11 states' data and extended the knowledge base about states' use of the NCSEAM survey. Results of her study indicate it is difficult to interpret states' accountability results for Indicator 8 in a comparable manner due to "(a) the choice of items to be analyzed, (b) the metrics used in data analysis, and (c) the standard applied to determine the percentage on the indicator" (Elbaum, 2012, p.213). For example, nine of the eleven states studied analyzed 25 items from the SEPPS, but metrics for these states varied from the Rasch measure to item-level scores to unknown. In contrast, Wisconsin analyzed only one item from the SEPPS with a standard of ≥ 4 in any category while Arkansas used six items from the SEPPS and an additional nine from other scales. Finally, some states reported separate preschool and school-age percentages while others combined the two. These variations resulted in significant differences in percentages reported on Indicator 8.

While Elbaum's research and OSEP's annual SPP/APR Response Tables provide important information about the national status of parent involvement for children and adolescents, they primarily provide data from the one APR submission or the current APR submission in relation to slippage or progress from the prior year. Thus, they reflect more of a cross-sectional approach or snapshot of states' use of particular parent involvement instruments, methodologies, and performance data.

Current Study

The purpose of the current study is to extend Elbaum's comparative research by examining the 11 states she included in her 2009-2010 comparative analysis and nine additional SEAs for the entire eight year extended SPP / APR cycle in an effort to obtain a longitudinal look at each states' parent involvement measure and resulting performance data. Indicator 8 data will then be delineated based on survey items, metrics, and standards, as well as how percentages were reported (i.e. combined versus separate preschool and school-age). By doing so, the lack of consistent methodologies across states and the need for an accountability system that allows for comparison among family-school partnership programs will be outlined. Furthermore, when an obvious change in the state reported percentage is observed, the examiner will explore if there was a concomitant change in measurement.

As previously mentioned, IDEA Part B allows individual states to determine the number of items analyzed to define the percentage of parental involvement. Statistically, longer surveys are more reliable; so, assuming states want to use the most reliable instruments available and comprehensively assess each dimension of parent involvement, they would choose the 25 item SEPPS developed by NCSEAM. However, this may not always be the case (McBride, 2013). As can be seen in Elbaum's (2012) study, the analysis of only one item is greatly influenced by which item is chosen and the degree of "agreeability" of that item. If a state chooses an item with a low Rasch item calibration, then there will likely be a greater number of parents who agree with the item and therefore a higher percentage of parents reporting that schools facilitated parental involvement as a means of improving services and results for children with disabilities. States opting to measure only one item are choosing to evaluate only one aspect from an entire scale which is unlikely to account for a true dimension of parent involvement.

Although states choosing to analyze the same number of items using the same metric and standard over time are able to compare their percentage from year-to-year, other states may find it more essential to report to OSEP that there has been improvement from one year to the next. Therefore, an individual state may decide to change the metric and standard used to analyze the data, and/or how the percentages are reported (combined preschool and school age versus separate). Based on the literature, there are three ways through which to change the metric and standard used to analyze the data, and/or how the percentages are reported (combined preschool and school age versus separate). The first change is supported by Elbaum (2012), who asserts that states choosing to analyze only a single item or to use a percentage of responses greater than or equal to 4 are reporting higher percentages than states using the NCSEAM recommended Rasch measure and standard of 600. The second change involves using item-level analysis, which allows for feedback at an individual item level, which, in turn, will focus improvement efforts where low performance is reported.

Finally, states deciding to alter the format in which the percentages are reported for the groups may separate the two because: two distinct surveys are being administered, the difference in the amount of parental involvement and response at the preschool level compared to the school age level, or to get a clearer picture of the specific improvement efforts that are needed for each. On the other hand, the percentages may be combined over time due to: the similarities between the two instruments, likeness between the response group and rates, and commonalities in areas that need improvement. Further, the scores may be combined to falsely inflate the school age scores and make it appear as if there was improvement.

The investigator hypothesizes that: (a) higher percentages will be reported on Indicator 8 for states that use metrics other than the NCSEAM recommended Rasch measure and standard of

600, (b) the fewer survey items the state analyzes, the higher the percentage on Indicator 8 will be, and (c) states will make one of three changes when they do not see improvement over time: use of a different metric, a different standard, and/or move from combined preschool and school age percentages to separate or vice versa.

CHAPTER 2

METHOD

Once the Individuals with Disabilities Education Act (IDEA) was reauthorized on December 3, 2004, each state had one year to establish a plan through which they intended to implement strategies and measure efforts on 20 indicators; this plan is known as the Part B State Performance Plan (SPP) (U.S. Department of Education, 2014). The indicator that will be the focus of this study is Indicator 8-“the percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities,” (OSEP’s Part B SPP APR Measurement Table, 2014, p. 7).

In addition to developing the SPP, states were also required to submit annual reports on each of the 20 indicators to both the Secretary and the public on their performance according to the targets stated in the SPP; this report is known as the Annual Performance Report (APR) (U.S. Department of Education, 2014). Through these annual reports, the percentage of parents indicating that parent involvement was facilitated is available. Both the SPP and APR must be accessible through the state’s website (U.S. Department of Education, 2014).

Participants

This study examined SEA reported performance on Indicator 8 (parental involvement) data throughout the SPP/APR cycle from fiscal year 2005-2006 through 2012-2013 for 20 states, which included the 11 participating in Elbaum’s study (Florida, Maryland, Pennsylvania, Rhode Island, Oregon, Michigan, New Jersey, Wyoming, Iowa, Arkansas, and Wisconsin) as well as nine others (Ohio, Kentucky, North Carolina, Tennessee, Mississippi, Georgia, South Carolina, Vermont, and West Virginia). States were selected based on their use of survey questions from

the *Schools' Efforts to Partner with Parents Scale* (SEPPS) or other NCSEAM validated items. As of (FFY) 2009-2010, there were 40 states that fell into this category; 20 states were selected for this study, which is half of the original 40.

Procedure

The primary data source used in this study was Part B SPP and APR letters, obtained from the Office of Special Education Programs on the U.S. Department of Education website (<http://www2.ed.gov/fund/data/report/idea/partbspap/allyears.html#>). To gather this data, the U.S. Department of Education website was accessed and the Office of Special Programs link was opened so that Part B of IDEA SPP and APR could be pulled and Indicator 8 data could be extracted and evaluated for each state. For FFYs 2005-2006 through 2012-2013, OSEP's annual SPP/APR Response Tables, which were located on the Department of Education website, were utilized. For FFYs 2011-2012 and 2012-2013, Indicator 8 data was compared with the OSEP annual Data Displays, also on the U.S. Department of Education website.

Analyzing these data longitudinally allowed for further examination of variability, growth, and slippage across time. Variables obtained from the publically posted OSEP response tables and documents included, but were not limited to, standards, metrics, and number of survey items used, as well as if they reported their preschool and school-age data as combined or separate percentages (Table 1). At times, this required cross-referencing summary documents and individual states' SPPs/APRs. If metrics or standards were unknown, the appropriate State Education Agency (SEA) level contact was contacted in order to obtain additional information.

Descriptive statistics were also calculated for the states that used the Rasch measure and NCSEAM standard of 600 to report combined preschool and school age percentages. SPSS was

used to calculate the range, mean, standard deviation, and variance based on the percentages entered.

CHAPTER 3

RESULTS

As of FFY 2009-2010, 40 states reported using either the SEPPS or other NCSEAM validated surveys to measure parental involvement in their respective state. For this study, items analyzed, metrics and standards used, and percentage of parental involvement were analyzed for 20 of these states. The investigator hypothesized that (a) higher percentages would be reported on Indicator 8 for states that used metrics other than the NCSEAM recommended Rasch measure and standard of 600, (b) the fewer survey items the state analyzed, the higher the percentage on Indicator 8 would be, and (c) states would make one of three changes when they did not see improvement over time: use of a different metric, a different standard, and/or move from combined preschool and school age percentages to separate or vice versa.

Variability in Items Analyzed, Metrics, and Standards across States

Table 1 provides an overview from FFY 2005-2006 through 2012-2013 of the various number of items analyzed, metrics used, and the standards applied to measure parental involvement in the school age (6-21) population. Table 2 provides the same overview for parental involvement in the preschool (3-5) population

Metrics and Standards Utilized in School Age Population. The investigator hypothesized that that higher percentages would be reported on Indicator 8 for states that used metrics other than the NCSEAM recommended Rasch measure and standard of 600.

Metrics. Of the 20 states, 11 (Kentucky, Maryland, Michigan, North Carolina, Oregon, Pennsylvania, Rhode Island, South Carolina, Vermont, West Virginia, and Georgia), chose to use the Rasch measure each year from FFY 2005-2006 through 2012-2013. It should also be noted

that Florida used the Rasch measure in FFYs 2005-2006 through 2011-2012, but chose to use item-level analysis in FFY 2012-2013.

New Jersey reports assigning numerical values of 1-6 to the Likert scale and using item-level response throughout while Ohio and Iowa take an average of all of the responses on each survey. Wyoming totaled the raw scores from FFY 2005-2006 through 2009-2010, then began using the percent of maximum metric in which each respondent received a percent of maximum score based on responses to all of the survey items. Additionally, Mississippi measured the percent of agreement on a single selected item and Wisconsin used a distribution of responses. Finally, in FFYs 2005-2006 and 2006-2007, Tennessee used the percentage of positive responses, then changed to item-level analysis in FFY 2007-2008. The measure used by Arkansas is currently unknown.

Standards. As recommended by NCSEAM, the 12 states (Florida, Kentucky, Maryland, Michigan, North Carolina, Oregon, Pennsylvania, Rhode Island, South Carolina, Vermont, West Virginia, and Georgia) using the Rasch measure also used the standard of 600, as recommended by NCSEAM. The standard of 600 can be interpreted as a 95% chance that parents will provide a response of *agree, strongly agree, or very strongly agree* to an indicator item on the SEPPS. It can be assumed that the respondent would also provide an *agree* response to the items with Rasch item calibrations below 600.

For those states using item-level analysis (New Jersey, and Tennessee), a score of ≥ 4 on at least 51% of the items (13/25) was considered agreement. When Tennessee used the percentage of positive responses, absolute ‘Yes’ responses were counted as agreement. Although Florida also used item-level analysis, the standard was higher than that of other states and required an *agree* response on 18 of the 25 items. For the states averaging responses (Ohio

and Iowa), an average score ≥ 3.5 and ≥ 4 , respectively, was interpreted as agreement. The standard for the percent of maximum metric, used in Wyoming, was 70%, thus a parent responded positively to at least 16 of the SEPPS questions and was neutral on one. Finally, Wisconsin's standard was a response of *agree, strongly agree, or very strongly agree* to the single selected item while Mississippi's was a 'Yes' response on the single selected item. Arkansas' standard was not reported by the state in the SPPs or APRs.

Figure 2 displays the significant differences in percentages reported on Indicator 8 for states following NCSEAM recommendations versus those choosing to use other metrics and standards.

Number of Items Analyzed in School Age population.

The investigator also hypothesized that the fewer survey items the state analyzed, the higher the percentage on Indicator 8 would be. Of the 20 states studied, 14 used the 25 item version of the *School Efforts to Partner with Parents Survey (SEPPS)*, which is the tool recommended by NCSEAM, to measure percentage of parental involvement throughout the entire SPP/APR cycle. Wyoming used the 25-item version from FFYs 2006-2011, but reduced the number to 17 in FFY 2012. Georgia also used the 25 item version of the SEPPS, but included an additional 75 questions validated by NCSEAM. Additionally, Tennessee used nine items from the SEPPS and sixteen from other NCSEAM validated surveys while Arkansas used six and nine items, respectively. Finally, both Mississippi and Wisconsin analyzed a single item to determine the percentage of parental involvement. In the State Performance Plan, the Wisconsin Department of Education stated that they considered 18 items from the SEPPS to be performance measures, such that the proportion of parents who agreed, strongly agreed, or very

strongly agreed with was calculated and this distribution was used to determine the lower performance limit (Wisconsin Department of Public Instruction, 2005).

The one item chosen to determine percent of parental involvement for Wisconsin was the one with the lowest number of responses in agreement with the item: “The school explains what options parents have if they disagree with a decision of the school.” Mississippi chose to use “I participate as a member of various teams to plan for my child’s educational needs” in FFYs

Table 1

Parent Involvement Measures by State for Students of School Age

<u>State</u>	<u>Number of SEPPS Survey Items Analyzed</u>	<u>Metric</u>	<u>Standard</u>
Florida	25	Rasch (2006-2011) Item-level analysis (2012)	600 Score ≥ 4 on at least 18 items
Georgia	25	Rasch	600
Iowa	25	Average of all responses	≥ 4 equals agreement
Kentucky	25	Rasch	600
Maryland	25	Rasch	600
Michigan	25	Rasch	600
New Jersey	25	Item-level analysis	Score ≥ 4 on at least 13 items
North Carolina	25	Rasch	600
Ohio	25	Average of all responses	≥ 3.5 equals agreement
Oregon	25	Rasch	600
Pennsylvania	25	Rasch	600
Rhode Island	25	Rasch	600
South Carolina	25	Rasch	600
Vermont	25	Rasch	600
West Virginia	25	Rasch	600
Wyoming	25	Total raw scores (2006-2011)	Sum of 104
	17	Percent of Maximum (2012-2013)	70% = ‘Agreement’
Tennessee	9	Percentage of agreement (2006-2007)	Absolute ‘Yes’ response
		Item-level analysis (2008-2013)	Score ≥ 4 on at least 13 items
Arkansas	6	Unknown	Unknown
Mississippi	1	Percentage of agreement	Absolute ‘Yes’ response
Wisconsin	1	Distribution of responses	Percentage of agreement (≥ 4) in any category

Table 2

Parent Involvement Measures by State for Students of Preschool Age

<u>State</u>	<u>Number of NCSEAM Survey Items Analyzed</u>	<u>Metric</u>	<u>Standard</u>
Florida	25	Rasch (2006-2012) Item-level analysis (2013)	600 Score ≥ 4 on at least 21 items
Georgia	25	Rasch	600
Iowa	25	Average of all responses	≥ 4 equals agreement
Kentucky	25	Rasch	600
Michigan	25	Rasch	600
New Jersey	25	Item-level analysis	Score ≥ 4 on at least 13 items
North Carolina	25	Rasch	600
Ohio	25	Average of all responses	≥ 3.5 equals agreement
Oregon	25	Rasch	600
Rhode Island	25	Rasch	600
South Carolina	25	Rasch	600
Vermont	25	Rasch	600
West Virginia	25	Rasch	600
Wyoming	20	Percent of Maximum	80% = 'Agreement'
Maryland	17	Rasch	600
Pennsylvania	15	Rasch (2006-2007) Percent of agreement (2008-2013)	600 Unknown
Arkansas	10	Unknown	Unknown
Tennessee	9	Percentage of agreement (2006-2007) Item-level analysis (2008-2013)	Absolute 'Yes' response Score ≥ 4 on at least 13 items
Mississippi	1	Percentage of agreement	Percentage of absolute 'Yes' responses
Wisconsin	1	Distribution of responses	Percentage of agreement (≥ 4) in any category

2005-2006 and 2006-2007 then changed to “The school gives parents the help they may need to play an active role in their child’s educational needs,” in FFY 2007-2008,

Figures 2 and 4-9 display the reported percentages for each of the states, and from these graphs one can see that states analyzing fewer SEPPS items (Wyoming, Tennessee, Arkansas, Mississippi, and Wisconsin) reported higher percentages than many states analyzing 25 items,

but it should also be noted that some states analyzing 25 items reported similarly high percentages while other states analyzing all items on the SEPPS reported significantly lower percentages.

Metrics and Standards Utilized in Preschool Age Population.

When compared to the school-age population, there appears to be greater variability concerning the metrics and standards implemented in this younger population.

Metrics. Ten of the twenty states (West Virginia, Michigan, Vermont, Rhode Island, Kentucky, North Carolina, South Carolina, Oregon, and Maryland) reported using the NSEAM recommended Rasch measure from FFY 2005-2006 through 2012-2013. Two additional states (Pennsylvania and Florida) used the Rasch measure for FFY 2005-2006 through 2006-2007 and 2005-2006 through 2010-2011, respectively. In the following FFYs, Pennsylvania began using percent of agreement while Florida implemented item-level analysis. New Jersey also reports using item-level analysis since FFY 2005-2006 and Tennessee reports using this metric starting in FFY 2012-2013. Prior to this, Tennessee utilized the percentage of positive responses, which is the metric that Iowa has used throughout the entire cycle. States choosing to use item-level analysis have done so by assigning numerical values of 1-6 to the responses on the Likert scale, with 1 being *very strongly disagree* and 6 being *very strongly agree*. Wyoming chose to use the percent of maximum metric throughout the entire SPP/APR cycle for the preschool age population. As with the school-age population, Mississippi analyzes a single selected item while Wisconsin uses a distribution of responses. Once again, the measure used by Arkansas is unknown at this time.

Standards. All 12 of the states that used the Rasch measure at any point in time opted to use the NCSEAM recommended standard of 600, indicating that there is a 95% chance that parents would answer *agree, strongly agree, or very strongly agree* to a given indicator item on the *Preschool Special Education Partnership Efforts and Quality of Services*. If parents provide one of these three responses to the indicator item, then it can be assumed that they would also reply with one of the three *agree* responses to the items with Rasch item calibrations lower than 600.

The standard for two of the states using an item-level analysis (New Jersey, Tennessee), was a score of ≥ 4 on at least 13 of the 25 items while Florida, who also used item-level analysis, had a higher standard of 21 *agree* responses out of the 25 items. The standard of ≥ 3.5 used by Ohio and ≥ 4 used by Iowa are the cutoff scores used, after the items of each individual survey has been averaged, to determine parental agreement. Pennsylvania also averaged responses, but the standard used was not reported in the SPPs or APRs. Wyoming increased the percent of maximum cutoff to 80% which is 10 percentage points higher than the school age cutoff. This can be interpreted as a respondent who *agrees* with 19 of the questions and *strongly agrees* with at least one question. Additionally, Mississippi considers a parent who answers ‘Yes’ to the single selected question to be in agreement that parental involvement was facilitated. Finally, Wisconsin’s standard was an *agree* response (*agree, strongly agree, very strongly agree*) on the one item selected. The standards used by Pennsylvania and Arkansas are currently unknown.

Once again, the significant differences in percentages reported by states implementing the Rasch measure and standard of 600 can be observed in Figure 2. .

Number of Items Analyzed in Preschool Age Population. As with the metrics and standards implemented, there also appears to be greater variability in the number of items

analyzed in the preschool-age population when compared to the school-age population. In FFY 2005-2006 and 2006-2007, West Virginia reported using a 100 question version of the *Preschool Special Education Partnership Efforts and Quality of Services*, developed by NCSEAM, while Georgia, Michigan, Ohio, and Vermont report using a 50 question version. By the FFY 2007-2008, NCSEAM reduced the length of the *Preschool Special Education Partnership Efforts and Quality of Services* to 25 questions, which is the same length as the SEPPS.

As of FFY 2007-2008, 12 states (West Virginia, Michigan, Ohio, Vermont, Florida, Rhode Island, New Jersey, Iowa, Kentucky, North Carolina, South Carolina, and Oregon) reported using this 25-item version. Georgia also used the 25-item version of the *Preschool Special Education Partnership Efforts and Quality of Services*, but supplemented it with an additional 75 questions from other NCSEAM validated surveys.

Although Pennsylvania used the 50-question version of the *Preschool Special Education Partnership Efforts and Quality of Services* in 2005-2006 and 2006-2007, in FFY 2007-2008, the Office of Child Development and Learning (OCDEL) introduced a survey from which they used a core group of questions in combination with NCSEAM validated questions for parents with children in Early Intervention Programs. Tennessee also combined two surveys, using nine questions from the *Preschool Special Education Partnership Efforts and Quality of Services* and 16 from other NCSEAM validated surveys.

In FFYs 2006 through 2007, Maryland used a 25-item version of the *Preschool Special Education Partnership Efforts and Quality of Services*, but decided to reduce the number of questions to 17 in FFY 2007-2008. Throughout, Wyoming has analyzed 20 questions while Arkansas has analyzed 10 items. Consistent with the school-age population, Wisconsin and Mississippi both analyzed only one item. Also, Wisconsin calculated the lower performance

limit for the preschool population using 15 items as opposed to 18, which was the number used for the school-age population. Figure 2 and Figures 4-9 display the percentages reported for the various number of items analyzed. As with the school-age population, states analyzing fewer items do report higher percentages than most states analyzing 25 items, but because a state chooses to analyze all 25 items does not mean that they will report a lower percentage as there are states that analyzed all 25 items and reported percentages similar to those analyzing only one.

Analysis of Percentages Reported based on Metric and Standard Used

Figures 2-9 represent the variability in states reported percentages over time.

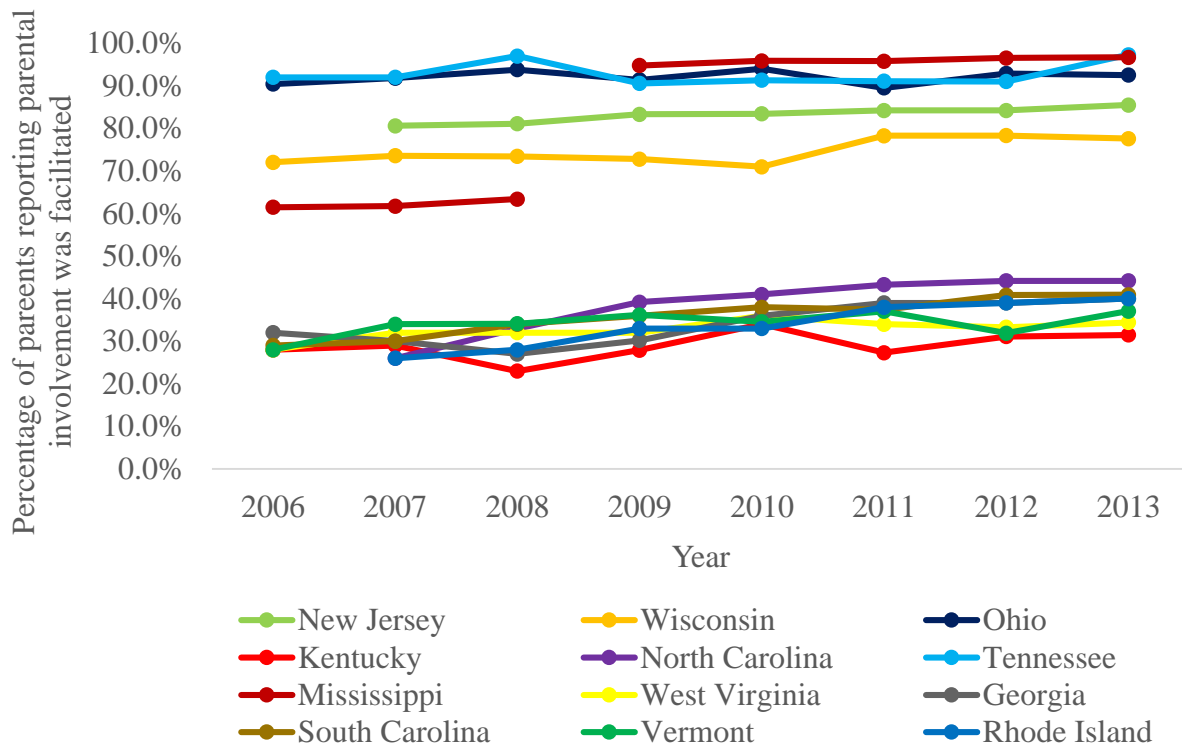


Figure 2: States with combined preschool and school age data: percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities.

This figure displays the differences seen in states choosing to use the Rasch measure and standard of 600 as opposed to other metrics and standards. In Figure 2, two discrete groups of data can be seen, one with percentages ranging between 20% and 45% and another with percentages ranging from 60% to almost 100%. Each state in the group reporting the lower percentages (Kentucky, West Virginia, Vermont, North Carolina, Rhode Island, South Carolina, and Georgia) analyzed the 25-item SEPPS using the Rasch analysis and a standard of 600. The states reporting higher percentages (New Jersey, Wisconsin, Ohio, Tennessee, and Mississippi) analyzed a various number of survey items from the SEPPS as well as survey items from other measures (see Tables 1 and 2). Furthermore, the NCSEAM recommended Rasch measure and standard of 600 was not used by any of the five states reporting the higher percentages.

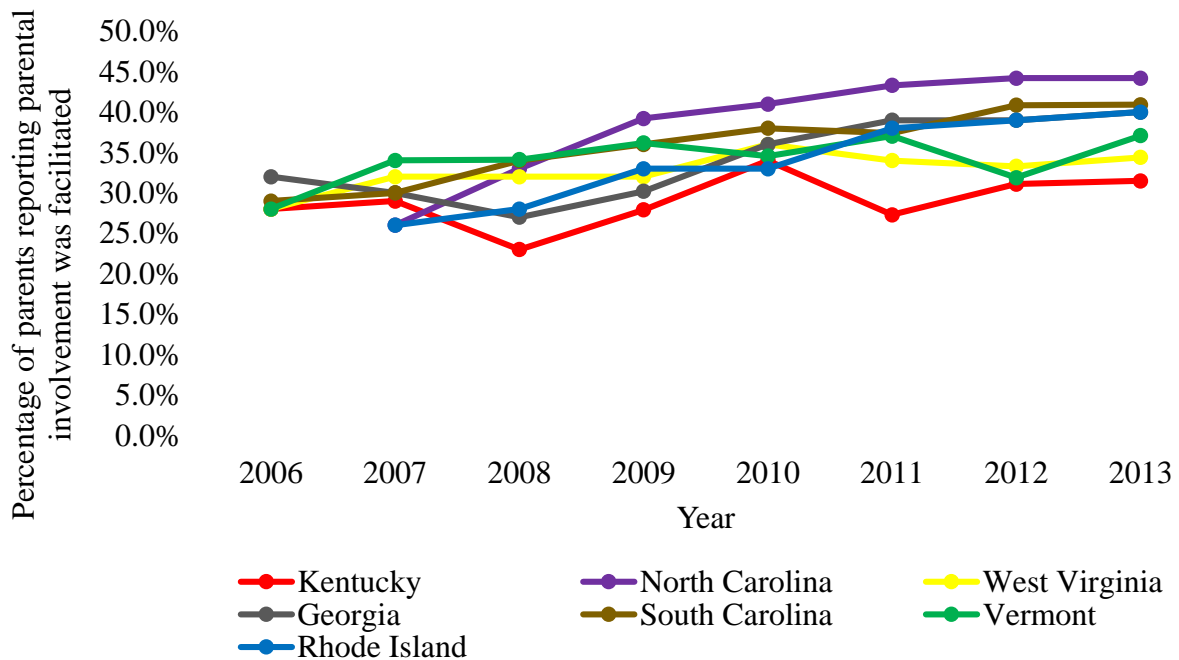


Figure 3: States reporting combined percentages based on NCSEAM recommendations. This figure represents only those states reporting combined preschool and school age percentages of

parental involvement based on the NCSEAM recommended Rasch measure and standard of 600. From this figure, one can see that states using this measure and standard display relatively small amounts of growth over the course of the eight year cycle. North Carolina was the one state that made consistent annual progress, beginning with a baseline of 26.0% in FFY 2006-2007 and gradually increasing to 44.2% in FFY 2012-2013, the highest percentage reported by any of the seven states following NCSEAM recommendations. Rhode Island did not report any slippage, but their progress was not as significant as North Carolina's, improving by 14% as compared to North Carolina's 18.2%.

In contrast, Kentucky's Indicator 8 data was most variable from year to year, with reported percentages as low as 23.0% in FFY 2007-2008 and as high as 34.0% in FFY 2009-2010, improving by only 3.5 percentage points from FFY 2005-2006 to 2012-2013. Georgia, South Carolina, Vermont, and West Virginia also reported slippage in one or more FFYs, but overall progress was greater than Kentucky's, at 8.0%, 11.9%, 9.1%, and 6.4%, respectively.

Table 3

Descriptive Statistics for States Reporting Combined Percentages using the Rasch Measure

<u>FFY</u>	<u>N</u>	<u>Range</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Std. Error</u>	<u>Std. Deviation</u>	<u>Variance</u>
2006	8	14.1%	21.0%	35.1%	28.8%	1.4%	4.0%	16.1
2007	10	11.5%	23.6%	35.1%	29.6%	1.1%	3.6%	13.2
2008	8	12.0%	23.0%	35%	30.8%	1.5%	4.3%	18.3
2009	7	11.3%	27.9%	39.2%	33.5%	1.5%	3.9%	15.1
2010	7	8.0%	33.0%	41%	36.1%	1.0%	2.7%	7.3
2011	7	16.0%	27.3%	43.3%	36.6%	1.9%	4.9%	24.4
2012	7	12.1%	31.1%	44.2%	37.0%	1.9%	4.9%	24.9
2013	7	12.7%	31.5%	44.2%	38.3%	1.6%	4.3%	18.4

Table 3 displays descriptive statistics for the states reporting combined percentages based on the NCSEAM recommendations. Over time, both the minimum and maximum percentages reported as well as the overall mean increased by only ten percentage points. The greatest number of states reporting combined data using the Rasch measure and standard of 600 was 10 in FFY 2006-2007. From there, the number decreases to eight and then ultimately stabilizes at seven states from FFY 2008-2009 through 2012-2013. The mean percentage reported steadily increase throughout the entire SPP/APR cycle, as does the maximum and minimum, with the exception of FFY 2007-2008 and 2010-2011. The highest range was observed in FFY 2010-2011 while the lowest was noted in FFY 2009-2010.

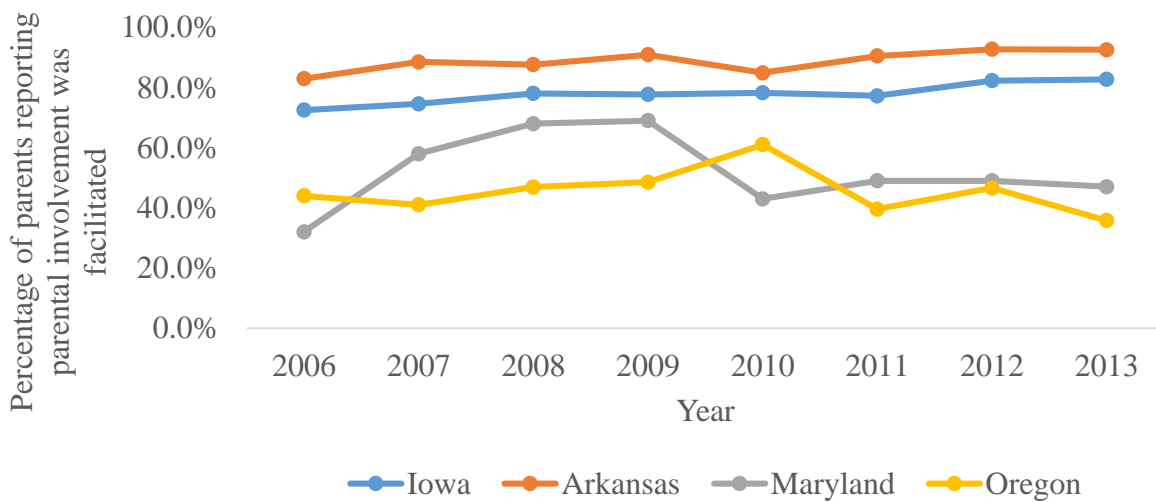


Figure 4: Preschool percentages for states reporting separately throughout the eight year cycle.

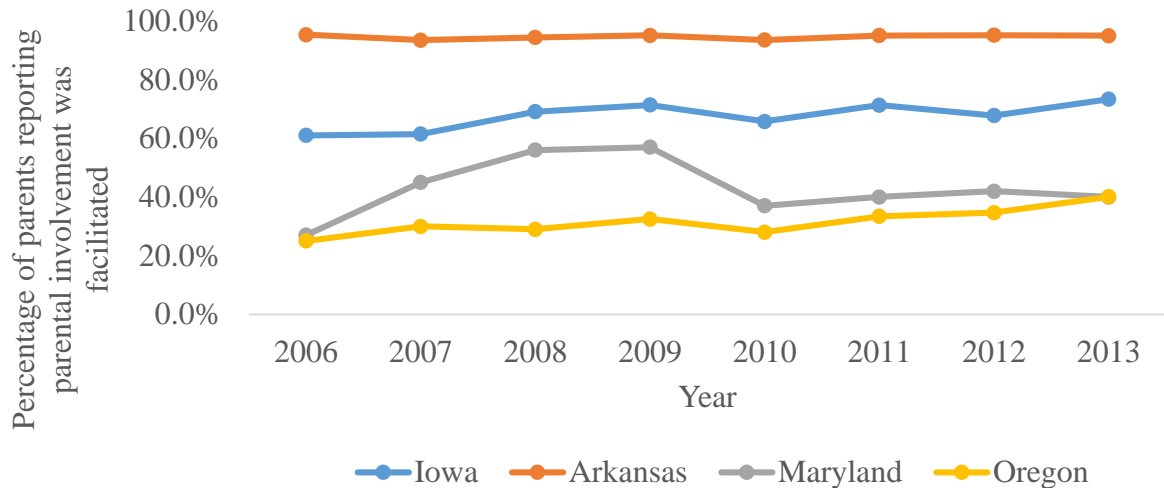


Figure 5: School age percentages for states reporting separately throughout the eight year cycle.

Figures 4 and 5 represent all of the states that measured their preschool and school-age data separately throughout the SPP/ARP cycle. These states included Iowa, Arkansas, Maryland, and Oregon. Two of the four states (Maryland and Oregon) opted to analyze the 25 item version of both the preschool and school age survey through FFY 2006-2007 as well as the NCSEAM recommended metric and standard. In FFY 2007-2008, Maryland reduced the number of items analyzed on the preschool survey to 17 but kept the same metric and standard. Iowa used a 20 item version of the SEPPS (school age) and 25 item *Preschool Special Education Partnership Efforts and Quality of Services* survey, but averaged the responses and considered anything ≥ 4 as agreement. Arkansas used only six questions from the SEPPS and an additional nine from other measures (school age) and 10 items from the *Preschool Special Education Partnership Efforts and Quality of Services* (preschool), but did not report the metric or standard used.

Changes over Time

Finally, the investigator hypothesized that states would make one of three changes when they did not see improvement over time: use of a different metric, a different standard, and/or

move from combined preschool and school age percentages to separate or vice versa. In the tables and figures listed above, one can see that the majority of states made no change to the analysis of their Indicator 8 data over the course of the extended eight year SPP/APR cycle. Listed below are the four states that separated or combined their preschool and school age data over time. Furthermore, Florida, Pennsylvania, and Wyoming changed their metric and standard. Tennessee also changed the metric and standard utilized and Mississippi changed the single item analyzed and therefore the standard implemented. The percentages reported for these two states as well as the effects of changing the metrics and/or standards can be seen in Figure 2.

The following Figures (6-8) represent individual states that began with combined preschool and school age data, but opted to separate the two for various reasons. Figure 8 represents the single state analyzed that began with separate percentages, but changed to combined over time.

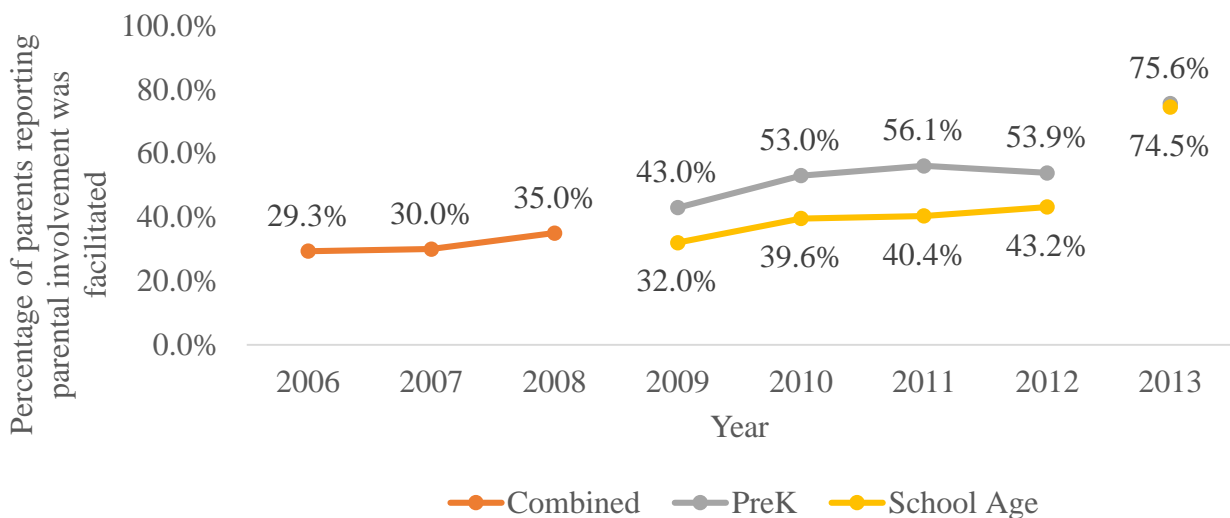


Figure 6: Florida-percent of parents with a child receiving special education services who report that schools facilitated parental involvement as a means of improving services and results for children with disabilities.

Figure 6 displays combined preschool and school age data for FFYs 2005-2006 through 2006-2007. The data was analyzed separately in FFY 2008-2009 and throughout the remainder of the SPP/AR cycle. From the beginning, Florida has used the 25 item version of both the preschool and school age survey and continues to do so. Although the surveys have remained constant throughout, the metric and standard used to analyze the data have not. From FFY 2005-2006, the Rasch measure and NSCEAM standard of 600 was used, but the metric changed to item-level analysis in FFY 2012-2013 with a standard of ≥ 4 on 18/25 items on the school age survey and 21/25 items on the preschool age survey indicating agreement.

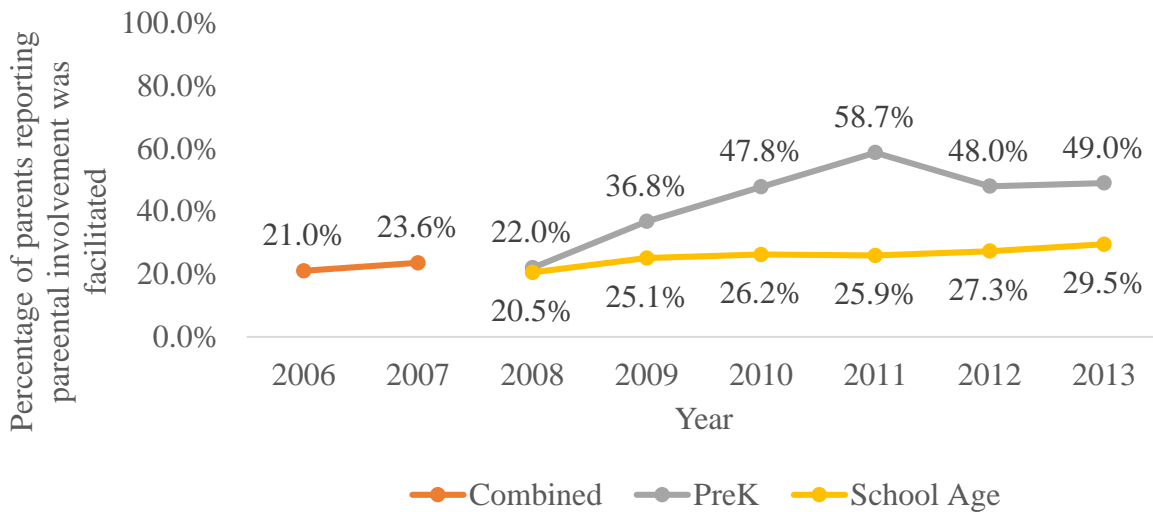


Figure 7: Michigan-percent of parents with a child receiving special education services who report that schools facilitated parental involvement as a means of improving services and results for children with disabilities.

Figure 7 represents combined preschool and school age data for Michigan from FFY 2005-2006 through 2006-2007, then separate percentages for the remaining FFYs. Throughout the entire SPP/APR cycle, Michigan used the NCSEAM recommended survey, metric, and

standard to obtain both preschool and school age percentages of parents who agreed that the school facilitated involvement as a means to improve their child’s services.

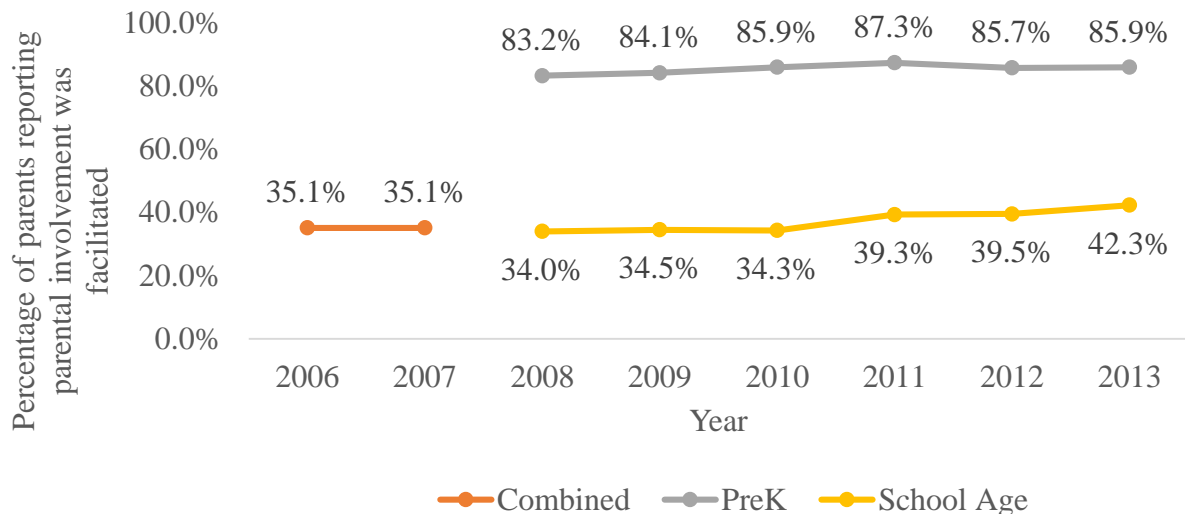


Figure 8: Pennsylvania-percent of parents with a child receiving special education services who report that schools facilitated parental involvement as a means of improving services and results for children with disabilities.

Figure 8 represents Pennsylvania’s combined school age and preschool results for FFYs 2005-2006 and 2006-2007, then separate results for the remaining FFYs. Throughout, Pennsylvania has implemented the NCSEAM recommended school age survey, and although they used the 50-question version of the *Preschool Special Education Partnership Efforts and Quality of Services* in 2005-2006 and 2006-2007, in FFY 2007-2008, the OCDEL introduced a survey from which they used a core group of questions in combination with NCSEAM validated questions for parents with children in Early Intervention Programs. For the first two years of the SPP/APR cycle, the Rasch measure and standard of 600 was used to analyze the data. In FFY 2007-2008, Pennsylvania continued to use the Rasch measure and a standard of 600 to analyze the school age data, but changed the metric to percent of agreement in FFY 2007-2008 to

analyze the preschool data. The standard used to indicate agreement in the preschool age group was not reported in either the SPP or APR.

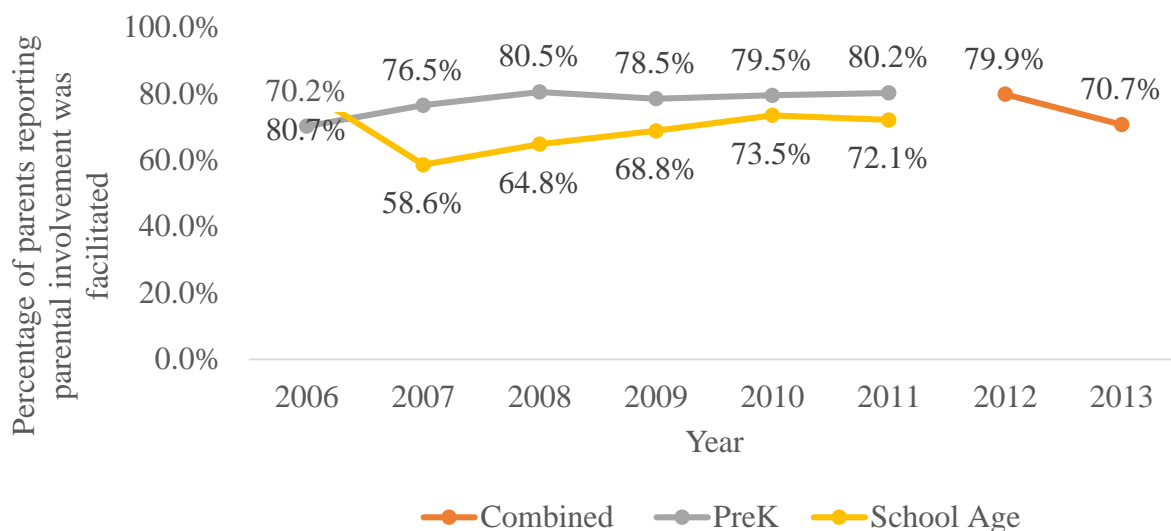


Figure 9: Wyoming-percent of parents with a child receiving special education services who report that schools facilitated parental involvement as a means of improving services and results for children with disabilities.

Figure 9 represents separate preschool and school age data for FFYs 2005-2006 through 2010-2011 then combined percentages for FFYs 2011-2012 and 2012-2013. Throughout the SPP/APR cycle, Wyoming has used a 20 item version of the *Preschool Special Education Partnership Efforts and Quality of Services* survey and used the 25 item version of the SEPPS in FFY 2005-2006 through 2010-2011, but reduced the number of items analyzed to 17 in FFY 2012-2013. In FFYs 2005-2006 through 2010-2011, the metric used by Wyoming was total raw scores with a standard of 104 indicating agreement, but in FFY 2011-2012, Wyoming opted to use a percent of maximum score with a standard of 70% and 80% indicating agreement in the school age and preschool age groups, respectively.

Chapter 4

Discussion

When OSEP mandated reporting of a parental involvement indicator annually through the APR submission, states were to be held accountable for involving families of children with disabilities as a strategy to improve outcomes for children with disabilities. During the eight year SPP/APR cycle, SEAs have largely met this requirement through the use of parent scales developed and validated by NCSEAM. As reported in OSEP's FFY 2012-2013 Indicator Analyses document, 34 of the total 60 SEAs used the NCSEAM survey instrument for Indicator 8 reporting and another nine SEAs used an NCSEAM adapted survey (OSEP, 2014). The sheer degree to which states continue to rely on the NCSEAM surveys as the primary instrument of choice substantiates the need for the present study and continued research around the instrument and states' use of the measure.

The current study served to extend the work of Elbaum (2012), providing a longitudinal examination of 20 states' use of the NCSEAM survey, metrics, and associated Indicator 8 performance data. Thus, key variables gauged included whether or not states used the NCSEAM recommended Rasch measure at the national standard of 600, how state performance rates varied, and how individual and states collectively performed over the course of the eight year cycle. From FFY 2005-2006 through 2012-2013, the state reported Indicator 8 percentages which varied by as much as 53.3% for a single state (Florida) and by as much as 65.8% among the 20 states in a single year. One may assume that the increases observed over time in states' reported percentages can be attributed to improved parental involvement strategies, and that differences in percentages reported among states may be due to the different interventions that are being used, but this is not necessarily the case.

By analyzing the data reported over time by 20 states using the NCSEAM validated survey instruments, this study highlights how the number of survey items analyzed as well as the metrics and standards used play a significant role in the percentages of parental involvement reported to OSEP. This can be said for differences observed across time for a single state as well as the differences seen annually when analyzing at all 20 states collectively. Due to this variability at the state level, it is difficult to compare individual states and the strategies that they use in order to determine areas that need improvement as well as approaches that are most effective when facilitating parental involvement.

Differences Observed between States Using Measures Other than the Rasch

The investigator hypothesized that higher percentages would be reported on Indicator 8 for states that used metrics other than the NCSEAM recommended Rasch measure and standard of 600. Support for this hypothesis can be seen in Figure 2 in which two distinct groups of percentages reported by states can be observed. What is significant about the differences between these two groups is that those states reporting lower percentages (Kentucky, West Virginia, Vermont, North Carolina, Rhode Island, South Carolina, and Georgia) analyzed all 25 items of the SEPPS using exclusively the Rasch measure and a standard of 600. In contrast, the states reporting higher percentages (New Jersey, Wisconsin, Ohio, Tennessee, and Mississippi) chose to analyze various numbers of survey items, ranging from all 25 to only 1, and also analyzed the data using a variety of metrics (item-level analysis, percentage of agreement, distribution of responses, and the average of all of the responses) and standards. Thus, the significant variable is not necessarily the number of items analyzed or the variety of metrics and standards utilized, but instead the usage of the NCSEAM recommended Rasch measure and

standard of 600. From Figure 2, one can see how states are able to increase the percentages of parental involvement reported by simply using a different metric or standard.

The one state in Figure 2 with a noticeable increase from FFY 2007-2008 to 2008-2009 was Mississippi. Once again, one may think that they implemented more effective parental improvement activities, but what is most likely the cause of the increase is that the single item analyzed by the state was changed from “I participate as a member of various teams to plan for my child’s educational needs” (2005-2006 through 2007-2008) to “The school gives parents the help they may need to play an active role in their child’s education (2008-2009 through 2012-2013). The question that Mississippi began using in 2008 has a Rasch item calibration of 581 which is below the NCSEAM recommended standard of 600, thus an increased number of parents likely provided an *agree* response to this question. This shows how a state can simply substitute one question as the target question for Indicator 8 and make it appear as if more parents are reporting increased parent partnership efforts.

Based on the stark contrast of percentages reported based on metrics and standards used, one is able to predict that states choosing to use the Rasch will report considerably lower percentages than those states using other measures, and therefore, differences cannot be attributed to strategies aimed at increasing parental involvement.

Number of Survey Items Analyzed

The investigator also hypothesized that the fewer survey items a state analyzed, the higher the reported percentage on Indicator 8 would be. Although states analyzing fewer than 25 items consistently reported higher percentages than states analyzing all 25 items, there were also states that analyzed all 25 that reported similarly high percentages. Furthermore, states

analyzing fewer than 25 items also implemented metrics and standards other than Rasch measure and standard of 600. Considering states analyzing 25 items reported a wide range of percentages on Indicator 8, it can be concluded that it is not the number of items that is responsible for the increased percentages, but rather the metric and standard implemented by the state when analyzing the chosen number of items.

Additionally, the number of items states elected to analyze additionally impacts the validity of their results. The SEPPS was created so that various dimensions of parent involvement would be measured and therefore a comprehensive understanding of the relationship and areas that are lacking could be obtained. When some states choose to analyze only one item, they thereby evaluate only one dimension of parent involvement from an entire scale, which is unlikely to account for a valid, comprehensive measure of parental involvement. Furthermore, it is possible that these states are choosing to analyze item(s) yielding more positive responses from parents, as opposed to ones yielding lower levels of parent agreement, thereby skewing Indicator 8 percentages in the positive direction for particular states.

States Decisions to Change or Remain the Same

Finally, it was hypothesized that states would make one of three changes when they did not see improvement over time: use of a different metric, use of a different standard, and/or move from combined preschool and school age percentages to separate or vice versa. This hypothesis was not supported as the majority of states analyzed (i.e., 14 of 20) made no changes over the course of the SPP/APR cycle. Florida, Michigan, Pennsylvania, Wyoming, Tennessee and Mississippi were the only six states that opted for change when there was a lack of improvement over time.

In Figure 6 (Florida), one can see that the way the percentages were reported changed from combined to separate in FFY 2008-2009, and although the preschool percentages increased while the school percentages decreased, the same measure and standard was used over the course of the seven years. Therefore, it is possible that if the combined data reported were separated, similar percentages would be seen. FFY 2012-2013 was the year a considerable difference was noted; at this time, Florida changed its metric and standard from what NCSEAM recommended to item-level analysis with a standard of ≥ 4 of 18/25 items on the school age survey and 21/25 items on the preschool age survey. Once again, the way the states choose to analyze the data had a significant impact on percentages reported.

In Figure 7, even though Michigan separated its percentages based on age in FFY 2007-2008, the Rasch measure and standard of 600 continued to be used. The fact that the preschool percentages are consistently higher could be due to the previously mentioned variables. The school-age scores are comparable to those reported by other states using the same metric and standard. Michigan states that the reason for separation was due to 1) the differences in the preschool and school age surveys; 2) the increased levels of parental involvement at the preschool level; 3) the way the samples were selected for each population; and 4) due to the possibility that separating the two could provide more reliable information for each entity (Michigan Department of Education, 2011).

In Figure 8 (Pennsylvania), the preschool and school age data were separated in FFY 2007-2008. This is the same year the metric used to analyze the preschool age data was changed from the Rasch to percent of agreement and also the year the survey instrument included items from OCDEL survey. The Rasch measure continued to be used to analyze the school age data throughout the entire eight year cycle, thus the results are comparable to those reported by other

states. Once again, the difference in percentages observed in the preschool age group is not likely due to improved parental involvement measures, but attributed to a change in the way the data were analyzed.

Rather than separating the percentages over time, similar to the previous three states, Wyoming opted to combine the percentages in FFY 2011-2012, as illustrated in Figure 9. Once again, the year in which Wyoming decided to report a single percentage is also the year the metric and standard used by the state was altered. For the first six years of the SPP/APR cycle, the data were analyzed using total raw scores with a score of 104 indicating agreement; in FFY 2011-2012, the state used a percent of maximum score with 70% indicating agreement at the school age level and 80% at the preschool age level. Considering the Rasch measure was not used by Wyoming at any time, the percentages reported throughout the entire SPP/APR cycle are noticeably higher than those reported by states using the Rasch. Wyoming reported they combined the scores to create a more cohesive system of Part B services for students of all ages (Wyoming Department of Education, 2014).

Additionally, Tennessee changed the metric and standard used over time from percent of agreement (Absolute 'Yes' response) to item-level analysis (≥ 4 on 13/25 items) and Mississippi changed the single item analyzed to one with a lower Rasch calibration which resulted in an increased percentage of "agree" responses.

By examining the states' APR data, it is evident that how the state chooses to report the percentages (i.e., combined or separated by preschool and school age) is not as significant as the metric and standard used. Even when states saw a drastic increase when percentages were separated, it was likely not due to the separation of the two populations, but instead the way the data were analyzed for each.

As Figure 3 and Table 3 represent, states that consistently used the Rasch measure throughout the entire eight year SPP/APR cycle observed an average gain of approximately 10%. This slight increase over an eight year time frame could be a reason that other states have chosen to use different metrics and standards. Although this increase appears to be minimal, the percentages among the states that have continuously used the NCSEAM recommended metric and standard are consistent across both state and time, thus the percentages can be compared. In contrast, states using other metrics and standards reported higher percentages of parental involvement, which may make it appear as if additional/revised improvement strategies are not necessary in their respective state. Although states using metrics and standards other than the Rasch measure and standard of 600 do report higher percentages, significant gains are not observed over time for these states either.

As states transition to a new SPP/APR cycle, they may opt for a different Indicator 8 instrument for a variety of reasons including: a) feasibility; analyzing a reduced number of survey items, or even a single item, in an effort to increase response rates, b) specificity; using item-level analysis in order to get specific data so improvement efforts can be more focused, and c) sensitivity; states initially using the Rasch measure may decide to change due to the relatively small increases in parental involvement percentages observed over time. States may think a different measure will be more sensitive to program changes and improvements and thus provide more valuable feedback. Additionally, states may decide the calibration item chosen by the stakeholder group (“The school explains what options parents have if they disagree with a decision of the school”) is not consistent with what Indicator 8, “the percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities,” intends to measure

(OSEP's Part B SPP APR Measurement Table, 2014, p. 7), so they may use a different item more consistent with what Indicator 8 is projected to measure. Finally, states opting for use of the Rasch measure over time may feel as if accountability and comparability across states provides valuable information regarding parental involvement efforts nationwide while those opting for measures other than the Rasch may determine improvement efforts should be focused at the individual state and district level for students with disabilities and comparability across states is not the priority.

Limitations

Limitations to this study include the fact that some states did not include the metrics and standards used in their SPPs or APRs, so it was not possible to analyze the percentages reported based on this information as was done for the other states. Additionally, how states sampled the parent population (census vs. cohort), the sampling procedures (mail, web-based, IEP meetings), and the response rate were factors that were not taken into consideration. Although the current study encompasses more states and FFYs than Elbaum's (2012) study, it is not a census study. Therefore, all states need to be accounted for longitudinally. These factors should be taken into consideration when conducting future research.

Conclusion

It is well documented that parental involvement is beneficial for all students, especially those with disabilities. For this reason, federal mandates are currently in place to facilitate this relationship and it is assumed that schools are striving to implement effective practices to foster this connection. Although this may very well be the case, it is difficult to compare one state's performance to another on Indicator 8 due to instrument, metric, standard, and other procedural

differences. While some states are reporting percentages below 50%, others are reporting percentages close to 100%, which appears to indicate that some states need significant improvement while others are performing quite well on this indicator. Due to the data being analyzed differently, and the likelihood that different domains were measured, the resulting percentages cannot be directly compared. These findings highlight the necessity for Indicator 8 measures which are feasible, sensitive to progress and/or slippage, and provide normative data.

In the future, it would be beneficial for investigators to include the 20 additional states that implemented NCSEAM validated surveys in FFY 2009-2010 for the entire SPP/APR cycle as well as the 2013-2014 SPP/APR data, which will soon be available. It may also be useful to add sampling procedures (IEP, telephone, web based, mail, etc.) as well as information regarding the parent population and response rate. Interviewing the SEAs regarding utility and practicality of the surveys would provide valuable information regarding why they continue to use the 25-item NCSEAM survey or have opted for an NCSEAM adapted or state developed survey. The current school year represents the first year in a new SPP/APR cycle, making it an ideal time to conduct additional research in the area. Finally, future investigators may want to examine if the standard set by the stakeholder group actually measures the what Indicator 8 intends to measure—“the percent of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities” (OSEP’s Part B SPP APR Measurement Table, 2014, p. 7). By including these additional factors, the investigator(s) will be able to determine the role that each plays in the percentages of parental involvement reported by states.

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APPENDIX A

Office of Research Integrity
Institutional Review Board

April 17, 2015

Lanai Jennings, PhD, NCSP
Assistant Professor
Marshall University College of Education and Professional Development
School Psychology Program
100 Angus E. Peyton Drive Room GC 108
South Charleston, WV 25303

Dear Dr. Jennings:

This letter is in response to the submitted thesis abstract for Channing Daniel to analyze the variability in methodologies used by 20 different states over eight years and the resulting performance levels, as reported on the Office of Special Education Programs (OSEP) public Annual Performance Report website. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this study does not involve human subjects as defined in the above referenced instruction it is not considered human subject research. If there are any changes to the abstract you provided then you would need to resubmit that information to the Office of Research Integrity for review and a determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, ThD, CIP

Director