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Piedra Data Services

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

18001 Old Cutler Road Suite 509

Palmetto Bay, FL 33157

# Request for Quotation

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ADDRESS CORRESPONDENCE TO

SHELLY MURRAY 304-558-8801

DEPARTMENT OF EDUCATION

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# GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
- 5. Payment may only be made after the delivery and acceptance of goods or services.
- 6. Interest may be paid for late payment in accordance with the West Virginia Code.
- 7. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 10. The laws of the State of West Virginia and the Legislative Rules of the Purchasing Division shall govern the purchasing process.
- 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
- 12. BANKRUPTCY: In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
- 13. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.html and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
- 14. CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.
- 15. LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
- 16. ANTITRUST: In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

#### **INSTRUCTIONS TO BIDDERS**

- 1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
- 2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
- 3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
- 4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
- 5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).



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Piedra Data Services

18001 Old Cutler Road Suite 509 Palmetto Bay, FL 33157

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# PIEDRA DATA SERVICES RFQ – EDD370596 Special Education Parent Survey

Tel: 305.254.9996 Fax: 305.254.3141 csarno@piedradata.com

# Summary

Piedra Data Services, LLC (PDS) submits this proposal in response to the RFQ issued by the West Virginia Department of Education (WVDE) to collect and report data for Indicator #8 of the Part B Annual Performance Plan. PDS specializes in providing high-quality information management services to facilitate decisionmaking and reporting functions. Our team is dedicated to providing innovative solutions that will result in reliable data for federal and state reporting purposes, electronic images for record retention, and scalable data collection tools. We dedicate ourselves to developing and managing these solutions for state and local education and health agencies, with a focus on parent satisfaction data, alternate assessment, early childhood transition, and child outcomes. We are currently assisting 9 states with their State Performance Plan data collection efforts for the following indicators: Indicator 3 (Part B - Alternate Assessment), Indicator 7 (Part B - Preschool Outcomes), Indicator 8 (Part B - Parent Involvement), Indicator 12 (Part B - Early Childhood Transition), Indicator 3 (Part C - Infant & Toddler Outcomes), and Indicator 4 (Part C - Family Outcomes). PDS has the technology, staff, skills, and experience necessary to meet the WVDE's overall requirements for this initiative.

#### Vendor Details

Piedra Data Services, LLC 18001 Old Cutler Road, #509 Palmetto Bay, FL 33157

Contact: Christopher Sarno Phone: (305) 254-9996

Email: csarno@piedradata.com

Tax Identification Number: 20-1345034

CAGE Number: 4HY25 DUNS: 781160028

PDS does not have the capacity to accept credit cards. We can only accept this contract if we are able to be paid through a  $3^{\rm rd}$  party payment processor such as PayPal.

# **Prior Experience & Organizational Capacity**

# Recent project experiences of similar size, scope, and function

- North Carolina Department of Public Instruction: NCSEAM 619 Preschool Survey and Part B Parent Survey (2006-2011) Annually, 23,000 surveys printed and shipped to 55 school districts. The survey contains only the first scale (25 items) of the standard survey in both English and Spanish with no demographic items. Parents use the included postage-paid business reply envelope to return surveys directly to PDS. Demographic data provided by the State of North Carolina is matched to each returned survey using the unique survey serial numbers. State-level report and 50 district-level reports created. Contact: Kate Neale (919) 807-3979, Kate.Neale@dpi.nc.gov
- Hawaii Department of Education: NCSEAM Part B Parent Survey (2005-2011) – Annually, 21,000 surveys. The survey contains the full, standard version of the NCSEAM Part B survey with minor demographic item changes. Parents use the included postage-paid business reply envelope to return surveys directly to PDS. Statelevel report created provides relevant percentages reportable to OSEP.
- Massachusetts Department of Public Health: NCSEAM Part C Family Survey (2005-2011) 14,000 surveys are printed, kitted by Early Steps Program, and shipped to 60 locations throughout Massachusetts. The survey contains both scales (48 items) of the standard survey in English and Spanish. Parents use the included postage-paid business reply envelope to return surveys directly to PDS. Survey data is matched to Early Steps programs using the serial number on each returned survey and state-level and program-level reports are generated. Contact: Suzanne Gottlieb (617) 624-5979, suzanne.gottlieb@state.ma.us

# <u>General experience</u>

Survey Design & Processing – PDS designed the original survey layouts for the NCSEAM pilot study in 2004. In 2005-2006, our team generated the design layouts for the standard NCSEAM Part B parent survey, Part C family survey, and 619 preschool surveys. Over the past several years, PDS has modified the standard NCSEAM survey designs (i.e., removed and replaced items, added logos, modified demographic items, and designed new layouts to accommodate Spanish translations) for the following states: Florida (Parts B, C, & 619), Hawaii (Parts B and C), Idaho (Parts B & C),

Louisiana (Part B), Illinois (Part B), Georgia (Part B), Kentucky (Part B), Massachusetts (Part C), North Carolina (Part B and 619), New Jersey (Parts B and C), Nevada (Part B) and the Bureau of Indian Education (Part B). In addition to processing returned surveys for the NCSEAM pilot studies, we have also processed returned surveys for all the aforementioned states. Surveys are scanned using high-speed imaging scanners. Data captured from the surveys are then verified by trained operators.

 Data Analysis & State-level Report – Members of the PDS team have previously worked on various research teams conducting data analysis. For the NCSEAM survey projects, Rasch analyses and reporting is conducted by a specialist in educational statistics and measurement, Dr. Randall Penfield, Professor at the University of Miami's School of Education. Rasch analyses will include an initial data quality assessment, a report of the measures in the NCSEAM metrics for each scale analyzed, and the percentage(s) reportable to OSEP on the relevant SPP/APR parent indicator(s).

# **Proposed Project Staff**

Christopher Sarno will be the project leader and has responsibility for all areas of application development, statistical data analysis, testing & quality assurance, and reporting functions. He has extensive experience managing government-funded research grants; developing research methods; and designing, developing and implementing front and back-end software applications. Christopher would work through the duration of the entire project. Prior to Piedra's inception, Mr. Sarno worked as a senior research analyst at the University of Miami and research fellow for the Criminal Policy Research Unit (CPRU) in London, England. He has a bachelor's degree from the University of London; a master's degree in research methods from South Bank University, London; and is a Sun Certified Java Programmer. Christopher has published government reports, book chapters and journal articles.

**Adalis Sanchez-Sarno** will be responsible for overall data collection solutions, which include design of scannable forms, database modeling & programming, SQL server administration, and IT project management. Previously, Ms. Sanchez-Sarno served as senior research analyst at the University of Miami's School of Education. She has also worked as consultant to the National Center for Special Education Accountability Monitoring (NCSEAM) and the Florida Department of Education, assistant director of admissions for the University of South Florida, and project manager for Chancellor Academies. Adalis holds degrees from Columbia University (B.A., Psychology) and from the University of Miami (M.S., Computer Information Systems).

**TyAnn Baity** oversees PDS survey projects to ensure that all deliverables are completed correctly and in a timely manner. Ms. Baity is responsible for managing the work plan for each survey project, providing current updates to State agencies, directing staff responsible for processing and verifying survey forms, administering project funds, and assisting with State and regional-level reports. Ms. Baity has previous experience managing accounting projects for various companies and holds a degree from Temple University (B.A., Accounting).

**Dr. Randall Penfield** will conduct the Rasch Analysis on the survey data. Dr. Penfield is a specialist in educational statistics and measurement at the University of Miami's School of Education. PDS has been working with Dr. Penfield on Part B Indicator #8 and Part C Indicator #4 analyses since 2005

# **Project Design**

# 1. Joint Decision Making/Liaison with WVDE

PDS to work with WVDE to determine: suitable design, formatting and barcoding of the surveys; specifications regarding the format and exchange of confidential student data files.

## 2. Survey Administration

- a. Survey Design: Recreate the existing NCSEAM Parent (Part B) and Preschool (619) surveys as per instructions from WVDE. It is assumed there will be one version of each survey (English). The surveys will be recreated using Teleform software to enable processing on our system. Our team will work closely with WVDE to develop custom scannable forms with user-friendly layouts that aim to maximize response rates and data reliability. Forms are designed in-house and include a variety of data capture fields that allow for Optical Mark Read (OMR) bubbles, checkboxes, handwritten entries, signature and image capture, bar codes, and other fields, as necessary. A SQL database will be created on the backend to store and manage data captured from the surveys. Each survey item will be mapped to a specific database field for exporting purposes. A comments section will be added to each survey and a survey number (WVDE-ISS-061) will be added to the bottom left of the surveys.
- b. Set-up and printing of surveys, cover letters, and envelopes: PDS will coordinate with Scantron to print the NCSEAM parent and preschool surveys as well as cover letters and envelopes with WVDE's "look and feel." The initial mailing will include the following materials: WV Part B NCSEAM Parent Survey (13,000); WV 619 NCSEAM Survey (2,000); parent cover letter (15,000); customized #10 outgoing envelope (15,000); and #9 Piedra Data Services Business Reply Envelope (15,000). WVDE will electronically generate and transmit cover letters, original versions of the 2 surveys, logos, signatures, and envelope return address. There will be a 2<sup>nd</sup> mailing of approximately 13,000 surveys. The second mailing will be distributed to recipients who have not returned a survey by June 15th. The second mailing will include: WV Part B NCSEAM Parent Survey (approx. 11,200); WV 619 NCSEAM 1,800); parent cover letter (approx. Survey (approx. customized #10 outgoing envelope (approx. 13,000); and #9 Piedra Data Services Business Reply Envelope (approx. 13,000).

# Assumptions:

- ▶ Printing Parent surveys Scantron graphics setup and printing with the following specifications: Surveys based on WVDE's versions of NCSEAM's Parent and Preschool Surveys -8.5" x 11" format; two scannable sides; two front & back colors (one color equaling black); printed on 60# white offset paper; page-link: double-sided serial numbering. The surveys will be specifically manufactured to meet scannability requirements with regard to composition, moisture content, brightness, opacity, reflectance, smoothness, pick resistance, tear strength and porosity. The color background color will "drop out" when scanned to assure accurate scanning. Unique serial numbering allows each specific survey to be matched to an individual child's demographic data, including school district information.
- ➢ Printing cover letters Cover letters will be printed in 8.5"x11" format; single-sided; printed in black and white; variable data included (i.e., parent mailing addresses); with logos and signatures as provided by WVDE.
- #10 Outgoing window envelope Scantron graphics setup/technical edit and printing on one side (one color - black ink); return address as provided by WVDE; mailing address printed on cover letter showing through window.
- > #9 Business reply envelope (BRE) Scantron printing on one side (one color-black ink), with postal regulations met; graphics provided by PDS.
- ➢ Folding & stuffing Scantron folding, inserting, and sealing of surveys, cover letters, and BREs. To ensure accurate matching of each letter and corresponding survey, press sheets are printed flat on 17x11 paper to include the cover page and survey. Each sheet is trimmed to create two 8.5x11 sheets (survey and letter). The parent letter portion will be one sided and printed in black ink only. Each survey and letter pair is electronically checked for compatibility using a barcode reader and then inserted into a #10 outgoing envelope, along with a #9 return postage-paid envelope.
- ➤ Outgoing USPS postage Scantron to mail approximately 15,000 surveys directly to parents; mailing data file provided by WVDE; data scrubbing to ensure addresses meet minimum post office requirements. For the second mailing, Scantron will mail roughly 13,000 surveys to parents who do not return surveys by June 15<sup>th</sup>.

# 3. Data Collection

Tel: 305.254.9996

Fax: 305.254.3141

- a. Return of paper-based surveys Completed surveys will be returned in postage-paid Business Reply Envelopes. Once completed surveys are received, the envelopes are fed through an electronic envelope opener. All documents are removed from the envelopes and unfolded. As a safety measure, all empty envelopes are re-inspected once surveys have been removed to ensure that no documents remain in the envelopes. Any letters written by parents or other documents relevant to the surveys are set aside to be mailed to the WVDE at the end of the project. Parent surveys are stored in locked cabinets for the next stage of processing.
- b. Data security All authorized personnel have individual usernames and passwords to access the stand-alone network, which stores secure student data. If personnel leave their computers for more than two minutes, a password-protected screen saver is activated. A very limited number of employees have access to sensitive electronic records. All sensitive electronic records, including scanned images, survey data, and student demographic information, are stored on the SQL server and backed up every night. All electronic records are protected from unauthorized access while in storage and while being processed through the use of suitable information security techniques, such as passwordprotection and analogous methods. Access control mechanisms must also be utilized to ensure that only authorized users can access data to which they have been granted explicit access rights. Additionally, any computer and/or electronic devices where these electronic records reside, such as database servers, local hard drives, external hard drives, tape or optical backups, are always kept within secure premises. Authorized individuals are trained to avoid transmitting sensitive data through electronic means proven to be easily intercepted and/or modifiable, such as unencrypted e-mail communications or unsecured FTP connections. Transmission of sensitive information via facsimile documents is also prohibited.
- c. Survey scanning and verification Surveys are scanned in batches and data collected from surveys are reviewed by verification operators. The system is programmed to identify items where (a) more than one answer has been completed or (b) the system was inconclusive about whether an answer had been bubbled. Verifiers are trained to check each paper form where there is a discrepancy to maximize accuracy. Our image processing system contains a formal hierarchical authentication process that allows verifiers to hold forms for further investigation and elevate cases to supervisors, if

- necessary. Once a batch has been scanned and verified, the data are exported to a SQL database.
- d. *Monthly updates* PDS to provide monthly updates to WVDE of response rates by district and survey type.

# 4. Data Analysis

- a. Prepare data files create data files for Rasch Analysis and raw data file for WVDE. Data will be exported from SQL database into SPSS. If applicable, demographic data from the initial address file provided by WVDE will be matched to survey data in SPSS using the unique survey serial numbers. A data file, containing survey data and a limited amount of demographic data (non-identifying), will be sent to Dr. Penfield (as described in part c. below) for analyses. The WVDE data file will be provided in a format chosen by WVDE (e.g., SPSS, MS Excel, tab-delimited) and will include data definitions describing each data field/element.
- b. Disaggregate and Report Return Numbers/Rates provide return numbers and rates at the State- and LEA- level by gender, race/ethnicity, disability type and other selected demographic variables.
- c. Rasch Analysis Rasch analyses and reporting is conducted by a specialist in educational statistics and measurement, Dr. Randall Penfield, Professor at the University of Miami's School of Education. PDS has been working with Dr. Penfield on Part B Indicator #8 and Part C Indicator #4 analyses since 2005. Rasch analyses will include an initial data quality assessment, a report of the measures in the NCSEAM metrics for each scale analyzed, and the percentage(s) reportable to OSEP on the relevant SPP/APR parent indicator(s). Results pertaining to the indicator (means and percentages) will be reported at the 95% confidence interval. Unless otherwise instructed, the standard of 600 on the measurement scale recommended by the nationally representative stakeholder group convened by NCSEAM will be applied as the cut score. The percent of parents who report that schools facilitated their involvement was calculated as the percent of parents with a measure of 600 or above on the measurement scale.

# 5. Reporting

PDS has worked closely with Dr. Randall Penfield since 2005 to develop a report that meets all of the necessary OSEP Indicator #8 reporting requirements. The report would include the following: details of the survey administration employed, data on the characteristics of the sample (i.e.,

child's age, race, primary exceptionality, etc.), sample mean of the scale measure including 95% confidence interval, overall performance on the measure at a state level (percentage that report that schools facilitated parent involvement across the entire sample), performance on the measure by various categories (i.e., age groupings (619 age 3-5 vs Part B age 6-21), primary exceptionality, race/ethnicity, LEA, etc.), background on the Rasch measurement framework employed, the psychometric properties of the scale, item calibration and methodology used, and frequencies and analysis for each survey item.

# **Estimated Timeline for 2012**

- 04/16 Project commencement Design and Print Surveys and Associated Materials
  - [Approx. 5 weeks to design surveys, print surveys, print envelopes, and cover letter. The following items must be provided by WVDE: official letter of intent; mailing address data; survey designs in PDF format; cover letter(s) including logos, artwork, and signatures in MS Word or PDF; and survey modification approval]
- 05/21 Survey Mailings
  - [Surveys will be mailed in mid-May. Approx. 4-5 weeks for parents to complete and return surveys.]
- 06/18 Second Follow-up Mailing of Surveys
  - [Surveys will be mailed in mid-June. Approx. 4 weeks for parents to complete and return surveys.]
- 07/16 Survey return deadline
  - [Approx. 2 weeks to complete processing and prepare final data file]
- 7/30 Processing/final data file completed
  - [Approx. 4 weeks for Dr. Randall Penfield to run analyses & provide state-level report with OSEP requirements]
- 08/27 State-level report completed

# **Price Quotation EDD370596**

Total Cost: \$49,950

Price per mailed survey (based on 15,000 initial outgoing surveys): \$3.33

# CHRISTOPHER SARNO

18001 Old Cutler Road, #509 Palmetto Bay, FL 33157 • Phone: 305 254 9996 • Email: csarno@piedradata.com

## **Technical Skills**

Application/Database Programming

Java • Visual Basic for Applications • VB.NET • PL/SQL • SQL

Web Programming

JavaScript • JSP • Servlets • PHP

**Databases** 

MS Access • MS SQL Server • MySQL

**Development Environments** 

JBuilder • Visual Basic Editor • Visual Studio.NET • Dreamweaver MX • HTML-Kit

Other Software

MS Word • MS Excel • IBM SPSS • Cardiff Teleform • Application Xtender

#### Recent Experience

CEO/Co-owner: 2004-Present

Piedra Data Services, 18001 Old Cutler Rd, Suite 509, Palmetto Bay, FL

- Responsible for all areas of application development, statistical data analysis, testing & quality assurance, and reporting functions.
- Manage government-funded research projects; develop research methods; and design, develop and implement front and back-end software applications.
- Responsible for full cycle development, including data cleaning, logic checking, and statistical
  analysis programming, including designing functional specifications, coding, testing,
  maintenance and modification.

Research Analyst/Programmer: 2001 – 2004

School of Education, University of Miami, Coral Gables, FL

- Design, program and implement front-end user interfaces in Access using VBA 6.
- Develop automated data scrubbing and analysis programs to streamline workflow and implement quality assurance.
- Perform data analysis programming with complex data transformations using MS Access, MS Excel, and SPSS.
- Run focus groups with students, parents, and staff at schools throughout the State of Florida.

**Data Manager:** 1999 – 2001

Criminal Policy Research Unit, South Bank University, London, UK

- Manage the collection, storage, and analysis of large-scale data sets for \$1.4 million UK Government funded evaluation of burglary reduction initiatives.
- Supervise and mentor junior members of staff.
- Interact and negotiate with a range of stakeholders to secure the collection of sensitive crime data.
- Analyze crime data and author reports.

Research Fellow: 1997 – 1999

Criminal Policy Research Unit, South Bank University, London, UK

- Lead researcher on three evaluations including one for the UK government.
- Develop research proposals, advise on survey design, and develop research methods.
- Data collection, including interviews.
- Data analysis and writing reports and articles.

#### **Education and Qualifications**

Sun Certified Programmer for Java 2 Platform	03/01 - 08/01
Computer Skills Center, London, UK	
M.S., Research Methods	09/98 - 08/00
South Bank University, London, UK	
Postgraduate Diploma, Environmental Management	09/91 – 07/92
University of Stirling, Stirling, UK	
B.S. Honors, Geography	09/87 – 06/90
University of London, London, UK	

#### **Publications**

Sarno, C., Hearnden, I., Hedderman, C., and Hough, M. (2000) Working their way out of offending: an evaluation of two probation employment schemes, Home Office Research Study, No. 218, Home Office Research, Development and Statistics Directorate, London.

Sarno, C., Hough M., Nee, C and Herrington, V (1999) *Probation Employment Schemes in Inner London and Surrey – An Evaluation*, Home Office Research Findings, No. 89, Research Development and Statistics Directorate, London.

Sarno, C. Hough M., and Bulos M. (1999) *Developing a picture of CCTV in Southwark town centres*, Borough of Southwark, http://www.sbu.ac.uk/cpru/publications/cctv.shtml

Sarno, C. and Hough, M. (1999) An evaluation of the work of the Lennox Lewis College, Social Science Research Paper, No. 8, Faculty of Humanities and Social Sciences, South Bank University.

## Other Skills/Aptitudes

- Extensive research and evaluation
- Proven report writing skills
- Clean driving license
- Spanish: proficient
- · Ability to work on own initiative

# ADALIS SANCHEZ-SARNO

18001 Old Cutler Road, #509 Palmetto Bay, FL 33157 • Phone: 305 254-3141 • Email: asanchez@piedradata.com

#### **EXPERIENCE**

2004-Present

Piedra Data Services

Palmetto Bay, FL

President/Co-owner

- Responsible for overall data collection solutions and IT project management.
- Designing survey forms and programming back-end scripts using Cardiff's Teleform software.
- Database modeling and programming of Access and SQL databases, including tables, forms, queries, and reports.
- Responsible for managing State-funded projects for Indicators 3 and 7 (Part B).
- Preparation of proposals, research protocols, reports, presentations, and project timelines.
- Directing staff to ensure timely completion of deliverables.

2001 - 2004

University of Miami

Coral Gables, FL

Project Manager/Programmer

- Responsible for managing State-funded research project for the Bureau of Instructional Support and Community Services.
- Preparation of grant proposals, research protocols, reports, presentations, and project timelines.
- Programming of Access and SOL databases, including tables, forms, queries, and reports.
- Directing project members to ensure timely completion of deliverables.
- Designing scoring forms and programming back-end scripts using Cardiff's Teleform software.
- Act as research team's project liaison for State funding agency and district-level directors.
- Travel to various sites throughout Florida to facilitate focus group interviews with key stakeholders.

2000

Chancellor Academies, Inc.

Miami, FL

Project Manager/Market Research Analyst

- Responsible for overseeing multiple projects from design to completion for charter school division of company (i.e., coordinating timely preparation of state charter applications).
- Preparation of presentations for potential charter school sponsors.
- Traveled to target areas to conduct primary evaluations of prospective real estate properties.
- Provided recommendations of potential in-state and nation-wide sites to company CEO and other senior executives based on general demographics, growth statistics, legislation, and competition.
- Prepared potential site profile reports based on research findings for Board of Directors.
- Designed, programmed, and implemented student admissions databases in Access for both private and charter schools.
- Trained corporate and regional employees in the use of several software packages.
- Company's Spanish-speaking liaison for parents from Latin America and the Caribbean.

Assistant Director, Office of Admissions

- Responsible for recruitment efforts in the following territories: Dade, Monroe, Palm Beach, Orange, Seminole, Osceola, Volusia, St. Lucie, Martin, Brevard Counties, and Puerto Rico.
- Coordinator of Hispanic scholarships awarded to qualified incoming freshmen.
- Member of university-wide advisory committee, organized, and directed by Noel-Levitz Consulting.
- Admissions liaison for Spanish-speaking international students and parents.
- New employee orientation committee member, responsible for creating new employee manuals for Admissions Office.
- Conducted recruitment in the aforementioned counties along with individual school visits, college fairs, onsite student evaluations, and general admissions counseling.

1994 - 1998

Columbia University

New York, NY

Senior Research Assistant, Similarity and Cognition Laboratory

- Managed and coordinated research schedules for several research assistants.
- Responsible for prioritizing and conducting simultaneous psychology & marketing experiments.
- Conducted university-wide recruitment of participants for experiments.
- Contributed graphics, data analysis, and participant testing for over 15 published articles.
- Prepared multimedia presentations for psychology conferences.

#### **EDUCATION**

2003

University of Miami

Miami, FL

M.S., Computer Information Systems

1998 - 1999

University of South Florida

Tampa, FL

- 24 credits towards M.A., Elementary Education
- National Society of Collegiate Scholars

1998

Columbia University

New York, NY

- B.A., Psychology
- Dean's List
- Honorary Kluge Scholar

#### QUALIFICATIONS

- Markman, A. & Sanchez, A. (1998). Structure and pragmatics in analogical inference. In Holyoak, K., Gentner, D., & Kokinov, B. (Eds.) <u>Advances in Analogy Research: Integration of Theory and Data from the Cognitive, Computational, and Neural Sciences (pp.191-200)</u>. Sofia: NBU Press.
- Programming languages: Oracle SQLPlus, PL/SQL, Java (JSP, Servlets, Dreamweaver), and VBA/VB.NET. Familiar with full development life cycle, including project planning and initiation, Enhanced ERD modeling, normalization, design, and implementation.
- Bilingual: English/Spanish

# UNIVERSITY OF MIAMI

# SCHOOL of EDUCATION



#### Curriculum Vitae

Randall David Penfield, Ph.D.
Professor and Director, Graduate Program in
Research, Measurement, and Evaluation
Department of Educational and Psychological Studies

#### **CONTACT**

University of Miami School of Education P.O. Box 248065 Coral Gables, FL 33124-2040

Office Telephone: 305-284-8340

Office Fax: 305-284-3003 e-mail: penfield@miami.edu

December, 2010

#### **HIGHER EDUCATION**

#### 11. Institutional:

Institution University of Toronto	Major Statistics and Measurement	<b>Degree</b> Ph.D.	<b>Date</b> 2000
York University	Physiological Psychology	M.A.	1996
University of Toronto	Psychology	B.Sc.	1993

12. Non-institutional: N.A.

13. Certification: N.A.

#### **EXPERIENCE**

#### 14. Academic:

2010-	Professor, Department of Educational and Psychological Studies, School of Education, University of Miami.
2010-	Associate Director, Dunspaugh-Dalton Community and Educational Well-Being Research Center, University of Miami.
2010-	Senior Faculty Advisor, Office of Planning, Institutional Research, and Assessment, University of Miami.
2004-	Director, Graduate Program in Research, Measurement, and Evaluation, Department of Educational and Psychological Studies, University of Miami.
2006-2010	Associate Professor, Department of Educational and Psychological Studies, School of Education, University of Miami.
2004-2006	Assistant Professor, Department of Educational and Psychological Studies, School of Education, University of Miami.
2000-2004	Assistant Professor, Department of Educational Psychology, College of Education, University of Florida.

#### 15. Non-academic:

1999-2000 Psychometrician, Education Quality and Accountability Office (EQAO), the Ontario provincial testing agency, Toronto. Provided psychometric consultation for the development of provincial standardized tests and the reporting of test scores (e.g., classical item analyses, item response theory parameter estimation, test equating, etc.).

1997-2000 Statistician/Psychometrician, Datahost Consulting Group.
Responsible for the analysis and reporting of large-scale
assessment data. Analyses included reliability and validity
analyses, scale development, differential item functioning analyses,
exploratory and confirmatory factor analyses, and univariate and
multivariate statistical analyses.

## 16. Military: N.A.

#### <u>PUBLICATIONS</u>

- 17. Books and monographs: N.A.
- 18a. Refereed journal articles (\* denotes invited paper):
- Gattamorta, K. A., & Penfield, R. D. (in press). A comparison of adjacent categories and cumulative differential step functioning effect estimators. *Applied Measurement in Education*.
- Lee, O., Penfield, R. D., & Buxton, C. (in press). Relationship between form and content in science writing among English language learners. *Teachers College Record*.
- Algina, J., Keselman, H., & Penfield, R. D. (in press). Confidence intervals for squared semi-partial correlation coefficients: The effect of non-normality. *Educational and Psychological Measurement*.
- Penfield, R. D. (in press). How are the form and magnitude of DIF effects in multiplechoice items determined by distractor-level invariance effects? *Educational and Psychological Measurement*.
- Maerten-Rivera, J., Myers, N. D., Lee, O., & Penfield, R. D. (2010). Student and school predictors of high-stakes assessment in science. *Science Education*, *94*, 937-962.
- Penfield, R. D. (2010). Explaining crossing DIF in polytomous items using differential step functioning effects. *Applied Psychological Measurement*, *34*, 563-579.
- Penfield, R. D. (2010). DDFS: Differential Distractor Functioning Software. *Applied Psychological Measurement*, *34*, 646-647.
- Elbaum, B., Gattamorta, K., & Penfield, R. D. (2010). Evaluation of the Battelle Development Inventory (2<sup>nd</sup> Ed.) screening test for use in states' child outcome measurement systems under IDEA. *Journal of Early Intervention*, *32*, 255-273.
- Penfield, R. D. (2010). Distinguishing between net and global DIF in polytomous items. *Journal of Educational Measurement*, 47, 129-149.
- Penfield, R. D. (2010). Modeling DIF effects using distractor-level invariance effects: Implications for understanding the causes of DIF. *Applied Psychological Measurement*, *34*, 151-165.

- \*Buxton, C., Lee, O., & Penfield, R. (2010). Developing English literacy through science instruction. *International Journal of Foreign Language Teaching*, 5(2), 11-14.
- Penfield R. D. (2010). Test-based grade retention: Does it stand up to professional standards of appropriate test use? *Educational Researcher*, 39, 110-119.
- Penfield, R. D., & Lee, O. (2010). Test-based accountability: Potential benefits and pitfalls of science assessment with student diversity. *Journal of Research in Science Teaching*, 47, 6-24.
- Montague, M., Penfield, R.D., Enders, C., & Huang, J. (2010). Curriculum-based measurement of math problem solving: A methodology and rationale for establishing equivalence of scores. *Journal of School Psychology*, 48, 39-52.
- Maerten-Rivera, J., Penfield, R. D., Myers, N., Lee, O., & Buxton, C. (2009). School and teacher predictors of science instruction practices with English language learners in urban elementary schools. *Journal of Women and Minorities in Science and Engineering*, 15(2), 93-118.
- Lee, O., Mahotiere, M., Salinas, A., Penfield, R. D., & Maerten-Rivera, J. (2009). Science writing achievement among English language learners: Results of three-year intervention in urban elementary schools. *Bilingual Research Journal*, 32, 153-167.
- Guler, N., & Penfield, R. D. (2009). A comparison of the logistic regression and contingency table methods for the simultaneous detection of uniform and nonuniform DIF. *Journal of Educational Measurement*, 46, 314-329.
- Lee, O., Penfield, R. D., & Maerten-Rivera, J. (2009). Effects of fidelity of implementation on science achievement gains among English language learners. *Journal of Research in Science Teaching*, 46, 836-859.
- Brownell, M. T., Bishop, A., Gersten, R., Klinger, J. K., Penfield, R. D., Dimino, J., Haager, D., Menon, S., & Sindelar, P. (2009). Examining the dimensions of teacher quality for beginning special education teachers: The role of domain expertise. *Exceptional Children*, 75, 391-411.
- Lee, O., Maerten-Rivera, J., Buxton, C., Penfield, R. D., & Secada, W. (2009). Urban elementary teachers' perspectives on teaching science to English language learners. *Journal of Science Teacher Education*, 20, 263-286.
- Penfield, R. D., Gattamorta, K., & Childs, R. A. (2009). An NCME instructional module on using differential step functioning to refine the analysis of DIF in polytomous items. *Educational Measurement: Issues and Practice*, 28(1), 38-49.

P. C. Sterrie

# Analysis of Parent Survey Data Addressing Part B SPP/APR Indicator #8

Sample State

Report prepared by Randall D. Penfield, Ph.D. on behalf of Piedra Data Services for the Sample

August 2012

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#### **SECTION 1**

#### **EXECUTIVE SUMMARY**

In accordance with federal reporting requirements mandated by the U.S. Department of Education, Office of Special Education Programs (OSEP), state lead agencies under Part B of the Individuals with Disabilities Education Act must report annually on 20 performance indicators related to the provision of special education services to children ages 3-21. This report presents findings of a survey conducted by the Sample to address Indicator #8, the "percent of parents with a child receiving special education services who reported that schools facilitated parent involvement as a means of improving services and results for children with disabilities."

The survey administered by the SAMPLE included a 25-item rating scale, the Schools' Efforts to Partner with Parents Scale (SEPPS), developed and validated by the National Center for Special Education Accountability Monitoring (NCSEAM). A total number of 3,595 respondents provided valid data. This number exceeds the minimum number required for an adequate confidence level based on established survey sample guidelines (e.g.http://www.surveysystem.com/sscalc.htm). The data set submitted for analysis contained no personally identifiable information on the respondents.

Data from the rating scale were analyzed through the Rasch measurement framework. The analysis produces a measure for each survey respondent on a scale from 0 to 1,000. Each measure reflects the extent to which the parent indicated that schools facilitated that parent's involvement. The measures of all respondents were averaged to yield a mean measure reflecting the overall performance of Sample schools' facilitation of parent involvement.

OSEP requires that the state's performance be reported as the *percent* of parents who report that schools facilitated their involvement. Deriving a percent from a continuous distribution requires application of a standard, or cut-score. The SAMPLE elected to apply the standard recommended by a nationally representative stakeholder group convened by NCSEAM. The recommended standard, established based on item content expressed in the

scale, was operationalized as a measure of 600. Thus, the percent of parents who report that schools facilitated their involvement was calculated as the percent of parents with a measure of 600 or above on the SEPPS.

The following points represent the major findings related to Indicator #8.

#### 1. Sample's Mean Measure on the SEPPS

Sample's mean measure on the SEPPS is 574, with a standard deviation of 151. The standard error of the sample mean is 2.5. The 95% confidence interval for the sample mean is 568.7 – 578.5. This means that there is a 95% likelihood that the true value of the state mean is within this range.

Descriptively, a mean measure of 574 indicates that schools are doing a good job of facilitating parent involvement in certain ways. For example, in this sample of parents of students receiving special education services in Sample, over 92% agreed, with 60% agreeing strongly or very strongly, that teachers are available to speak with parents and that at the IEP meeting, accommodations and modifications needed by the child were discussed. In other areas, agreement is considerably weaker. For example, only 72% of parents agreed, with only 39% of parents expressing strong or very strong agreement, that the school explains what options parents have if they disagree with a decision of the school. Further descriptive information is provided in Section 4.2.

# 2. Sample's Percent on Indicator #8

The percent of parents who reported that schools facilitated parent involvement, calculated as the percentage of respondents with a SEPPS measure at or above the adopted standard of 600, is 39%. The standard error of the sample percentage is 0.8%. The 95% confidence interval for the sample percentage is 37.7% - 40.9%. This means that there is a 95% likelihood that the true value of Sample's state-level percentage is between 37.7% and 40.9%.

Descriptively, a parent with a measure at or above 600 would have a very high likelihood (95% or greater) of having agreed with the item that calibrates at 600 (see Section 5 for an explanation of item calibrations, and Table 15 for SEPPS item calibration values). In other words, a parent with a measure of 600 would typically have expressed strong or very strong agreement with all the items having calibrations at or below 600, and would have expressed simple agreement with items having higher calibrations. Approximately two-fifths of parents of students with disabilities served in the state of Sample had measures high enough to support the claim that schools facilitate parent involvement at the level deemed desirable and appropriate by the SAMPLE.

#### **SECTION 2**

#### METHOD

#### Federal Requirements

Lead Agencies under Part B of the Individuals with Disabilities Education Improvement Act (IDEA 2004) are currently required to report data annually addressing 20 key performance indicators. Each Lead Agency was required to submit a State Performance Plan (SPP) to OSEP in 2005 detailing its plan to collect data addressing the 20 indicators, as well as baseline data for indicators on which the states had previously been required to report data to the federal government. 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," is a new indicator in the federal accountability system. States were asked to submit baseline data for this indicator in February 2007.

State-level performance on the indicator must be reported annually. Districts with an average daily membership (ADM) of 50,000 or more must be included in each year's data collection. Data addressing each district's performance on the indicator must be collected at least once in the 6-year period of the SPP.

#### Survey Instrument

For the purpose of addressing Indicator #8 of the State Performance Plan, the SAMPLE elected to use the Schools' Efforts to Partner with Parents Scale (SEPPS) developed by the National Center for Special Education Accountability Monitoring (NCSEAM). This instrument was developed for the purpose of providing states with a valid and reliable tool for measuring the extent to which parents perceive that schools facilitate their involvement. Potential items to measure schools' facilitation of parent involvement, as well as other aspects of parents' involvement with and perceptions about special education services, were developed with substantial input from parents and other key stakeholders across the country. A full description of the development of the item content is available at <a href="https://www.accountabilitydata.org">www.accountabilitydata.org</a>.

As part of its National Item Validation Study, NCSEAM collected data from a nationally representative sample of over 2,500 parents of children receiving special education services. Results of NCSEAM's data analyses supported the high reliability and validity of the SEPPS. Additionally, the study yielded a large bank of items that could be used to measure schools' facilitation of parent involvement. It was determined that a reliability of .90 or above could be achieved with 25 items. NCSEAM provided states with an appropriate 25-item set that represented the full range of available items.

#### **Survey Administration**

Surveys, including a cover letter and postage-paid business reply envelope, were mailed to 23,807 parents in 23 districts in April 2012. The surveys were printed on 8.5" x 11" size paper with the 25 items displayed in English. Surveys were distributed to all parents of students with disabilities across the 23 districts sampled. Parents were given until late May to return the surveys. In total, 3,595 completed surveys were returned, representing a return rate of 15.1%.

#### Standard

The SAMPLE elected to apply the standard recommended by NCSEAM as a way of deriving the percent to be reported on Indicator #8, based on the distribution of measures on the SEPPS.

To establish a recommended standard, NCSEAM convened a group of nationally representative stakeholders, including parents of children with disabilities, state directors of special education, state early intervention coordinators, district and program personnel, advocates, attorneys, and community representatives. Participants were invited to examine a set of items from the SEPPS, laid out in their calibration order (see Table 15). The items towards the bottom of the scale, with lower calibrations, are items that parents tend to agree with most. The items towards the top of the scale, with higher calibrations, are items that parents tend to agree with least. Because of the robust structure of the scale, a parent who

agrees with a given statement will have a very high likelihood of agreeing, or agreeing even more strongly, with all the items below it on the scale.

The consensus of the stakeholder group was that schools could only be said to have adequately facilitated parent involvement if parents agreed with all the items on the scale up to, and including, the item, "The school explains what options parents have if they disagree with a decision of the school." The metric of the SEPPS is such that to achieve this level of agreement, parents would have to have a measure of 600 or above. Thus, states adopting the recommended standard would calculate their percentage on Indicator #8 as the percent of parents with measures at or above 600 on the SEPPS.

#### **SECTION 3**

#### CHARACTERISTICS OF THE SAMPLE

This section describes characteristics of the obtained sample of 3,595 survey respondents. Table 1 presents the distribution of the sample by race/ethnicity.

Race/Ethnicity	N	Percentage <sup>*</sup>
American Indian or Alaskan Native	11	<1%
Asian or Pacific Islander	39	1%
Black (Not Hispanic)	1,000	28%
Hispanic	594	17%
White (Not Hispanic)	1,951	54%

Table 2 presents the distribution of the sample by students' gender.

Table 2. Distrik	oution of Gender	in the Sam	ple			e e tre
Gender				N	Perce	ntage <sup>*</sup>
Male			<b>.</b>	2,448	68	%
Female				1,147	32	%

Table 3 presents the distribution of the sample by students' grade level.

Table 3. Distribution of Grade Level in the Sample					
Grade Category	N	Percentage <sup>*</sup>			
Pre-Kindergarten	355	10%			
Kindergarten – Grade 5	1,726	48%			
Grades 6 – 8	786	22%			
Grades 9 – 12	728	20%			

<sup>\*</sup>Percentages have been rounded and may not sum to exactly 100%.

Table 4 presents the distribution of the sample by students' primary exceptionality.

Primary Exceptionality	N	Percentage <sup>*</sup>
Autism	182	5%
Visual Impairment - Blindness	14	<1%
Hearing Impairment - Deafness	42	1%
Emotional Disturbance	69	2%
Developmental Delay	471	13%
Hearing Impairment – Hard of Hearing	47	1%
Specific Learning Disability	809	23%
Mental Disability - Mild	231	6%
Mental Disability – Moderate	142	4%
Mental Disability – Severe	44	1%
Mental Disability - Profound	7	<1%
Multiple Disabilities	39	1%
Orthopedic Impairments	63	2%
Other Health Impairments	503	14%
Visual Impairment	13	<1%
Traumatic Brain Injury	14	<1%
Speech or Language Impairment	905	25%

Table 5 presents the distribution of the sample by sampling category. The sampling categories were formed based on gender, ethnicity (White vs. Non-White) and disability (high- vs. low-incidence).

Table 5. Distribution of Sampling Categories in the Sample						
Primary Exceptionality	N	Percentage <sup>*</sup>				
High Incidence - White Male	967	27%				
High Incidence - Non-White Male	884	25%				
High Incidence - White Female	469	13%				
High Incidence - Non-White Female	390	11%				
Low Incidence - White Male	346	10%				
Low Incidence - Non-White Male	251	7%				
Low Incidence - White Female	169	5%				
Low Incidence - Non-White Female	119	3%				

<sup>\*</sup> Percentages have been rounded and may not sum to exactly 100%.

#### **SECTION 4**

# RESULTS PERTAINING TO MEASURES ON THE SEPPS AND SAMPLE'S PERFORMANCE ON INDICATOR #8

#### 4.1. Distribution of the SEPPS Measures

The properties of the distribution of SEPPS measures for the sample of 3,595 respondents who provided valid data are shown in Table 6 below. The sample mean was 574. The standard deviation of measures was 151, indicating that the average distance of measures from the mean measure was 151 units. The standard error of the sample mean, that is, the expected error of the sample mean in estimating the true population mean for Sample, was 2.5. The 95% confidence interval for the true population mean for Sample extended from 568.7 to 578.5, indicating that we are 95% confident that the true population mean for parents of students in Sample lies within this range.

Table 6. Properties of SEPPS Measures					
Sample Mean	Standard Deviation	Standard Error of the Sample Mean	95% Confidence Interval for the Population Mean		
574	151	2.5	568.7 - 578.5		

The distribution of SEPPS measures obtained for the 3,595 respondents who provided valid data is shown in Figure 1. Each bar represents the number of respondents who had a measure at a particular value. The black line corresponds to a measure of 600, applied as the standard. As seen in the graph, most parents had a score above the standard value of 600.

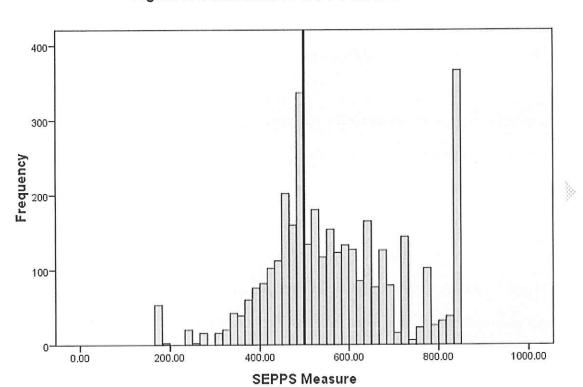


Figure 1. Distribution of SEPPS Measures

The distribution of measures approximates a normal distribution, with the exception of an unexpectedly high number of respondents with measures at the extreme positive end of the scale (represented by the high bar at the extreme right of the graph). These individuals responded in the "very strongly agree" category to each and every item. When individuals fail to make any distinction among items that are known to have different levels of agreeability, they are said to display a "response set," that is, a uniform way of responding that makes it hard to judge whether the responses are authentic or are, in effect, a way of complying with the task that does not really provide useful information. This phenomenon should be taken into consideration when interpreting the findings. That is, if data from respondents exhibiting a response set were omitted from the analyses, the statewide mean would be somewhat lower than the mean calculated based on all the data. This is because although there was also a

"response set" on the very low end of the scale, the surveys with unvarying positive responses greatly outnumbered those with unvarying negative responses.

#### 4.2. Interpretation of the Mean SEPPS Measure

Descriptively, a mean measure of 574 indicates that schools are facilitating parent involvement in various ways. For example, in this sample of parents of students receiving special education services in Sample, 92% agreed, with 57% to 61% agreeing strongly or very strongly, that teachers are available to speak with parents, that accommodations and modifications needed by their children were discussed at the IEP meeting and that their child's evaluation report is written in terms that they understand. Amongst parents responding to the item that teachers treat parents as a team member, 88% of parents agreed, with 57% expressing strong or very strong agreement with this item.

Over 83% of parents agreed, with at least 51% agreeing strongly or very strongly, that teachers and administrators ensure that parents have fully understood the Procedural Safeguards, and that teachers and administrators show sensitivity to the needs of students with disabilities. Exactly, 79% of parents agreed, with 42% to 46% agreeing strongly or very strongly, that the school offers parents a variety of ways to communicate with teachers, and that the school gives parents choices with regard to services that address their child's needs.

In other areas, schools' facilitation of parent involvement is less consistent. Between 66%-72% of parents agreed, with over one-third of parents expressing strong or very strong agreement, that the school explains what options parents have if they disagree with a decision of the school, and that the school provides information on agencies that can assist their child in the transition from school. Between 56%-61% of parents agreed, with 30%-34% expressing strong or very strong agreement, that they were given information about organizations that offer

support for parents of students with disabilities, and that the school offers parents training about special education issues.

For reference, the frequency distribution of responses to all the items in the SEPPS is provided in Appendix A.

# 4.3. Sample's Performance on Indicator #8: Percent of Parents at or above the Standard

The percentage of parents of a child receiving special education services who reported that "schools facilitated parent involvement as a means of improving services and results for children with disabilities," calculated as the percentage of respondents with a SEPPS measure that met or exceeded the standard of 600, was 39%. Table 7 presents statistical information relevant to the percentage of respondents at or above the standard of 600.

Table 7. Percent of Parents at or above the Standard						
Percent at or above the Standard Value of 600	Standard Error of the Sample Percentage	95% Confidence Interval for Populatio Percentage				
39% (1,413 out of 3,595 met standard)	0.8%	37.7% - 40.9%				

The standard error of the sample percentage, that is, the expected error of the sample percentage in estimating the true percentage of measures at or above the standard in the population of Sample parents, equaled 0.8%. Equations for computing the standard error of the sample percentage can be found in Moore & McCabe, 1998, p. 382.

The 95% confidence interval for the population percentage ranged from 37.7% to 40.9%. Confidence intervals for percentages, in contrast to confidence intervals for means, are asymmetrical. The asymmetric confidence interval reported here is the interval proposed by Wilson (1927), and is described in greater detail in Agresti (1996) and Penfield (2003).

# 4.4. Sample's Performance on the Indicator by Racial/Ethnic Category

Table 8 presents the percentage of respondents with measures that met or exceeded the standard, by racial/ethnic category. When considering these data, it is important to bear in mind that the sampling plan was not designed to yield a representative sample of parents within each racial/ethnic category. Therefore, the data are presented for illustrative purposes only.

Table 8. Percent of Parents at or a	bove Stand	N at or above the Standard Value of	Percent at or above the Standard Value of	95% Confidence Interval for the Population
Race/Ethnicity	Total N	600	600	Percentage
American Indian or Alaskan Native	11	5	45%	21% - 72%
Asian or Pacific Islander	39	23	59%	43% - 73%
Black (Not Hispanic)	1,000	360	36%	33% - 38%
Hispanic	594	238	40%	27% - 55%
White (Not Hispanic)	1,951	815	42%	40% - 44%

#### 4.5. Sample's Performance on the Indicator by Student's Grade

Table 9 presents the percentage of parents meeting or exceeding the standard of 600 as a function of their child's grade level. Grades were grouped into four meaningful categories, so that moderate sample sizes would exist in each category. The four categories are as follows: (a) Pre-Kindergarten, (b) Kindergarten to Grade 5, (c) Grade 6 to Grade 8, and (d) Grade 9 to Grade 12.

Table 9. Percent of Parents at or above Standard by Grade Category						
Grade Category	N	N at or above the Standard Value of 600	Percent at or above the Standard Value of 600	95% Confidence Interval for the Population Percentage		
Pre-Kindergarten	355	147	41%	36% - 47%		
Kindergarten – Grade 5	1,726	721	42%	39% - 44%		
Grades 6 – 8	786	278	35%	32% - 39%		
Grades 9 – 12	728	267	37%	33% - 40%		

The null hypothesis of independence of grade category and meeting criteria is rejected using a chi-square test of independence (p=.006).

# 4.6. Sample's Performance on the Indicator by Student's Primary Exceptionality

Table 10 presents the percentage of parents meeting or exceeding the standard of 600 as a function of their child's primary exceptionality. It should be noted that owing to the small number of students in some of the categories, the confidence intervals are very large. This means that the percentage given may not be a very accurate estimate of the true percentage for that category.

Student's Primary Exceptionality	Total N	N at or above the Standard Value of 600	Percent at or above the Standard Value of 600	95% Confidence Interval for the Population Percentage
Autism	182	83	46%	39% - 53%
Visual Impairment - Blindness	14	6	43%	21% - 67%
Hearing Impairment - Deafness	42	16	38%	25% - 53%
Emotional Disturbance	69	23	33%	23% - 45%
Developmental Delay	471	192	41%	36% - 45%
Hearing Impairment – Hard of Hearing	47	26	55%	41% - 69%
Specific Learning Disability	809	295	36%	33% - 40%
Mental Disability - Mild	231	94	41%	35% - 47%
Mental Disability – Moderate	142	55	39%	31% - 47%
Mental Disability – Severe	44	22	50%	36% - 64%
Mental Disability - Profound	7	2	29%	8% - 64%
Multiple Disabilities	39	17	44%	29% - 59%
Orthopedic Impairments	63	26	41%	30% - 54%
Other Health Impairments	503	182	36%	32% - 40%
Visual Impairment	13	1	8%	1% - 33%
Traumatic Brain Injury	14	5	36%	16% - 61%
Speech or Language Impairment	905	368	41%	38% - 44%

# 4.7. Sample's Performance on the Indicator by Part B vs. 619 Administration

Table 11 presents the percentage of parents at or above the standard of 600, separately for children ages 3-5 receiving services under Section 619 and students 6-21 receiving services under Part B, along with the associated 95% confidence intervals for the true population percentages.

Table 11. Percent of Parents a	at or above	Standard by		istration
Administration	N	N at or above the Standard Value of 600	Percent at or above the Standard Value of 600	95% Confidence Interval for the Population Percentage
619 Preschool (PK)	355	147	41%	36% - 47%
Part B School Age (KG-12)	3,240	1,266	39%	37% - 41%

# 4.8. Sample's Performance on the Indicator by Gender

Table 12 presents the percentage of parents at or above the standard of 600, separately for each gender, along with the associated 95% confidence intervals for the true population percentages.

Gender	N	N at or above the Standard Value of 600	Percent at or above the Standard Value of 600	95% Confidence Interval for the Population Percentage
Female	1,147	456	40%	37% - 43%
Male	2,448	957	39%	37% - 41%

# 4.9. Sample's Performance on the Indicator by Sampling Category

Table 13 presents the percentage of parents at or above the standard of 600 separately for each sampling category, along with the associated 95% confidence intervals for the true population percentages.

Table 13. Percent of Parents at o	r above	Standard by	Sampling Ca	tegory
Sampling Category	N	N at or above the Standard Value of 600	Percent at or above the Standard Value of 600	95% Confidence Interval for the Population Percentage
High Incidence White Male	967	385	40%	37% - 43%
High Incidence Non-White Male	884	315	36%	33% - 39%
High Incidence White Female	469	198	42%	38% - 47%
High Incidence Non-White Female	390	143	37%	32% - 42%
Low Incidence White Male	346	165	48%	42% - 53%
Low Incidence Non-White Male	251	92	37%	31% - 43%
Low Incidence White Female	169	67	40%	33% - 47%
Low Incidence Non-White Female	119	48	40%	32% - 49%

Table 14 presents the mean score for each sampling category, along with the associated 95% confidence intervals for the true population percentages.

Sampling Category	N	Sample Mean	95% Confidence Interval for the Population Mean
High Incidence - White Male	967	568	558 - 578
High Incidence - Non-White Male	884	567	558 - 577
High Incidence - White Female	469	586	572 - 599
High Incidence - Non-White Female	390	568	552 - 583
Low Incidence - White Male	346	593	576 - 610
Low Incidence - Non-White Male	251	569	551 - 587
Low Incidence - White Female	169	578	556 - 601
Low Incidence - Non-White Female	119	585	556 - 614

#### **SECTION 5**

#### THE RASCH MEASUREMENT FRAMEWORK

The measurement approach used by NCSEAM, known as the Rasch framework, applies a series of parametric models to estimate the properties of each survey item and each respondent in a way that places individuals and items on a common metric (Bond & Fox, 2001; Fischer & Molenaar, 1995; Rasch, 1960; Wright & Masters, 1982). The Rasch approach offers many advantages over typical approaches to survey development. First, it is possible to test whether the items administered belong together, that is, whether they are all related to the construct that the scale is supposed to measure. Ongoing confirmation of the fit of the items helps to maintain the quality of the measurement system. It is also possible to test whether the response categories are operating in the expected fashion. Often, the way in which respondents actually use the response categories does not correspond to the equidistant way in which they are laid out on paper. Extreme categories (e.g., "very strongly disagree") are sometimes used so infrequently that it makes sense to combine them with an adjacent, less extreme, category ("very strongly disagree/strongly disagree").

Second, it is possible to determine where each item is located on the measurement ruler. The item's location is referred to as the item's "calibration." Typically, items in a test or survey are not all equal with respect to the amount of the attribute or quality that the items are measuring. It has been empirically demonstrated, in fact, that items in the SEPPS scale are not all of equal agreeability. Items range from those that are most likely to draw agree responses to those that are least likely to draw agree responses. Highly agreeable items have low calibrations; less agreeable items have higher calibrations. Table 15 displays the SEPPS items in calibration order. The item, "At the IEP meeting, we discussed accommodations and modifications that my child would need," which calibrated at 490, was the most agreeable item in this item set. The item, "I was offered special assistance (such as child care) so that I could

participate in the Individualized Educational Program (IEP) meeting," which calibrated at 673, was the least agreeable item in the item set.

Item	
Calibration	Item
673	I was offered special assistance (such as child care) so that I could participate in the Individualized Educational Program (IEP) meeting.
653	The school offers parents training about special education issues.
647	I was given information about organizations that offer support for parents of students with disabilities.
634	The school provides information on agencies that can assist my child in the transition from school.
600	The school explains what options parents have if they disagree with a decision of the school.
591	I have been asked for my opinion about how well special education services are meeting my child's needs.
581	The school gives parents the help they may need to play an active role in their child's education.
573	Written justification was given for the extent that my child would not receive services in the regular classroom.
570	The school gives me choices with regard to services that address my child's needs.
564	At the IEP meeting, we discussed how my child would participate in statewide assessments.
561	The school offers parents a variety of ways to communicate with teachers.
550	The school communicates regularly with me regarding my child's progress on IEP goals.
544	Teachers and administrators seek out parent input.
533	Teachers and administrators show sensitivity to the needs of students with disabilities and their families.
528	Teachers and administrators ensure that I have fully understood the Procedural Safeguards [the rules in federal law that protect the rights of parents].
526	Teachers and administrators encourage me to participate in the decision-making process.
523	The school has a person on staff that is available to answer parents' questions.
513	All of my concerns and recommendations were documented on the IEP.
511	Teachers treat me as a team member.
507	I am considered an equal partner with teachers and other professionals in planning my child's program.
505	My child's evaluation report is written in terms I understand.
505	Written information I receive is written in an understandable way.
504	Teachers and administrators respect my cultural heritage.
492	Teachers are available to speak with me.
490	At the IEP meeting, we discussed accommodations and modifications that my child would need.

The fact that items have highly stable calibrations (agreeability levels) regardless of the population that is asked to respond to the items is a very important attribute of well-constructed measurement scales. This stability means that items with similar calibrations are, for all intents and purposes, interchangeable. As an example, this is why the SAT is the "same" test each time it is administered, even though it contains different items each time. The score achieved on any particular version of the SAT is comparable to the score achieved on any other version. Thus, a state can change some of the items on the survey from year to year, and still have validly comparable SEPPS measures across successive years. Guidelines for creating comparable item sets are available at: www.accountabilitydata.org.

Third, a Rasch analysis condenses information from a person's responses to all the items in a scale into a single number. That number is the person's measure on the scale. Since the Rasch framework puts measures on the same metric as item calibrations, a person's measure on a scale can be meaningfully interpreted in terms of the items on the scale. A person with a higher measure is expressing more agreement with items, overall, than a person with a lower measure. When SEPPS measures from a representative sample of parents are aggregated, the average value represents a reliable and highly interpretable measure of the extent to which schools are facilitating parent involvement.

Fourth, a Rasch analysis yields an estimate of the reliability of both the calibration values (related to the items) and the measures (related to people's responses). Scientific approaches to measurement require that the amount of "error," or imprecision, in the system be estimated, so that interpretations based on the measures can take this into consideration.

For a more detailed explanation of these concepts, please refer to Bond and Fox (2001) and Wright and Masters (1982).

#### **SECTION 6**

#### **PSYCHOMETRIC PROPERTIES OF THE SEPPS**

#### 6.1. Psychometric Properties of SEPPS Measures

The quality of a measurement instrument, and by implication the usefulness of inferences drawn from measures derived from the instrument, is assessed in terms of two characteristics of the instrument, namely, reliability and validity. The reliability of the obtained SEPPS measures pertains to the extent to which a particular individual would be expected to attain the same SEPPS measure if the SEPPS were administered to the individual multiple times. That is, reliability concerns the stability of the SEPPS measure¹ (Crocker & Algina, 1986; Lord, 1980; Traub, 1994). Validity, on the other hand, concerns the extent to which the scale actually measures the intended attribute, in this case, schools' facilitation of parent involvement.² The validity of the SEPPS measures can be evaluated using numerous approaches, several of which are described below.

Statistics used to express measurement reliability range from 0 (indicating lack of any stability) to 1 (indicating perfect stability). The reliability of the SEPPS measures for the Sample sample was measured in the Rasch framework to be .90, indicating a high level of stability in the obtained SEPPS measures. An alternative approach to estimating the reliability of the SEPPS measures is to employ Cronbach's alpha, which makes no assumptions about the fit of the responses to any particular model (Cronbach's alpha is based on the simpler true score model, and is commonly used in the behavioral sciences as a model-free index of reliability). The value of Cronbach's alpha was .98, which is consistent with the value obtained from the Rasch

<sup>&</sup>lt;sup>1</sup> A definition of reliability that is more theoretically accurate describes reliability as the extent to which a given respondent's score is determined by random error versus his or her true level of the trait being measured; low reliability coincides with a high level of measurement error, and high reliability coincides with a low level of measurement error (Crocker & Algina, 1986; Lord, 1980; Traub, 1994).

<sup>&</sup>lt;sup>2</sup> This definition of validity is a simplification of the definition now endorsed by the technical measurement community. The contemporary definition of validity describes it as the extent to which evidence and theory support the interpretations of the scale scores entailed by the proposed use of the scale (AERA/APA/NCME, 1999; Osterlind, 2006). That is, the validity of the SEPPS measures is based on how much evidence we have that the measures support the intended purposes of the use of the measures. In the case of measures used to address system accountability, we will want to ascertain whether use of the measures leads to correct decisions (e.g., about need for intervention) at the state and district levels.

analysis. These results suggest that the measures obtained from the SEPPS contain relatively little error, and thus serve as stable measures of the underlying construct (i.e., schools' facilitation of parent involvement).

Support for the validity of the measures obtained by the SEPPS comes from several lines of evidence. First, items for the SEPPS were developed in consultation with multiple groups of individuals, including parents, school personnel, district-level administrators, and advocates, with direct and extensive experience related to schools' efforts to encourage parent involvement and to ensure that parents are active participants in decision-making related to their child's education. Subsequent review of the items by expert panels, researchers, and NCSEAM's Parent/Family Involvement Workgroup confirmed that the item content maps onto the intended content domain of the SEPPS. Second, dimensionality analysis (i.e., principal components analysis and factor analysis) indicates that the items of the SEPPS are all measuring one primary construct, which is likely the intended one, i.e., schools' facilitation of parent involvement. The results of the dimensionality analyses are presented in Winsteps output displayed in Appendix C. A third line of evidence is related to a characteristic of items known as discrimination. The high discrimination indices of the SEPPS items (see Table 16, below) indicate that the items are providing useful information concerning the construct that is intended to be measured. All of these types of evidence support the claim that the measures obtained using the SEPPS are valid.

#### 6.2. Psychometric Properties of the SEPPS Items

To better understand the properties of the items included in the SEPPS (i.e., which items are located either low or high on the trait scale and which items seem to work well versus those that may require revision), several aspects of each item can be examined. The results of the Rasch analysis provide information concerning two aspects of the items. The first is the location of each item with respect to the underlying construct being measured, specifically, what overall level of endorsement of school efforts is required to provide a positive endorsement of the item.

The second relates to how well the item fits the measurement model, in other words, how accurate the Rasch model is in describing the properties of the item.

Table 16 gives the calibration of each item (previously presented in Table 15 above), along with indices of the item's fit to the Rasch model.

Item	Item Calibration	Infit	Outfit	Discrimination
1	507	1.01	1.38	0.70
2	673	2.32	2.53	0.63
3	564	1.48	1.66	0.69
4	490	0.92	0.90	0.70
5	513	0.85	0.76	0.72
6	573	1.82	2.41	0.64
7	647	1.75	2.02	0.70
8	591	1.10	1.03	0.76
9	505	0.87	0.97	0.72
10	505	0.87	0.85	0.72
11	492	0.78	0.66	0.73
12	511	0.74	0.65	0.76
13	544	0.74	0.68	0.80
14	533	0.78	0.72	0.78
15	526	0.71	0.63	0.79
16	504	0.80	0.79	0.75
17	528	0.78	0.71	0.78
18	523	0.76	0.85	0.78
19	550	0.77	0.69	0.78
20	570	0.73	0.65	0.81
21	653	1.33	1.18	0.77
22	561	0.92	0.89	0.78
23	581	0.76	0.69	0.81
24	634	1.25	1.20	0.77
25	600	0.99	0.95	0.79

The column labeled "Item Calibration" provides the value of the location parameter of the item. The higher the value of the item calibration, the greater the level of overall endorsement of schools' efforts to facilitate parent involvement that is required to provide an agreeable response to the item (i.e., a response of agree, strongly agree, or very strongly agree). The "Infit" and

"Outfit" columns provide two measures of how well the Rasch model fits the responses provided to each item. In general, values of 1.0 indicate very good fit. Values approaching 2, or less than 0.5, suggest poorer fit (Bond & Fox, 2001). Only one item, Item #2 ("I was offered special assistance (such as child care) so that I could participate in the IEP meeting") exhibited less than ideal levels of fit.

The rightmost column of the table presents an index of discrimination for each item, calculated as the corrected item-total correlation coefficient. The values in this column are all relatively high (> 0.6), indicating that each item is discriminating well between respondents who had more positive versus more negative perceptions of schools' facilitation of parent involvement.

While Item #2 displays a less than ideal level of fit, it nevertheless has a strong discrimination index, which provides evidence that it is a useful item. Therefore, this item appears to be measuring the intended construct relatively well, but is not a very good fit for the Rasch framework, which employs specific assumptions concerning the properties of the items. The poor fit of Item #2 makes this item a possible candidate for revision and/or replacement in future administrations of the SEPPS.

Table 17 is provided to assist in interpretation of the item calibrations in relation to the observed distribution of responses to items for parents in the Sample sample (Appendix A). The table displays the observed percentage of responses in (a) any of the three agree categories (A=agree, SA=strongly agree, VSA=very strongly agree) and (b) only the strongly and very strongly agree categories for each of the items. As seen in the table, the percentage of agree responses is highest for items with the lowest calibrations. Conversely, the percentage of agree responses is lowest for items with the highest calibrations. The percentage of responses in the two strongest categories of agreement ranged from 27% to 61%; the percentage of responses in any of the agree categories ranged from 50% to 93%.

The fact that the rank ordering of items by the percentage of agree responses does not correspond exactly to the rank ordering by item calibration is expected, based on the measurement model and the calibration methodology that were applied (see Section 7).

Table 17. SEPPS Item Calibrations, Observed Percentage of Responses in the Strongly Agree/Very Strongly Agree Categories, and Observed Percentage of Responses in Any Agree Category

Item #	Item Calibration	% SA/ VSA	% A/SA/ VSA	Item
4	490	60%	92%	At the IEP meeting, we discussed accommodations and modifications that my child would need.
11	492	61%	92%	Teachers are available to speak with me.
16	504	53%	93%	Teachers and administrators respect my cultural heritage.
9	505	57%	92%	My child's evaluation report is written in terms I understand.
10	505	57%	92%	Written information I receive is written in an understandable way.
1	507	58%	89%	I am considered an equal partner with teachers and other professionals in planning my child's program.
12	511	57%	88%	Teachers treat me as a team member.
5	513	60%	91%	All of my concerns and recommendations were documented on the IEP.
18	523	49%	87%	The school has a person on staff who is available to answer parents' questions.
15	526	52%	85%	Teachers and administrators encourage me to participate in the decision-making process.
17	528	51%	85%	Teachers and administrators ensure that I have fully understood the Procedural Safeguards.
14	533	52%	83%	Teachers and administrators show sensitivity to the needs of students with disabilities.
13	544	49%	82%	Teachers and administrators seek out parent input.
19	550	50%	82%	The school communicates regularly with me regarding my child's progress on IEP goals.
22	561	42%	79%	The school offers parents a variety of ways to communicate with teachers.
3	564	44%	78%	At the IEP meeting, we discussed how my child would participate in statewide assessments.
20	570	46%	79%	The school gives me choices with regard to services that address my child's needs.

6	573	40%	74%	Written justification was given for the extent that my child would not receive services.
23	581	44%	80%	The school gives parents the help they may need to play an active role in their child's education.
8	591	46%	76%	I have been asked for my opinion about how well the special education services my child receive are meeting my child's needs.
25	600	39%	72%	The school explains what options parents have if they disagree with a decision of the school.
24	634	35%	66%	The school provides information on agencies that can assist my child in the transition from school.
7	647	34%	61%	I was given information about organizations that offer support for parents of students with disabilities.
21	653	30%	56%	The school offers parents training about special education issues.
2	673	27%	50%	I was offered special assistance (such as child care) so that I could participate in the IEP meeting.

#### **SECTION 7**

#### CALIBRATION METHODOLOGY

The Rasch calibrations were conducted using the Winsteps software program. The original six-category response structure was reduced to a three-category response structure by collapsing the bottom three categories (very strongly disagree, strongly disagree, disagree) into one category, and the top two categories (strongly agree, very strongly agree) into a single category. The rationale for combining the categories was based on two factors: (a) low response rates (i.e., < 5%) in the extreme categories, making their corresponding threshold parameter estimates relatively unstable, and (b) the extreme category threshold estimates were not far enough apart to indicate that the distinct categories served to meaningfully distinguish between individuals having substantially different levels of the trait being measured.

The SEPPS was calibrated using the Rating Scale Model (Wright & Masters, 1982). An initial calibration was conducted with all item parameters freed, and on a standard metric (mean = 0 and 1 scale unit per logit). The resulting item location parameter estimates were then correlated with the values obtained by Dr. William P. Fisher, Jr., consultant to NCSEAM, on a larger multi-state database for the same items. The resulting correlation was 0.98, indicating a very strong linear relationship between the locations of the items for the Sample and the larger multi-state sample. In addition, the structure of the two thresholds was very similar to that obtained in the multi-state calibration. As a result of the nearly perfect relationship between the initial Sample calibration and the multi-state calibration, a second calibration of the Sample data was conducted in which all item location parameters and threshold values were fixed to the values obtained in the multi-state analysis (the values of the fixed parameters are documented in the Winsteps control file shown in Appendix B). The purpose of fixing the item parameter values to the multi-state analysis values was to set the metric of the items such that the resulting item and person location measures are on an equivalent metric with the multi-state

analysis, thus permitting an exact comparison of the Sample results to those of other states employing a Rasch calibration.

It should be noted that in the multi-state calibration, efforts were taken to ensure that at a measure of 600 there would be a 95% chance of observing an agreeable response (agree, strongly agree, or very strongly agree) on the item that the national stakeholder group convened by NCSEAM identified as the threshold item for the recommended standard (Item #25, "The school explains what options parents have if they disagree with a decision of the school"). Specifically, the values of the threshold parameters were established so that a respondent with a measure of 600 would have a .95 likelihood of having an agreeable response to the item.

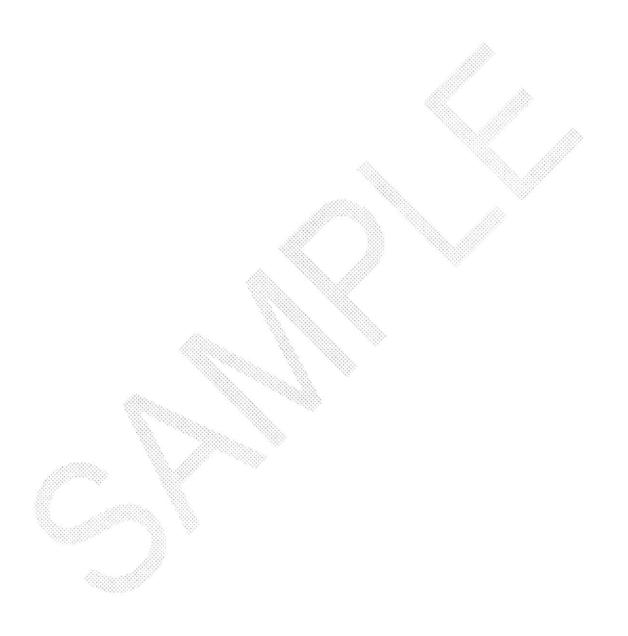
The control file used in the current analysis of the SEPPS is given in Appendix B. The pertinent output related to the properties of each item on the SEPPS scale is given in Appendix C.

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# APPENDIX A: RESPONSE FREQUENCIES BY ITEM

Q1 - I am considered an equal partner with teachers and other professionals in planning my child's program.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	126	3.5	3.5	3.5
	Strongly Disagree	64	1.8	1.8	5.3
	Disagree	185	5.1	5.2	10.5
	Agree	1121	31.2	31.5	42.1
	Strongly Agree	598	16.6	16.8	58.9
	Very Strongly Agree	1462	40.7	41.1	100.0
	Total	3556	98.9	100.0	
Missing	g	39	1.1		
Systen	n Total	3595	100.0		

Q2 - I was offered special assistance (such as child care) so that I could participate in the Individualized Educational Program (IEP) meeting.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	463	12.9	14.3	14.3
	Strongly Disagree	103	2.9	3.2	17.4
	Disagree	1066	29.7	32.8	50.2
	Agree	747	20.8	23.0	73.2
	Strongly Agree	268	7.5	8.2	81.5
	Very Strongly Agree	602	16.7	18.5	100.0
	Total	3249	90.4	100.0	
Missin	g	346	9.6		
Systen	n Total	3595	100.0		

Q3 - At the IEP meeting, we discussed how my child would participate in statewide assessments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	207	5.8	5.9	5.9
	Strongly Disagree	79	2.2	2.3	8.2
	Disagree	496	13.8	14.2	22.5
	Agree	1169	32.5	33.6	56.0
	Strongly Agree	496	13.8	14.2	70.3
	Very Strongly Agree	1034	28.8	29.7	100.0
	Total	3481	96.8	100.0	
Missing	9	114	3.2		
System	n Total	3595	100.0		

Q4 - At the IEP meeting, we discussed accommodations and modifications that my child would need.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	99	2.8	2.8	2.8
	Strongly Disagree	36	1.0	1.0	3.8
	Disagree	138	3.8	3.9	7.7
	Agree	1126	31.3	31.8	39.6
	Strongly Agree	648	18.0	18.3	57.9
	Very Strongly Agree	1489	41.4	42.1	100.0
	Total	3536	98.4	100.0	
Missing	)	59	1.6		
System	n Total	3595	100.0		

Q5 - All of my concerns and recommendations were documented on the IEP.

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	114	3.2	3.2	3.2
	Strongly Disagree	53	1.5	1.5	4.7
	Disagree	166	4.6	4.7	9.4
	Agree	1078	30.0	30.3	39.7
	Strongly Agree	633	17.6	17.8	57.5
	Very Strongly Agree	1508	41.9	42.5	100.0
	Total	3552	98.8	100.0	
Missing	I	43	1.2		
System	ı Total	3595	100.0		

Q6 - Written justification was given for the extent that my child would not receive services in the regular classroom.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	236	6.6	7.2	7.2
	Strongly Disagree	90	2.5	2.7	9.9
	Disagree	538	15.0	16.4	26.4
	Agree	1086	30.2	33.1	59.5
	Strongly Agree	455	12.7	13.9	73.4
	Very Strongly Agree	872	24.3	26.6	100.0
	Total	3277	91.2	100.0	
Missing	]	318	8.8		
System	n Total	3595	100.0		

Q7 - I was given information about organizations that offer support for parents of students with disabilities.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	410	11.4	11.9	11.9
	Strongly Disagree	136	3.8	4.0	15.9
	Disagree	788	21.9	22.9	38.8
	Agree	923	25.7	26.8	65.6
	Strongly Agree	393	10.9	11.4	77.1
	Very Strongly Agree	789	21.9	22.9	100.0
	Total	3439	95.7	100.0	
Missing	9	156	4.3		
System	n Total	3595	100.0		

Q8 - I have been asked for my opinion about how well the special education services my child receives are meeting my child's needs.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	275	7.6	7.8	7.8
	Strongly Disagree	114	3.2	3.2	11.0
	Disagree	455	12.7	12.9	23.9
	Agree	1073	29.8	30.4	54.2
	Strongly Agree	503	14.0	14.2	68.5
	Very Strongly Agree	1115	31.0	31.5	100.0
	Total	3535	98.3	100.0	
Missing	r	60	1.7		
System	Total	3595	100.0		

Q9 - My child's evaluation report is written in terms I understand.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	96	2.7	2.7	2.7
	Strongly Disagree	36	1.0	1.0	3.7
	Disagree	149	4.1	4.2	7.9
	Agree	1244	34.6	34.9	42.7
	Strongly Agree	581	16.2	16.3	59.0
	Very Strongly Agree	1462	40.7	41.0	100.0
	Total	3568	99.2	100.0	
Missing	3	27	.8		
System	n Total	3595	100.0		

Q10 - Written information I receive is written in an understandable way.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	90	2.5	2.5	2.5
	Strongly Disagree	40	1.1	1.1	3.7
	Disagree	141	3.9	4.0	7.6
	Agree	1264	35.2	35.5	43.1
	Strongly Agree	570	15.9	16.0	59.2
	Very Strongly Agree	1453	40.4	40.8	100.0
	Total	3558	99.0	100.0	
Missing	3	37	1.0		
System Total		3595	100.0		

Q11 - Teachers are available to speak with me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	108	3.0	3.0	3.0
	Strongly Disagree	39	1.1	1.1	4.1
	Disagree	140	3.9	3.9	8.0
	Agree	1094	30.4	30.7	38.7
	Strongly Agree	572	15.9	16.0	54.7
	Very Strongly Agree	1616	45.0	45.3	100.0
	Total	3569	99.3	100.0	
Missing	g	26	.7		
Systen	n Total	3595	100.0		

Q12 - Teachers treat me as a team member.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	144	4.0	4.1	4.1
	Strongly Disagree	54	1.5	1.5	5.6
	Disagree	213	5.9	6.0	11.6
	Agree	1122	31.2	31.6	43.2
	Strongly Agree	526	14.6	14.8	58.0
	Very Strongly Agree	1488	41.4	42.0	100.0
	Total	3547	98.7	100.0	
Missing	1	48	1.3		
System	Total	3595	100.0		

Q13 - Teachers and administrators: -seek out parent input.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	188	5.2	5.5	5,5
	Strongly Disagree	79	2.2	2.3	7.8
	Disagree	350	9.7	10.2	18.0
	Agree	1140	31.7	33.3	51.3
	Strongly Agree	508	14.1	14.8	66.2
	Very Strongly Agree	1157	32.2	33.8	100.0
	Total	3422	95.2	100.0	
Missing	9	173	4.8		
System	n Total	3595	100.0		

Q14 - Teachers and administrators: -show sensitivity to the needs of students with disabilities and their families.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	193	5.4	5.7	5.7
	Strongly Disagree	95	2.6	2.8	8.4
	Disagree	278	7.7	8.1	16.6
	Agree	1077	30.0	31.5	48.1
	Strongly Agree	542	15.1	15.9	64.0
	Very Strongly Agree	1230	34.2	36.0	100.0
	Total	3415	95.0	100.0	
Missing	9	180	5.0		
System	n Total	3595	100.0		

Q15 - Teachers and administrators: -encourage me to participate in the decision-making process.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	164	4.6	4.8	4.8
	Strongly Disagree	69	1.9	2.0	6.8
	Disagree	277	7.7	8.1	15.0
	Agree	1119	31.1	32.8	47.8
	Strongly Agree	536	14.9	15.7	63.5
	Very Strongly Agree	1245	34.6	36.5	100.0
	Total	3410	94.9	100.0	
Missing	9	185	5.1		
System	n Total	3595	100.0		

Q16 - Teachers and administrators: -respect my cultural heritage.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	85	2.4	2.6	2.6
	Strongly Disagree	42	1.2	1.3	3.9
	Disagree	109	3.0	3.4	7.3
	Agree	1291	35.9	39.8	47.1
	Strongly Agree	462	12.9	14.3	61.4
	Very Strongly Agree	1253	34.9	38.6	100.0
	Total	3242	90.2	100.0	
Missing	System	353	9.8		
Total		3595	100.0		

Q17 - Teachers and administrators: -ensure that I have fully understood the Procedural Safeguards [the rules in federal law that protect the rights of parents].

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	167	4.6	4.9	4.9
	Strongly Disagree	68	1.9	2.0	6.9
	Disagree	272	7.6	8.0	14.9
	Agree	1179	32.8	34.6	49.5
	Strongly Agree	465	12.9	13.6	63.1
	Very Strongly Agree	1256	34.9	36.9	100.0
	Total	3407	94.8	100.0	
Missing	g	188	5.2		
Systen	n Total	3595	100.0		_

Q18 - The school: -has a person on staff who is available to answer parents' questions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	122	3.4	3.6	3.6
	Strongly Disagree	61	1.7	1.8	5.3
	Disagree	245	6.8	7.2	12.5
	Agree	1321	36.7	38.6	51.1
	Strongly Agree	461	12.8	13.5	64.6
	Very Strongly Agree	1212	33.7	35.4	100.0
	Total	3422	95.2	100.0	
Missing	3	173	4.8		
System	n Total	3595	100.0		

Q19 - The school: -communicates regularly with me regarding my child's progress on IEP goals.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	174	4.8	5.1	5.1
	Strongly Disagree	71	2.0	2.1	7.2
	Disagree	356	9.9	10.4	17.6
	Agree	1097	30.5	32.0	49.6
	Strongly Agree	510	14.2	14.9	64.5
	Very Strongly Agree	1215	33.8	35.5	100.0
	Total	3423	95.2	100.0	
Missing	Missing		4.8		
System	Total	3595	100.0		

Q20 - The school: -gives me choices with regard to services that address my child's needs.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	198	5.5	5.9	5.9
	Strongly Disagree	80	2.2	2.4	8.2
	Disagree	442	12.3	13.1	21.3
	Agree	1115	31.0	33.0	54.3
	Strongly Agree	461	12.8	13.6	67.9
	Very Strongly Agree	1085	30.2	32.1	100.0
	Total	3381	94.0	100.0	
Missing	3	214	6.0		
System	n Total	3595	100.0		

Q21 - The school: -offers parents training about special education issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	330	9.2	10.2	10.2
	Strongly Disagree	141	3.9	4.3	14.5
	Disagree	948	26.4	29.2	43.7
	Agree	851	23.7	26.2	70.0
	Strongly Agree	276	7.7	8.5	78.5
	Very Strongly Agree	699	19.4	21.5	100.0
	Total	3245	90.3	100.0	
Missing	3	350	9.7	and confidences	
System	n Total	3595	100.0		

Q22 - The school: -offers parents a variety of ways to communicate with teachers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	194	5.4	5.7	5.7
	Strongly Disagree	82	2.3	2.4	8.2
	Disagree	432	12.0	12.8	21.0
	Agree	1246	34.7	36.9	57.9
	Strongly Agree	431	12.0	12.8	70.7
	Very Strongly Agree	990	27.5	29.3	100.0
	Total	3375	93.9	100.0	
Missing	g	220	6.1		
System	n Total	3595	100.0		

Q23 - The school: -gives parents the help they may need to play an active role in their child's education.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	196	5.5	5.8	5.8
	Strongly Disagree	89	2.5	2.6	8.4
	Disagree	391	10.9	11.5	19.9
	Agree	1225	34.1	36.1	56.1
	Strongly Agree	445	12.4	13.1	69.2
	Very Strongly Agree	1043	29.0	30.8	100.0
	Total	3389	94.3	100.0	
Missing	Missing		5.7		
System	n Total	3595	100.0		

Q24 - The school: -provides information on agencies that can assist my child in the transition from school.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	299	8.3	9.2	9.2
	Strongly Disagree	95	2.6	2.9	12.1
	Disagree	725	20.2	22.3	34.5
	Agree	983	27.3	30.3	64.8
	Strongly Agree	340	9.5	10.5	75.3
	Very Strongly Agree	802	22.3	24.7	100.0
	Total	3244	90.2	100.0	
Missin	g	351	9.8		
Systen	n Total	3595	100.0		

Q25 - The school: -explains what options parents have if they disagree with a decision of the school.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	292	8.1	8.7	8.7
	Strongly Disagree	96	2.7	2.9	11.6
	Disagree	554	15.4	16.5	28.1
	Agree	1094	30.4	32.6	60.7
	Strongly Agree	378	10.5	11.3	72.0
	Very Strongly Agree	938	26.1	28.0	100.0
	Total	3352	93.2	100.0	
Missing	3	243	6.8		
System	n Total	3595	100.0		

#### APPENDIX B: WINSTEPS CONTROL FILE

```
&INST ; THIS FILE MUST BE SAVED AS ASCII DOS TEXT BEFORE USE WITH WINSTEPS
Title="Sample Part B 2012: Equated to previous years' calibrations"
ITEM1=1
DELIMITER=TAB ;
                       specifies a tab as a delimiter
;FITI=7
;FITP=7
ITLEN=10 ; max length of item label
LCONV=0.0001
RCONV=0.001
RESCOR=2
NEWSCR="111233"
DATA=C:\Users\Valued Customer\Documents\Consulting\Sample\Sample2012\data1.TXT ; Name of data
file
NI=25
XWIDE = 1
CODES = "123456"
IDFILE=*
1-34
+1-25
; ISELECT=E
IAFILE=*
1 507
2 673
3 564
4 490
5 513
6 573
7 647
8 591
9 505
10 505
11 492
12 511
13 544
14 533
15 526
16 504
17 528
18 523
19 550
20 570
21 653
22 561
23 581
24 634
25 600
SAFILE=*
  2 = -128.28
  3 = 14.28
NAME1 = 34; Column containing person name
NAMLEN = 15; Length of person name
PRCOMP=S
UDECIM=1
UMEAN=553
USCALE=54.105
CFILE=*
1 VS/S/Disagree
2 Agree
3 S/VSAgree
CSV=S
HLINES=N
IFILE=ItemStats.sav ; Name of file containing item-level statistics
PFILE=PersonStats.sav ; Name of file containing person-level statistics
REALSE=Y
```



# APPENDIX C: SELECTED WINSTEPS OUTPUT

TABLE 1.2 Sample Part B 2012: Equated to previ ZOU561WS.TXT Jul 13 10:48 2012 INPUT: 3595 PERSONS 25 ITEMS MEASURED: 3595 PERSONS 25 ITEMS 3 CATS 3.66.0

PERSONS - MAP - ITEMS <more> | <rare> 800 .########### .## .### 700 .# .### q2 .# .## S q21 .## .# q24 .# .# S 600 .## q25 .# q8 .# q23 .# q20 q6 .## M q22 q3 . # q19 .## М q13 q15 .# q14 .### q18 .# q1 q10 500 .##### +S q16 .### q11 .### .## .### .# .## .# .# 400 300 200

<less> | <frequ>

EACH '#' IS 38.

TABLE 3.1 Sample Part B 2012: Equated to previ ZOU561WS.TXT Jul 13 10:48 2012 INPUT: 3595 PERSONS 25 ITEMS MEASURED: 3595 PERSONS 25 ITEMS 3 CATS 3.66.0 \_\_\_\_\_\_

SUMMARY OF 3052 MEASURED (NON-EXTREME) PERSONS

23.9 2.8 25.0	MEASU 540. 111.	24	ERROR  28.32 11.42	1	NSQ .10	ZSTD .0	MNSQ 1.05	ZSTI
2.8								
	111.	44	11.42				70	
25 0					.58	2.0	.79	1.5
25.0	767.	96	76.21	4	.73	7.9	9.90	9 . 5
3.0	236.	42	18.80		.02	-5.3	.03	-5.3
DJ.SD	107.18	SEP	ARATION	3.51	PERS	ON REL	IABILITY	. 92
DJ.SD	108.15	SEP	ARATION	4.02	PERS	SON REL	IABILITY	.94
1	DJ.SD	DJ.SD 107.18	DJ.SD 107.18 SEP DJ.SD 108.15 SEP	DJ.SD 107.18 SEPARATION DJ.SD 108.15 SEPARATION	DJ.SD 107.18 SEPARATION 3.51 DJ.SD 108.15 SEPARATION 4.02	DJ.SD 107.18 SEPARATION 3.51 PERS DJ.SD 108.15 SEPARATION 4.02 PERS	DJ.SD 107.18 SEPARATION 3.51 PERSON REL DJ.SD 108.15 SEPARATION 4.02 PERSON REL	DJ.SD 107.18 SEPARATION 3.51 PERSON RELIABILITY DJ.SD 108.15 SEPARATION 4.02 PERSON RELIABILITY

MAXIMUM EXTREME SCORE: 488 PERSONS 488 PERSONS MINIMUM EXTREME SCORE:

VALID RESPONSES: 95.5%

SUMMARY OF 3595 MEASURED (EXTREME AND NON-EXTREME) PERSONS

	RAW SCORE	COUNT	MEASURI	REAL E ERROR	ı	INFIT INSQ ZS	OUTF STD MNSQ	IT ZSTD
MEAN	54.4	23.8	573.63	1 39.16	;			
S.D.	15.2	2.9	150.93	27.78			100	*
MAX.	75.0	25.0	836.36	104.07				
MIN.	5.0	3.0	169.3	18,80				
REAL RI	MSE 48.01	ADJ.SD	143.09 SI	EPARATION	2.98	PERSON	RELIABILITY	.90
ODEL R	MSE 46.11	ADJ.SD	143.71 SI	EPARATION	3.12	PERSON	RELIABILITY	.91

PERSON RAW SCORE-TO-MEASURE CORRELATION = .87 (approximate due to missing data) CRONBACH ALPHA (KR-20) PERSON RAW SCORE RELIABILITY = .98 (approximate due to missing data)

SUMMARY OF 25 MEASURED (NON-EXTREME) ITEMS

	RA	W				REAL		INF	T	OUTF	T
	SCC	RE	COUNT	MEA	SURE	ERROR	M	NSQ	ZSTD	MNSQ	ZSTE
MEAN	7,821	0	3423.8	55	5.12	2.17		.03	-2.5	1.06	-1,6
S.D.	895	. 2	109.2	5	2.12	.29		.40	7.7	.53	6.6
MAX.	9039	.0	3569.0	67	3.00	3.24	2	2.32	9.9	2.53	9.9
MIN.	5736	.0	3242.0	49	00.00	1.97		.71	-9.9	.63	-9.9
REAL 1	RMSE	2.19	ADJ.SD	52.08	SEP.	ARATION	23.73	ITEM	REL	IABILITY	1.00
MODEL S.E.	RMSE OF ITEM	2.03 1 MEAN	ADJ.SD = 10.64	52.08	SEP.	ARATION	25.61	ITEM	REL	IABILITY	1.00

UMEAN=553.000 USCALE=54.105

ITEM RAW SCORE-TO-MEASURE CORRELATION = -.95 (approximate due to missing data) 72833 DATA POINTS. LOG-LIKELIHOOD CHI-SQUARE: 97097.37 with 69756 d.f. p=.0000

TABLE 3.2 Sample Part B 2012: Equated to previ ZOU561WS.TXT Jul 13 10:48 2012 INPUT: 3595 PERSONS 25 ITEMS MEASURED: 3595 PERSONS 25 ITEMS 3 CATS 3.66.0

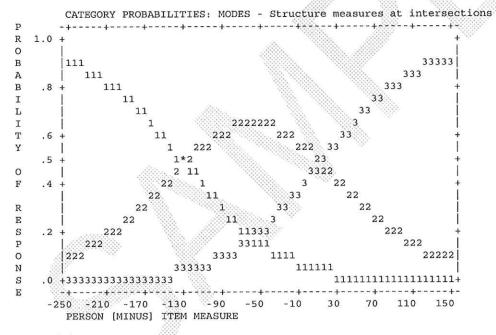
SUMMARY OF CATEGORY STRUCTURE. Model="R"

1 1	5412 2	-+ 1 -143.9	-152.	1.26	1.46	NONE	-190.51)	1 VS/S/Disagree
2 2	7785 3	8  -51.3	-43.2	.86	.79	-128.28A	-57.00	4 Agree
3 2	9636 4	1 89.1	85.9	.96	1.09	14.28A	(76.51)	5 S/VSAgree
	SCORE 1 1! 2 2'	SCORE COUNT 1 15412 2 2 27785 3	SCORE COUNT % AVRGE 1 15412 21 -143.9 2 27785 38 -51.3	SCORE COUNT % AVRGE EXPECT 1 15412 21 -143.9 -152. 2 27785 38 -51.3 -43.2	SCORE COUNT % AVRGE EXPECT MNSQ 1 15412 21 -143.9 -152. 1.26 2 27785 38 -51.3 -43.2 .86	SCORE COUNT % AVRGE EXPECT   MNSQ MNSQ   15412 21   -143.9 -152.   1.26 1.46   2 27785 38   -51.3 -43.2   .86 .79	SCORE COUNT % AVRGE EXPECT   MNSQ MNSQ   CALIBRATN   1 15412 21   -143.9 -152.   1.26 1.46   NONE   2 27785 38   -51.3 -43.2   .86 .79   -128.28A	SCORE COUNT % AVRGE EXPECT   MNSQ   MNSQ   CALIBRATN   MEASURE   1 15412 21   -143.9 -152.   1.26 1.46   NONE   -190.51)   2 27785 38   -51.3 -43.2   .86 .79   -128.28A   -57.00

OBSERVED AVERAGE is mean of measures in category. It is not a parameter estimate.

CATEGORY	STRUCTU MEASURE	10.00	SCORE-TO-MEA		50% CUM.  PROBABLTY			4.1.4.4.4.4	
1	NONE		-190.51) -INF	-137.33	İ	71%	53%		1 VS/S/Disagree
2	-128.28A	.66	-57.00-137.33	23.33	-131.78	62%	76%	.78	4 Agree
3	14.28A	.57	( 76.51) 23.33	+INF	17.78	84%	778	1.12	5 S/VSAgree

M->C = Does Measure imply Category? C->M = Does Category imply Measure?



<sup>1 =</sup> VS/S/Disagree

<sup>2 =</sup> Agree

<sup>3 =</sup> S/VSAgree

TABLE 10.1 Sample Part B 2012: Equated to prev ZOU561WS.TXT Jul 13 10:48 2012
INPUT: 3595 PERSONS 25 ITEMS MEASURED: 3595 PERSONS 25 ITEMS 3 CATS 3.66.0

PERSON: REAL SEP.: 3.51 REL.: .92 ... ITEM: REAL SEP.: 23.73 REL.: 1.00

ITEM STATISTICS: MISFIT ORDER

ENTRY	TOTAL			REAL   IN	FIT   OUT	FIT   PT-MEA	SURE EXACT	матсн	1
NUMBER	SCORE	COUNT		NO NOOS MILL OF SEC	100 500		EXP.   OBS%		
					+	+	+	+-	
2	5736	3249	673.0A	3.2   2.32	9.9 2.53	9.9 A .63	.80  49.3	70.6	9.0   q2
6	7017	3277	573.0A	2.7 1.82	9.9   2.41	9.9 B .64	.76  58.8	67.4	16.3   q6
7	6726	3439	647.0A	2.6   1.75	9.9 2.02	9.9 C .70	.79  52.7	67.9	-13.2  q7
3	7710	3481	564.0A	2.4   1.48	9.9 1.66	9.9 D.69	.76  61,3	67.9	7.5  q3
1	8797	3556	507.0A	2.1 1.01	.3 1.38	6.3 E .70	.70  74.1	71.2	-,2  q1
21	6046	3245	653.0A	2.4   1.33	9.9 1.18	3.8 F .77	.80  59.7	68.7	2.8   q21
24	6511	3244	634.0A	2.3   1.25	9.1 1.20	4.8 G .77	.79  63.6	66.8	-13.1  q24
8	7844	3535	591.0A	2.0 1.10	4.0 1.03	.8 н .76	.77  68.8	66.6	-19.0  q8
25	7078	3352	600.0A	2.0 .99	3 .95	-1.5 I .79	.78  71.7	66.4	-3.5   q25
9	8898	3568	505.0A	2.1  ,87	-5.0  .97	5 J .72	.70 78.5	71.4	-3.7  q9
22	7463	3375	561.0A	2.0  .92	-2.9  .89	-2,9 K .78	.75 72.6	68.2	11.7   q22
4	8936	3536	490.0A	2.1  .92	-3.0  .90	-1.5 L .70	.68  78.6	72.3	1.6 q4
10	8868	3558	505.0A	2.1  .87	-5.1  .85	-2.8 M .72	.70  78.4	71.4	-2.8   q10
18	8089	3422	523.0A	2.0  .76	-9.7  .85	-3.1 1 .78	.72 77.9	70.3	12.3   q18
5	8912	3552	513.0A	2.0  .85	-5.8  .76	-4.9 k .72	.71  76.5	71.0	-16.3   q5
16	7963	3242	504.0A	2,2  .80	-7.4  .79	-3.8 j .75	.70  79.6	71.6	8.5 q16
11	9039	3569	492.0A	2.1  .78	-8.5  .66	-6.1 i .73	.69  80.7	72.2	-2.0   q11
14	8036	3415	533.0A	2.0 .78	-8.8  .72	-6.9 h .78	.73  75.7	69.8	6.1 q14
17	8028	3407	528.0A	2.0  ,78	-8.9  .71	-6.8 g .78	.73   77.3	70.1	9.8 q1
19	7970	3423	550.0A	2.0  .77	-9.3  .69	-8.6 f .78	.75  74.1	68.8	-5.4   q19
23	7590	3389	581.0A	2.0  .76	-9.9  .69	-9.7 e .81	.77  77.2	67.1	-15,3   q23
12	8697	3547	511.0A	2.0  .74	-9.9  .65	-7.6 d .76	.71  80.3	71.1	3.0   q12
13	7892	3422	544.0A	2.0  .74	-9.9  .68	-8.6 c .80	.74  77.0	69.2	6.4   q1
20	7588	3381	570.0A	2.0  .73	-9.9  .65	-9.9 b .81	.76  76.9	67.7	-4.8   q20
15	8091	3410	526.0A	2.0  .71	-9.9  .63	-8.8 a .79	.72   78.8	70.2	7.9 q1
						+		+	+
   MEAN	7821.0	3423.8	555.1	2.2   1.03	-2.5 1.06	-1.6	72.0	69.4	ſ
S.D.	895.2	109.2	52.1	.3  .40	7.7  .53	6.6	8.9	1.8	ĺ

RFQ No. EDD 370596

# STATE OF WEST VIRGINIA Purchasing Division

# PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (**West Virginia Code** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

#### WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: PIEDRA DATA SERVICES LLC
Authorized Signature:
State of Florida
County of Dade , to-wit:
Taken, subscribed, and sworn to before me this day of, 20/2_
My Commission expires Dec. 14 , 2015
AFFIX SEAL HERE MARY ANNE HOSTITUTE ON NOTARY PUBLIC May L HosTITUTED
MARY ANNE HOSTUTLER MY COMMISSION # EE 122078 EXPIRES: December 14, 2015 Bonded Thru Notary Public Underwriters