

## State of US Autism Education

### Executive Summary

A pro bono consulting team of Harvard Business School alumni conducted a nationwide survey of over one thousand members of the autism community to assess the current state of autism education as part of a project for The New England Center for Children®.

#### Key Findings:

- Budget limitations and lack of qualified teaching staff are the biggest issues reported in autism education. Urban schools are more concerned about finding and retaining staff, maintaining the facility, and parental support. Rural schools report better parent support and lower staff turnover.
- Most schools use Applied Behavior Analysis (ABA) in some capacity, and develop their own curriculum. Board Certified Behavior Analysts (BCBAs) are also widely used and students on the autism spectrum are mostly taught in full inclusion settings. Some schools regularly use software to track student progress and outside sources for curriculum.
- ABA enjoys wide acceptance, including a 95% effectiveness rating by front-line professionals.
- 53% reported being satisfied, or very satisfied, with their current autism education solution; conversely, 27% are dissatisfied or very dissatisfied. Parents of children with autism, BCBAs, and therapists are least satisfied with the status quo. Respondents at smaller schools and private schools are significantly more satisfied than large or public schools
- While budget is a universal concern, satisfaction is driven by attention to teaching concerns and to a lesser extent, the facility.
- There is significantly higher satisfaction at schools using ABA and BCBAs backed by progress tracking software and external lesson plans than at other schools.

## **Overview:**

The New England Center for Children® retained a pro bono consulting team of Harvard Business School alumni to evaluate whether an online autism curriculum and case management system NECC developed for its own use would be a valuable resource to public school districts, collaborative and private schools teaching students on the autism spectrum. As part of this analysis, the consulting team conducted a nationwide survey of 1400 (of which 1,021 were from the US) parents, teachers, and caregivers of individuals with autism to assess the current state of autism education. This report contains the analysis of the 1,021 US responses about autism education at US schools.

The report is in five parts:

Part I: Areas of Concern: Examines the biggest opportunities for improving education for children with autism.

Part II: Current Practices: Presents the landscape of educational practices at US schools.

Part III: View of Applied Behavior Analysis: Reports data on ABA effectiveness.

Part IV: Satisfaction: Reviews the drivers of satisfaction with autism education.

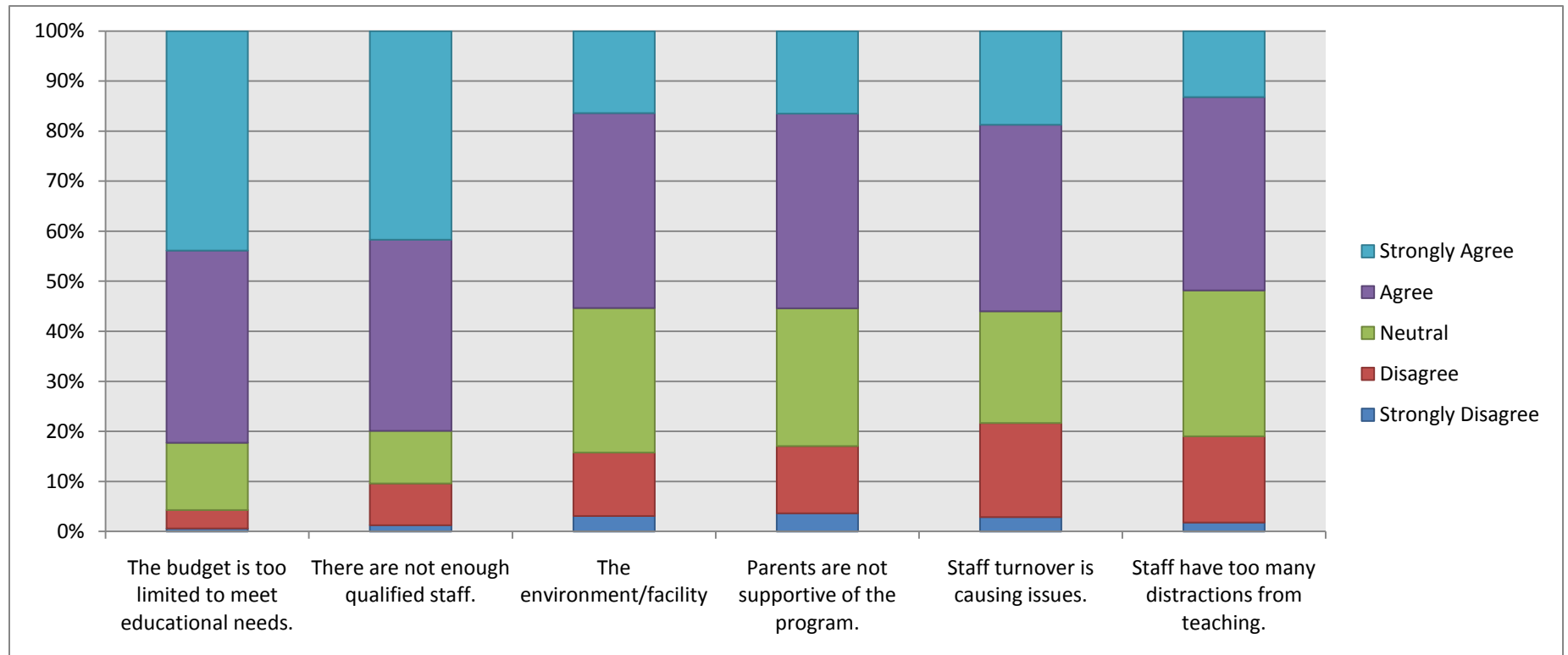
Appendix: About the Survey Respondents: Shows aggregate demographic data on the respondents.

## **Summary of Key Lessons about NECC and ACE**

Briefly, the survey was very supportive of NECC's goal to serve more children through distribution of its curriculum. NECC is viewed as a strong, respected player in the industry. In other survey questions we found that autism professionals are aware of the New England Center for Children's work in autism research and education. Moreover, 60% of respondents who recognized NECC are more likely to acquire an online curriculum product if they know that it was developed by NECC. Overall the survey suggests an excellent match between the needs of the autism educators and NECC's product, ACE®, especially given dissatisfaction expressed by interested parties in currently provided educational services, and the weak use of technology to track student progress, for individuals diagnosed with autism.

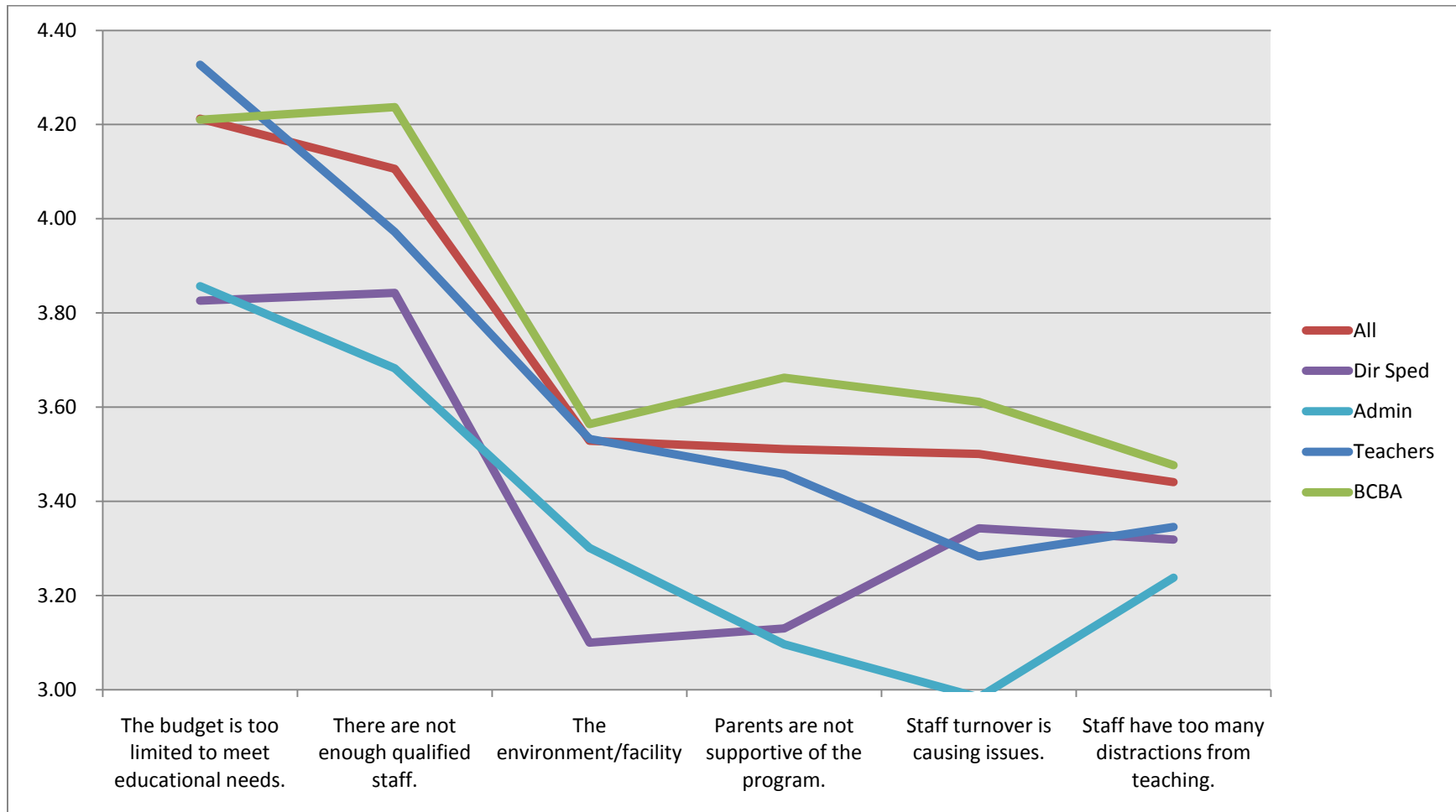
## Part I: Areas of Concern in Autism Education

The respondents were asked the degree to which they believed that each of a list of potential obstacles to improving autism education was relevant to their situation. Respondents indicated a wide range of issues, with 50% or more agreeing or strongly agreeing to all six criteria in the survey. Budget constraints and lack of enough qualified staff generated the most agreement with over 40% answering “strongly agree” and over 80% answering “agree” or “strongly agree.”



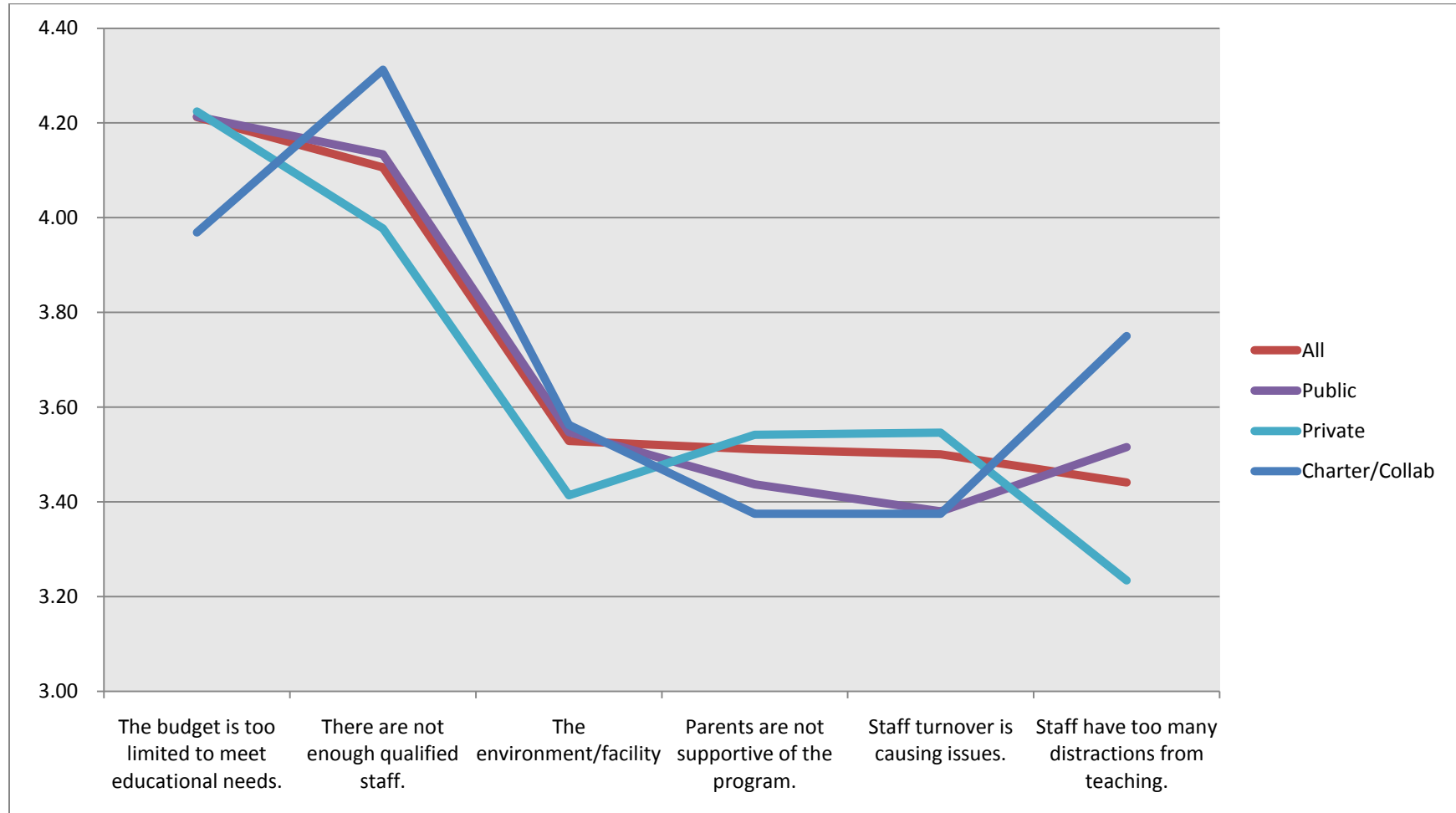
## Areas of Concern by Role

The chart below breaks out responses by role, showing the average score for each group (strongly agree = 5 to strongly disagree = 1). Budgets and finding qualified staff are the top two issues. However management, represented by Administrators and Directors of Special Education, are less concerned about each issue than teachers and BCBA's.



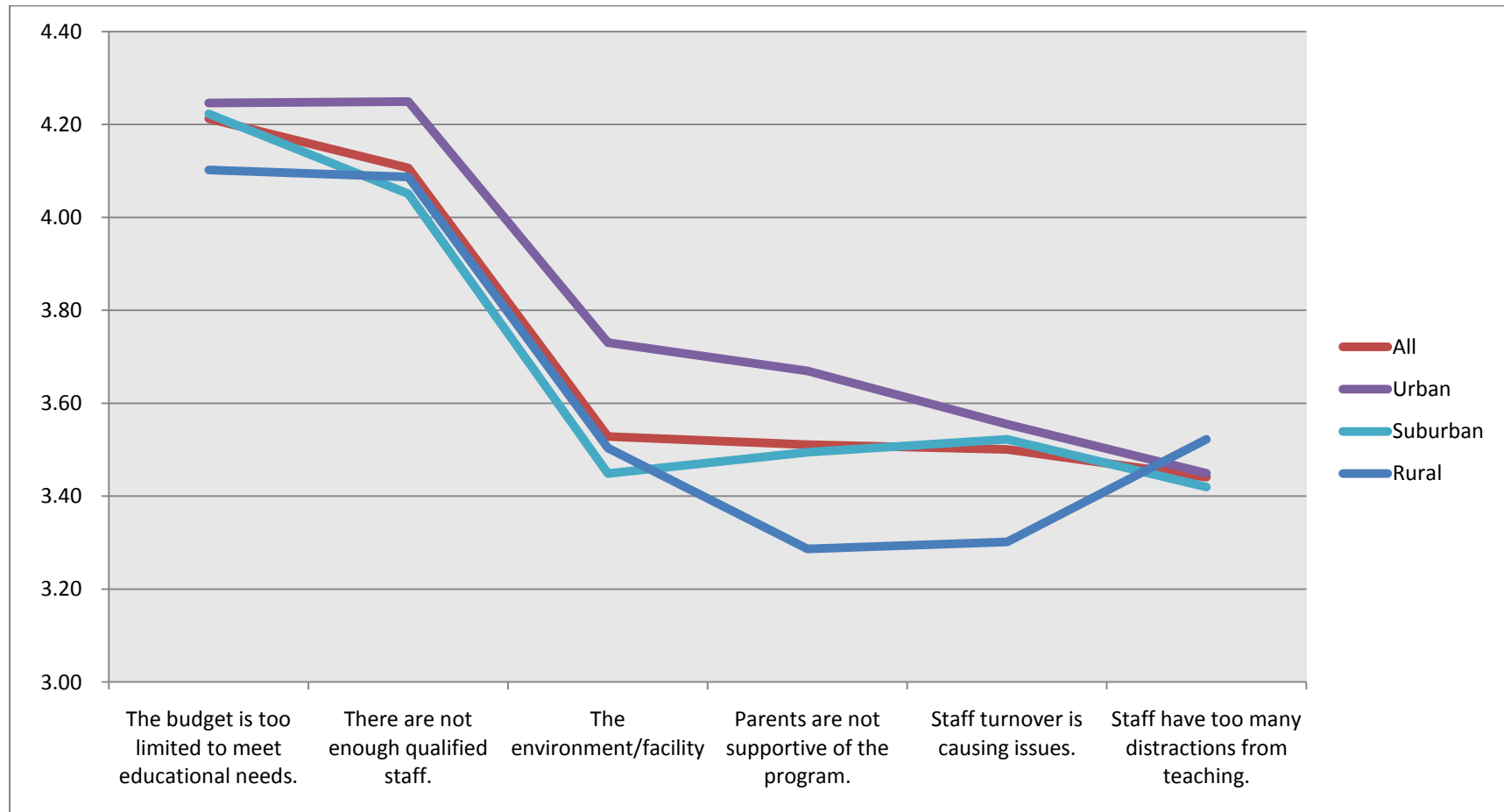
## Areas of Concern by Type of School

A breakout of answers by type of school indicated agreement on the issues among public and private schools. Charters and collaboratives are less concerned about budget and more concerned about the number of qualified staff and staff having too many distractions from teaching. Private schools have fewer teaching issues, though are concerned about turnover.



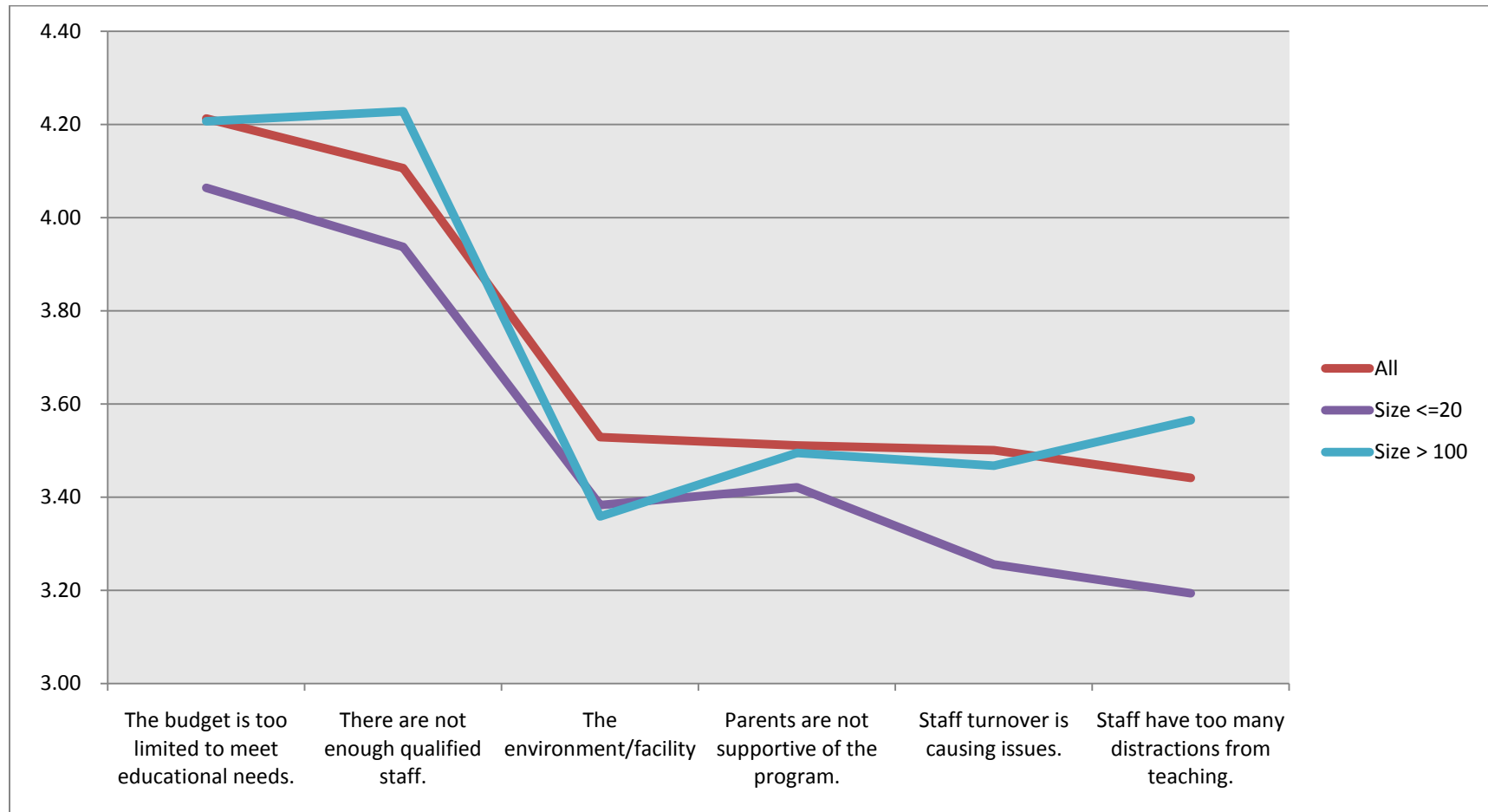
### Areas of Concern by School Setting

An analysis of answers by school settings indicated general agreement of priority of concerns among urban, suburban, and rural schools. Urban school respondents indicated a higher level of concern about finding and retaining quality staff, the environment / facility, and parents support. Rural schools reported better parent support and lower staff turnover.



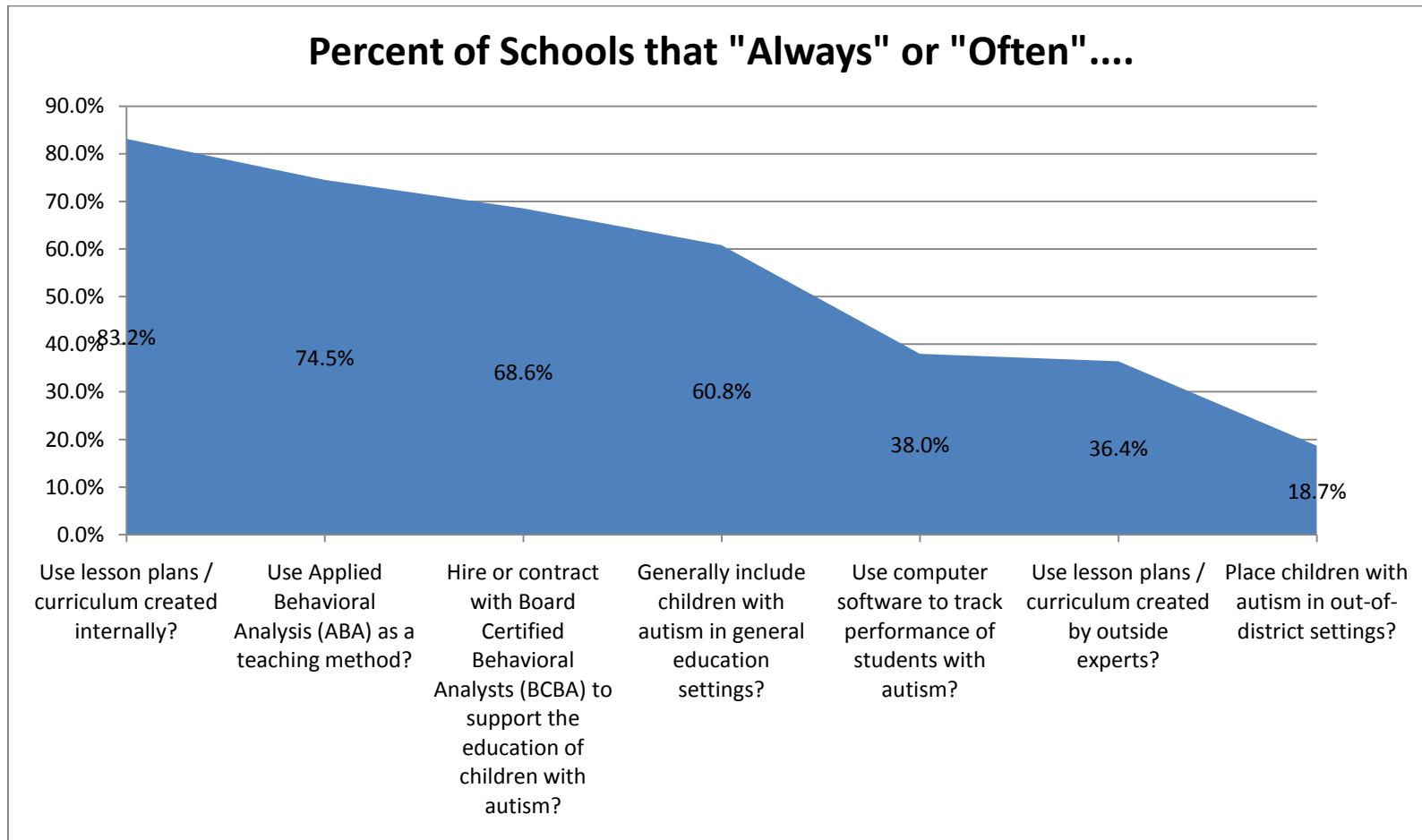
## Areas of Concern by Program Size

A comparison of respondents associated with the largest 26% of programs (serving than 100 students with autism in-house) and the smallest 29% of programs (20 or fewer in-house students) with the average shows that the smallest programs are less concerned on each issue than average. Staff issues are particularly prevalent among large programs.

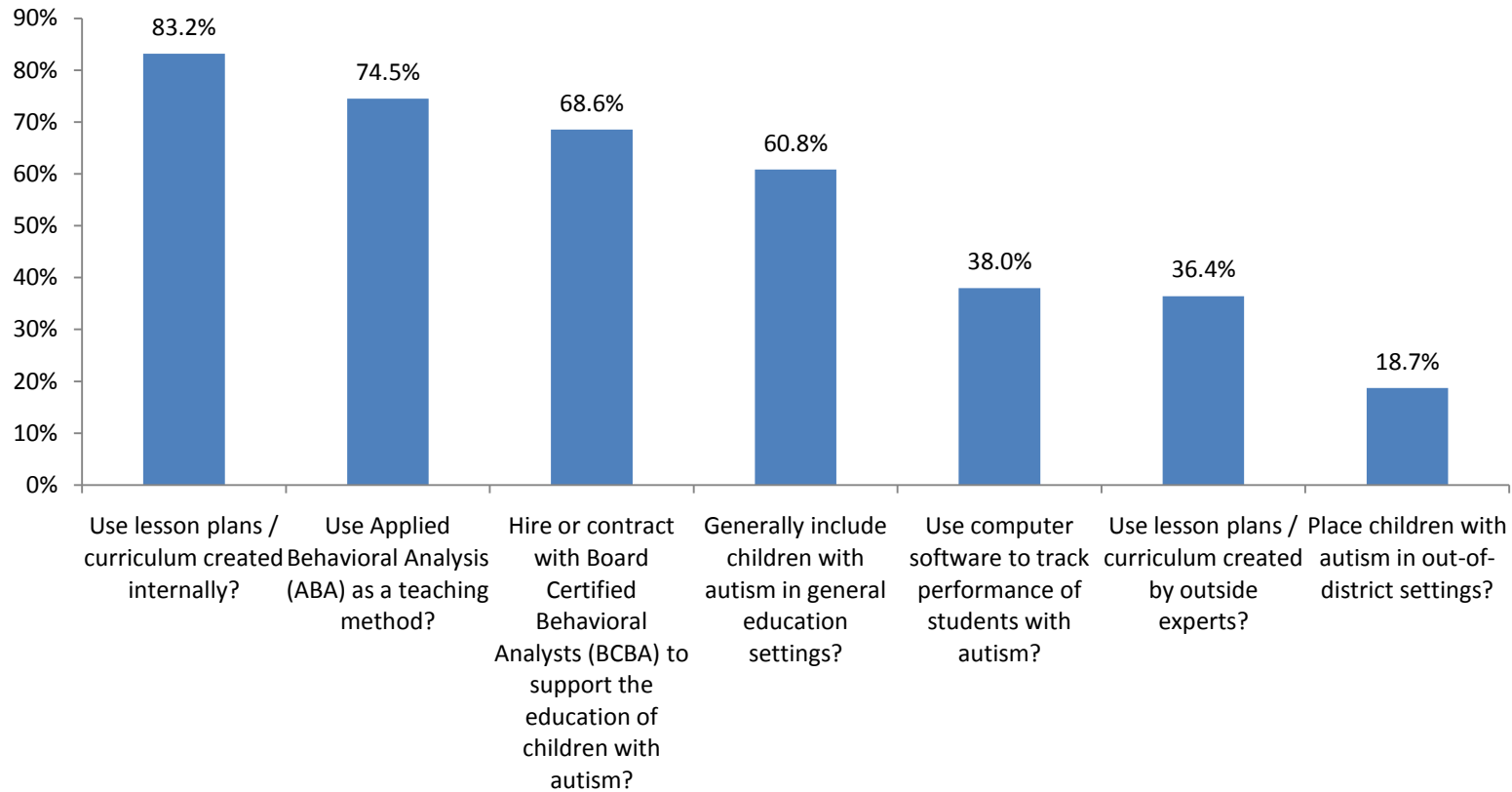


## Part II: Current Practices

The survey indicated that a large majority of schools use ABA and develop their own curriculum. BCBA's are also widely used and students on the autism spectrum are mostly taught in full inclusion settings. A minority of respondents use software to track student progress and outside sources for curriculum.

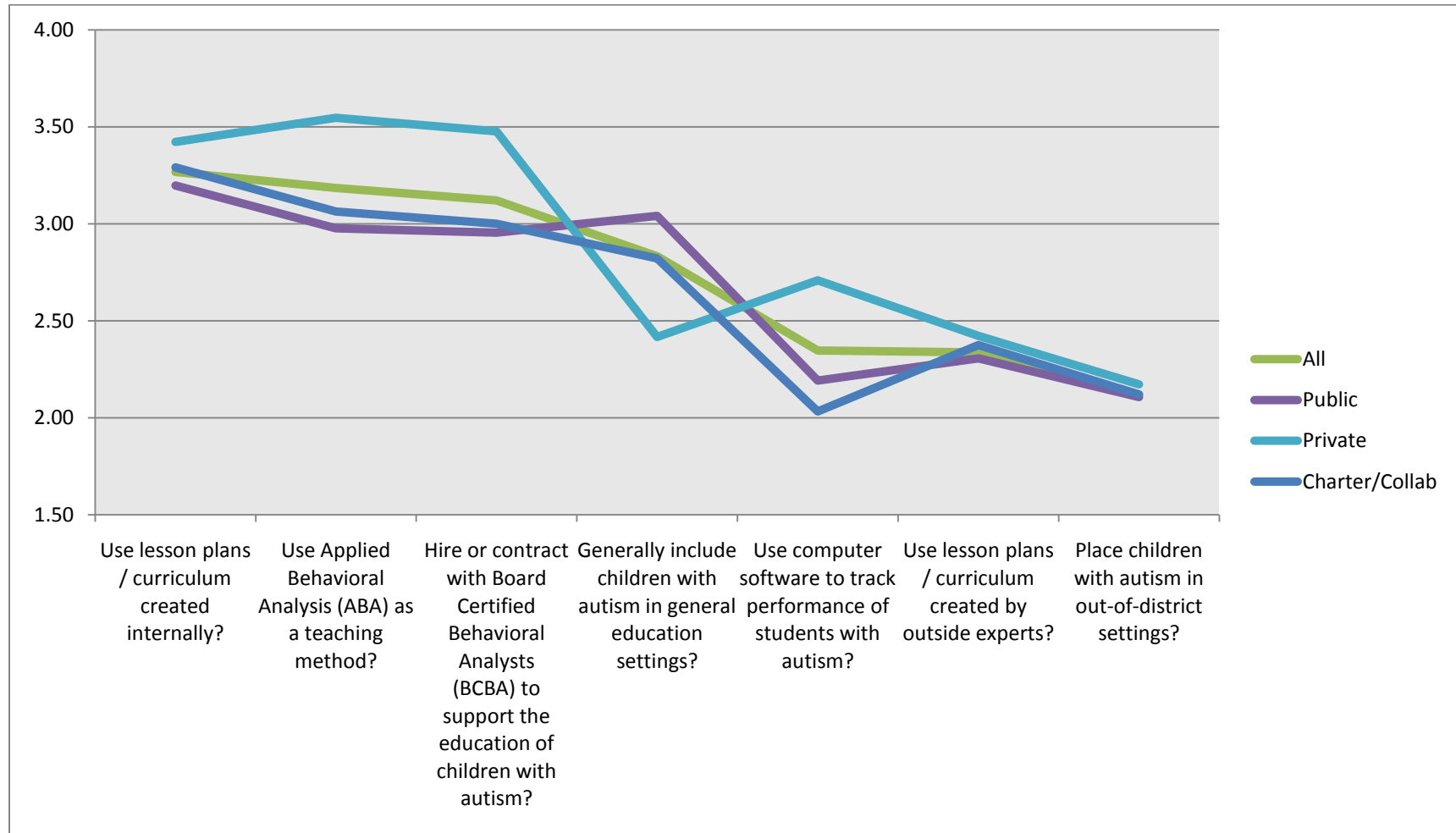


## Percentage of Schools that "Always" or "Often" ....



## Current Practices by School Type

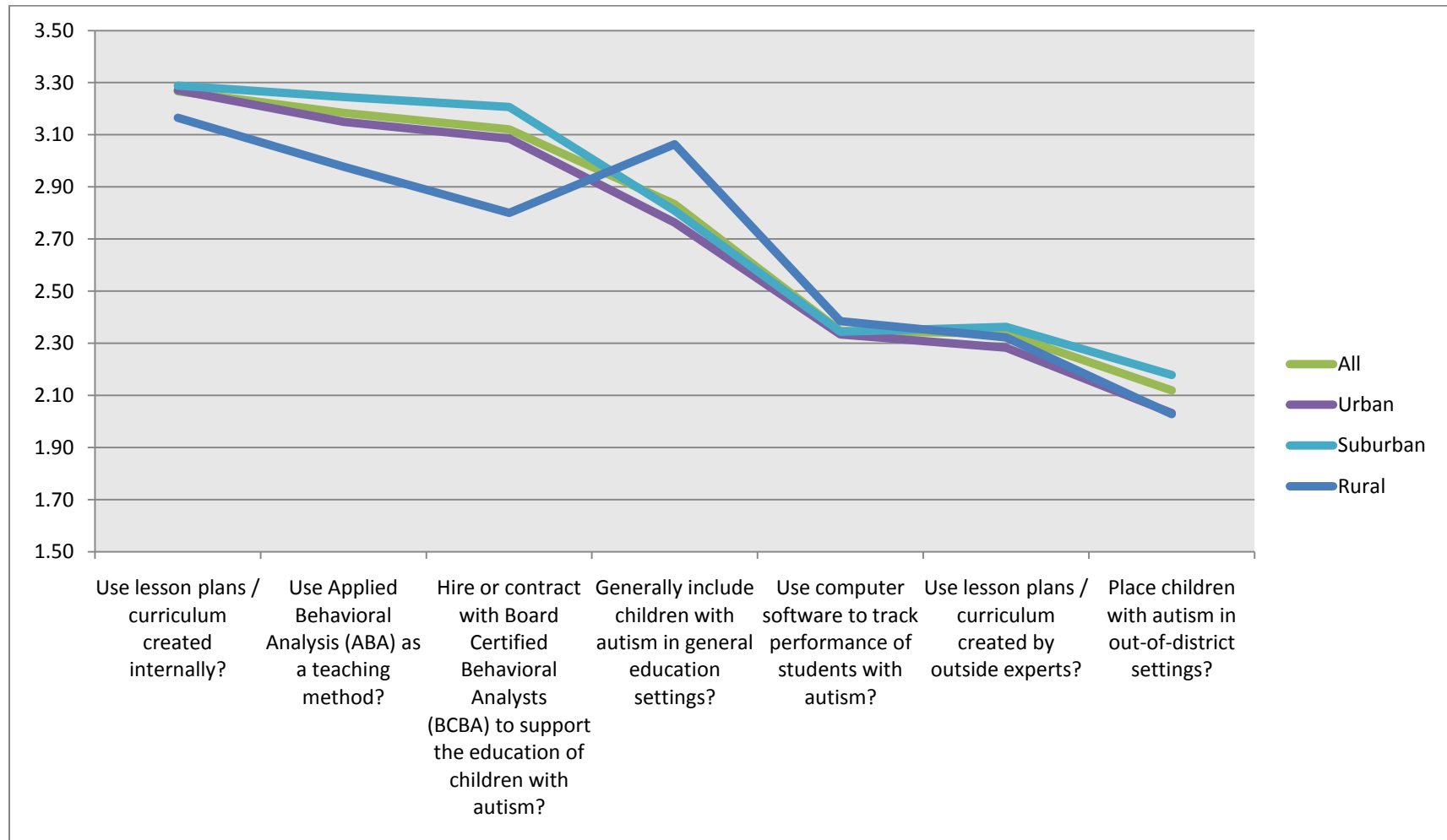
A breakout of responses by type of school indicated similar practices among public, private, and collaboratives with private schools somewhat more likely to use ABA, hire BCBA's and use software to track performance.



4 = Always; 3 = Often; 2 = Rarely; 1 = Never

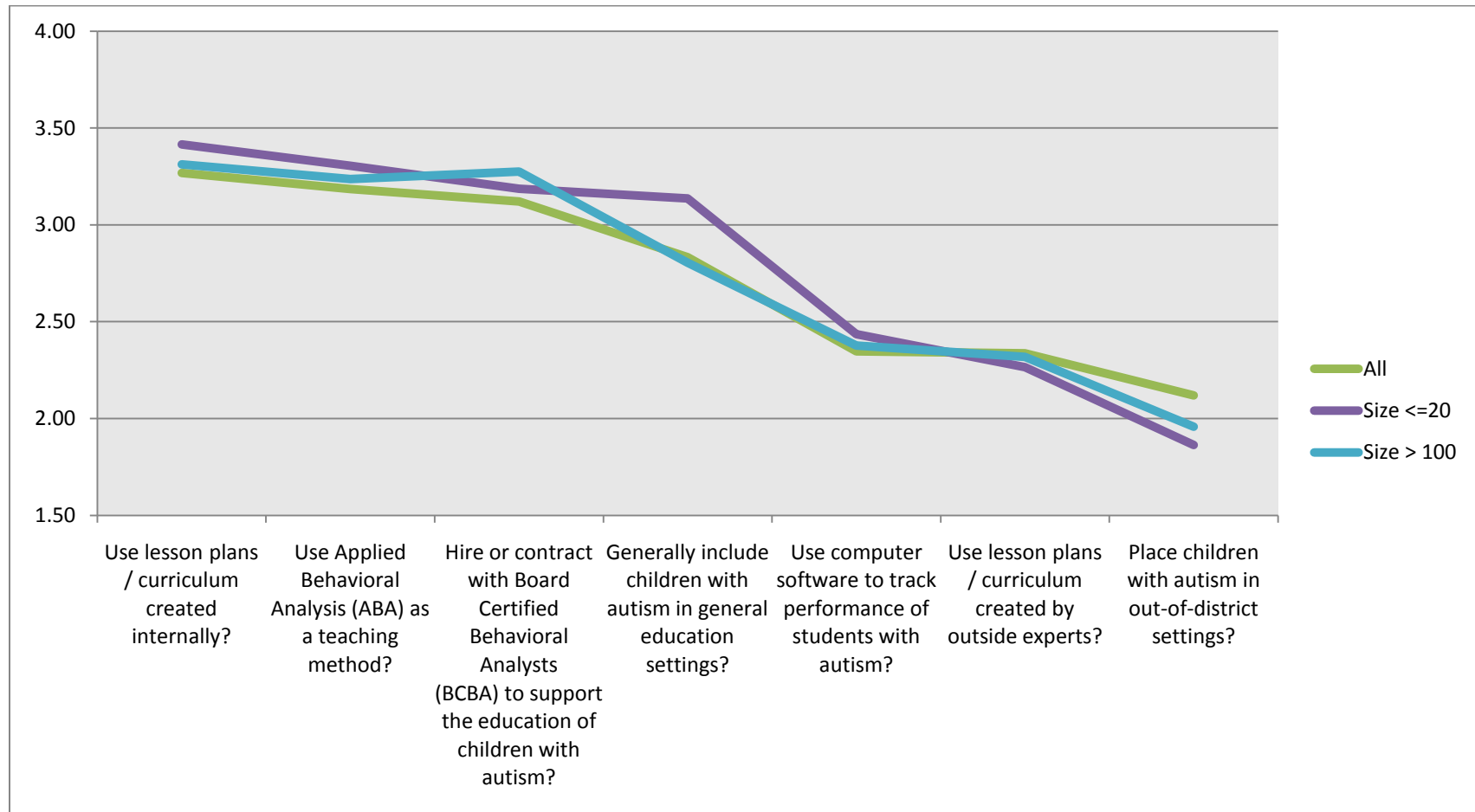
### Current Practices by School Setting

A breakout by school settings shows rural schools somewhat less likely to use ABA or retain BCBA's, and more likely to teach students on the autism spectrum in the general classroom.



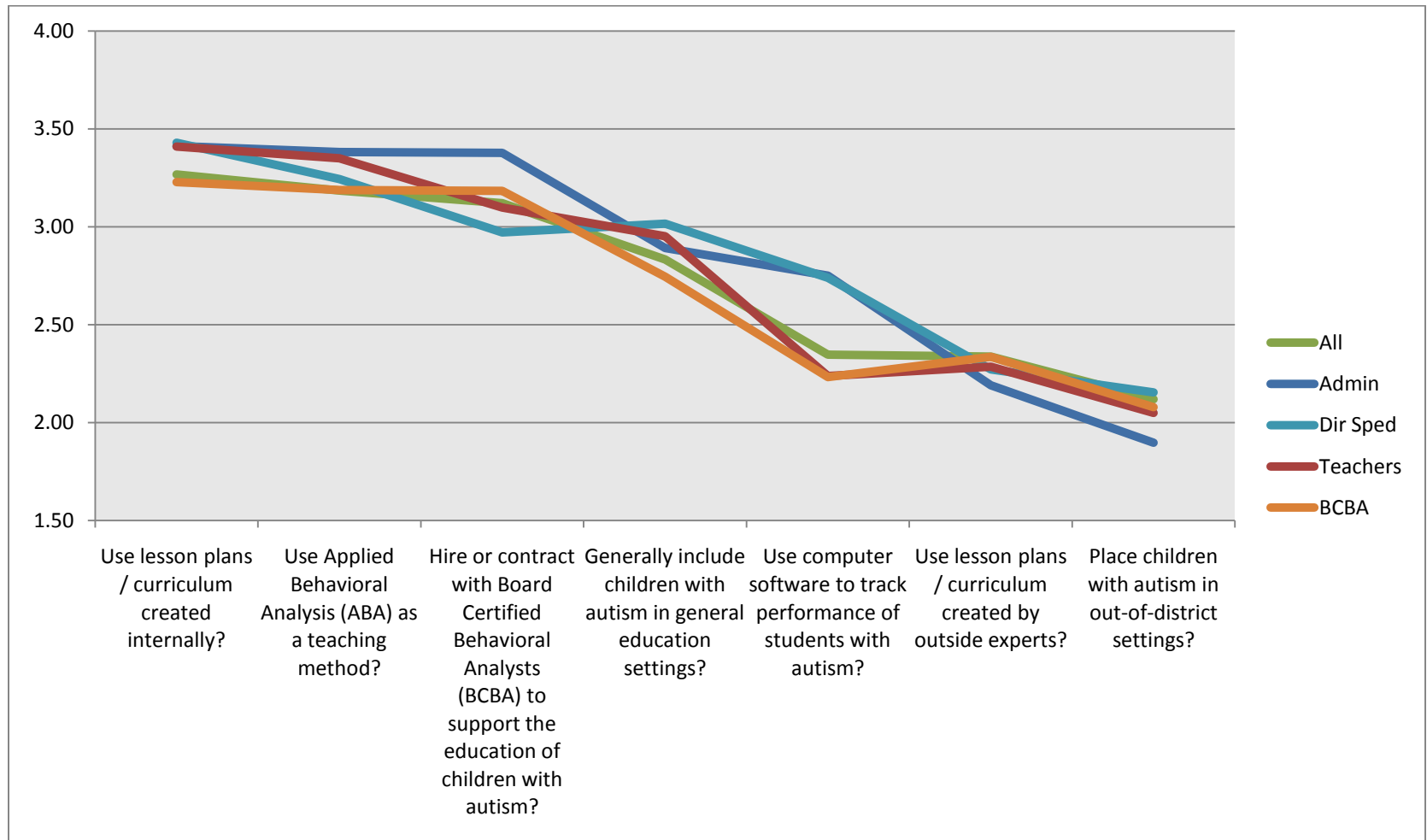
## Current Practices by School Size

Current practice did not vary significantly based on the population of autism students. Schools with fewer in-house students with ASD are more likely to teach children in a general education classroom and less likely to use out-of-district placements.



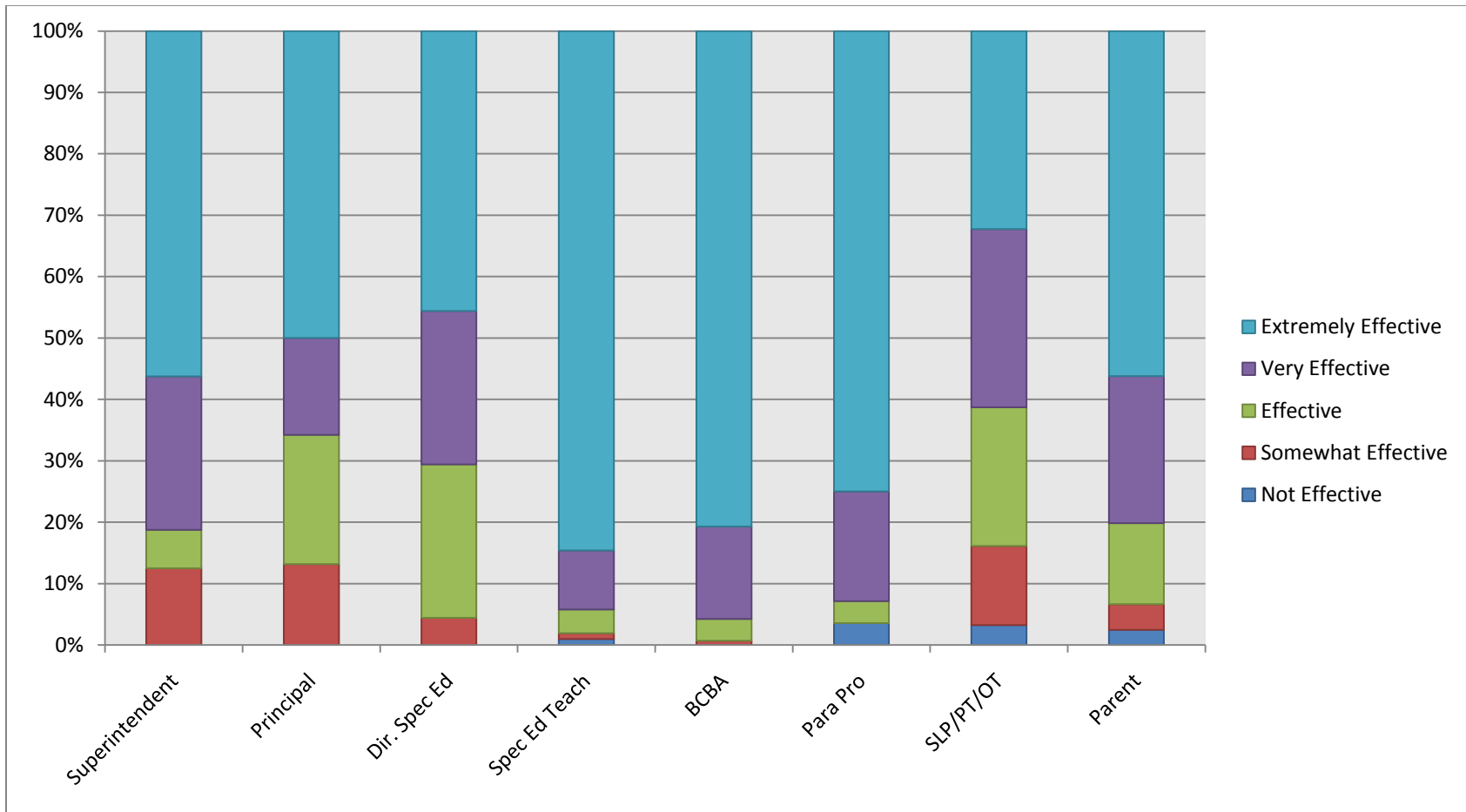
## Current Practices by Role

When practices are broken out by school role we found consistent observations, except for the use of software to track performance where administrators and special education directors reported a higher use than teachers and BCBA's.



### Part III: View of Applied Behavior Analysis

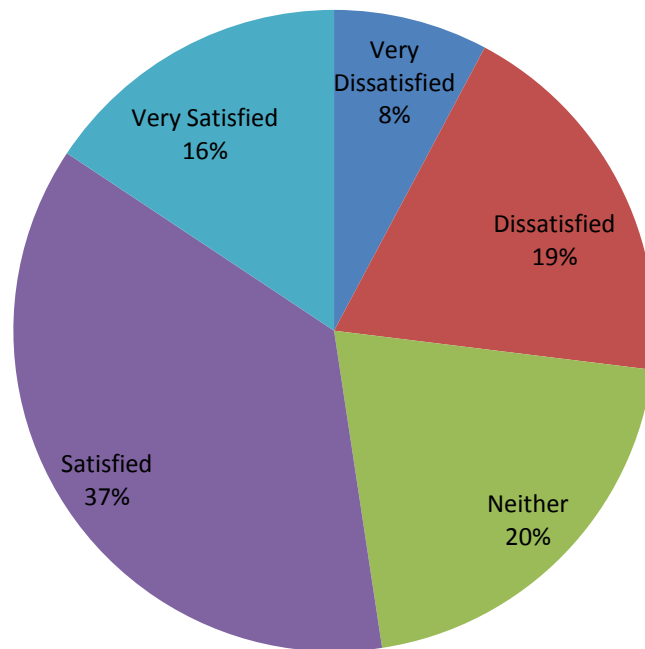
The survey results indicate that ABA is broadly accepted as effective by all categories of respondents and in all program types. Those on the frontlines of education, Special Education Teachers, BCBA's, and Paraprofessionals, are the biggest supporters of ABA, with 95% responding that ABA is "Very" or "Extremely Effective".



#### Part IV: Satisfaction

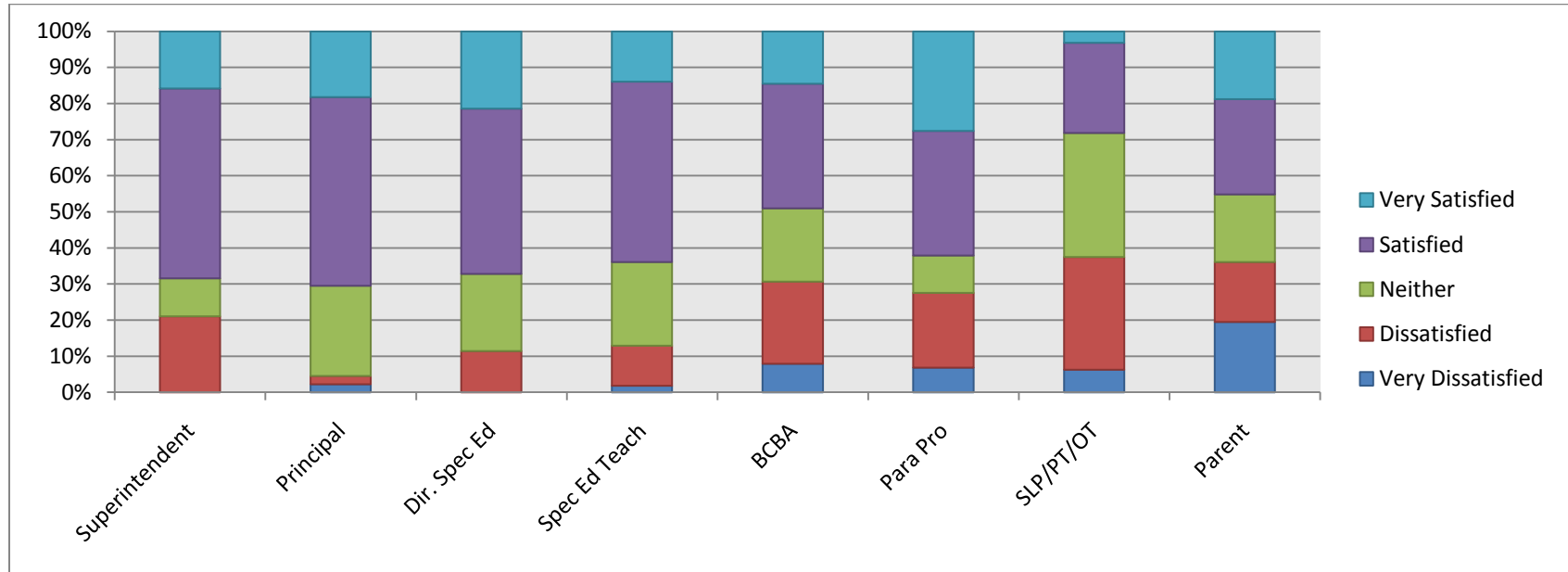
Respondents were asked about their overall satisfaction with their school/district's autism program. The majority of respondents reported satisfaction with the current program. On the negative side, 8% were very dissatisfied and 19% are dissatisfied. This suggests a sizable minority of respondents would be interested in ways to improve the quality of their autism programs.

### Question 12: How satisfied are you with the current solution used for teaching individuals with autism in your school?



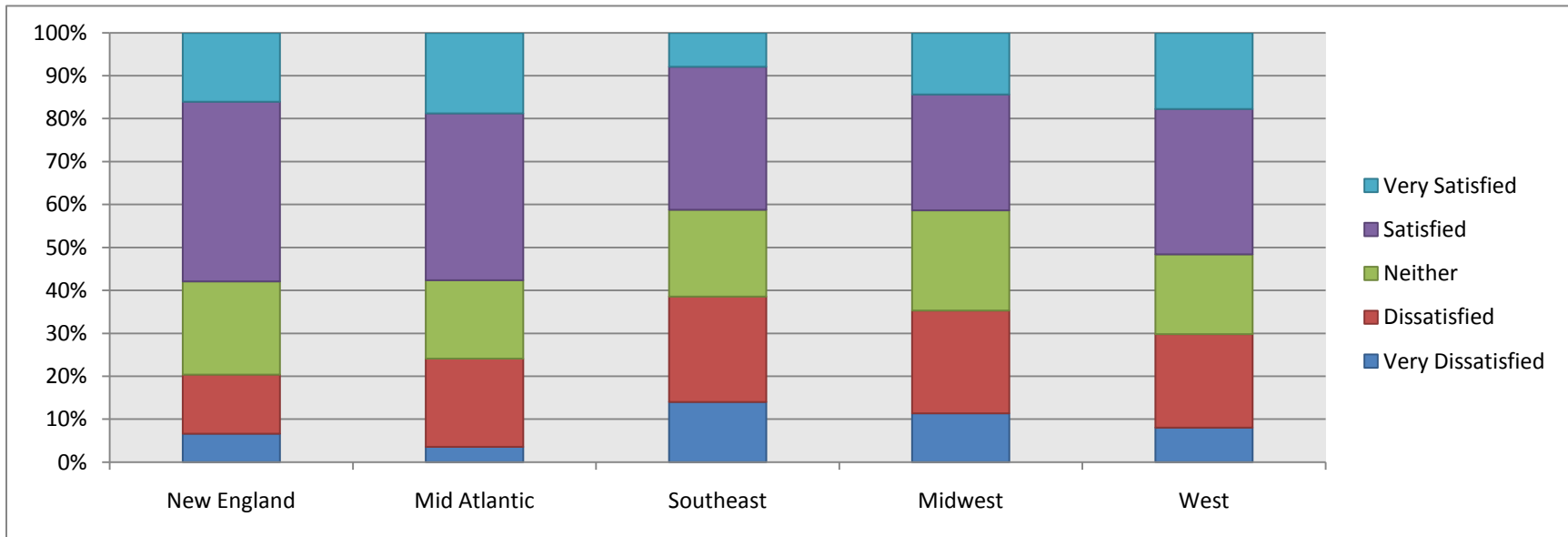
## Satisfaction by Role

Satisfaction varies greatly by role. Persons involved with management – Superintendents, Principals, and Special Education Directors are relatively satisfied (generally 70% are satisfied or very satisfied). Parents, Occupational Therapists, Physical Therapists, Speech and Language Therapists, and BCBA's are much less satisfied. As this second group is most likely to see the direct results of the education policy first hand, this is concerning.



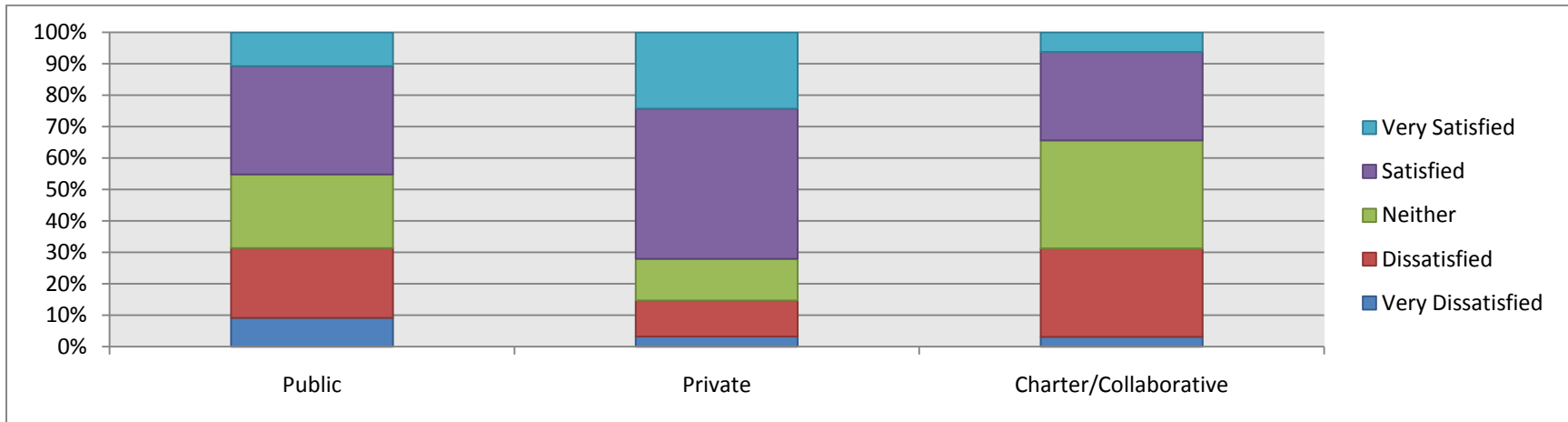
## Satisfaction by Region

An analysis of satisfaction by region indicates there is a meaningful difference with Northeast, Mid-Atlantic and West Coast respondents significantly more satisfied with their autism education system than Southeast and Midwest respondents.



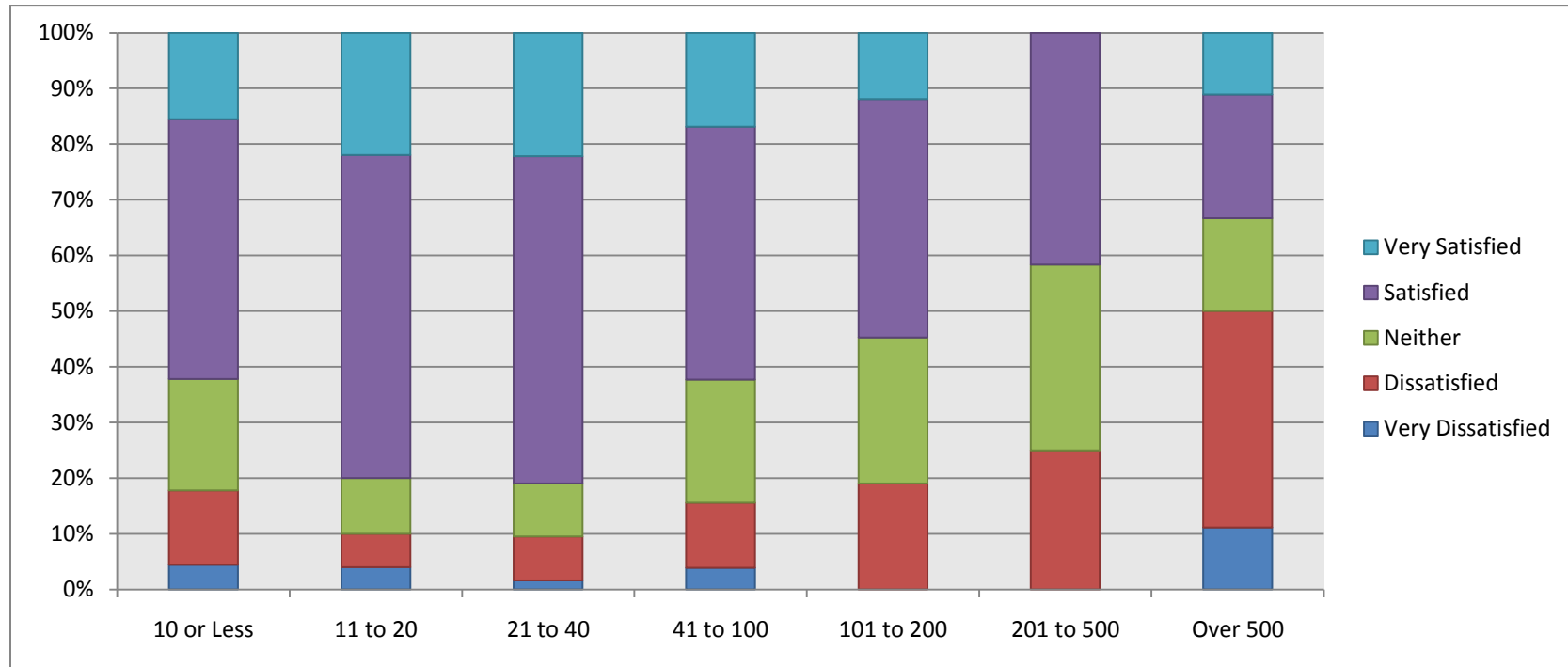
## Satisfaction by School Type

Overall satisfaction is much higher in private school settings than in the public schools, charter schools, or collaboratives.



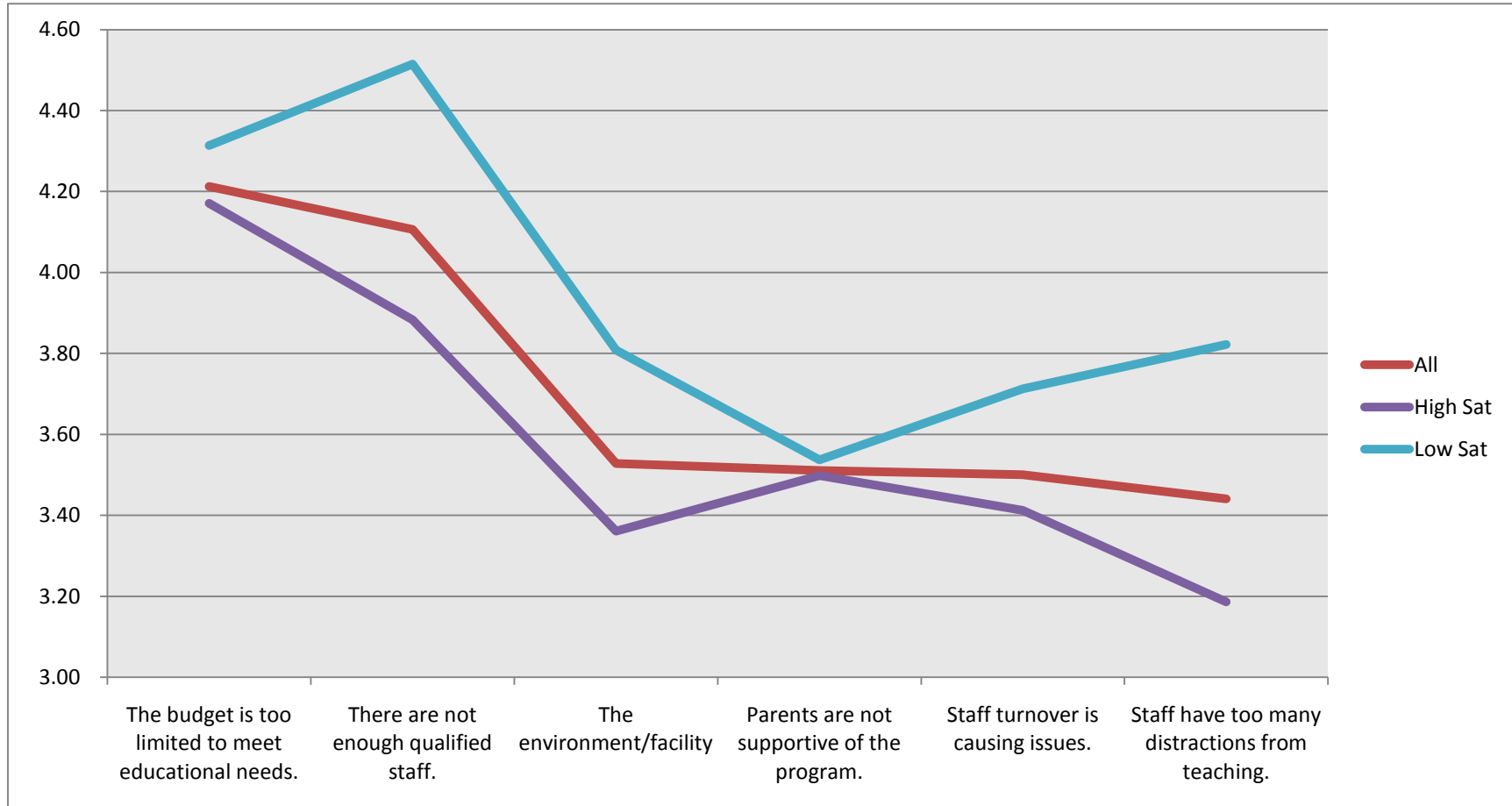
## Satisfaction by School Size

An analysis of overall satisfaction by size of program indicated that generally smaller is better, though respondents in the smallest programs (10 or fewer students) were not as satisfied as the 11 to 20 and 21 to 40 student cohorts.



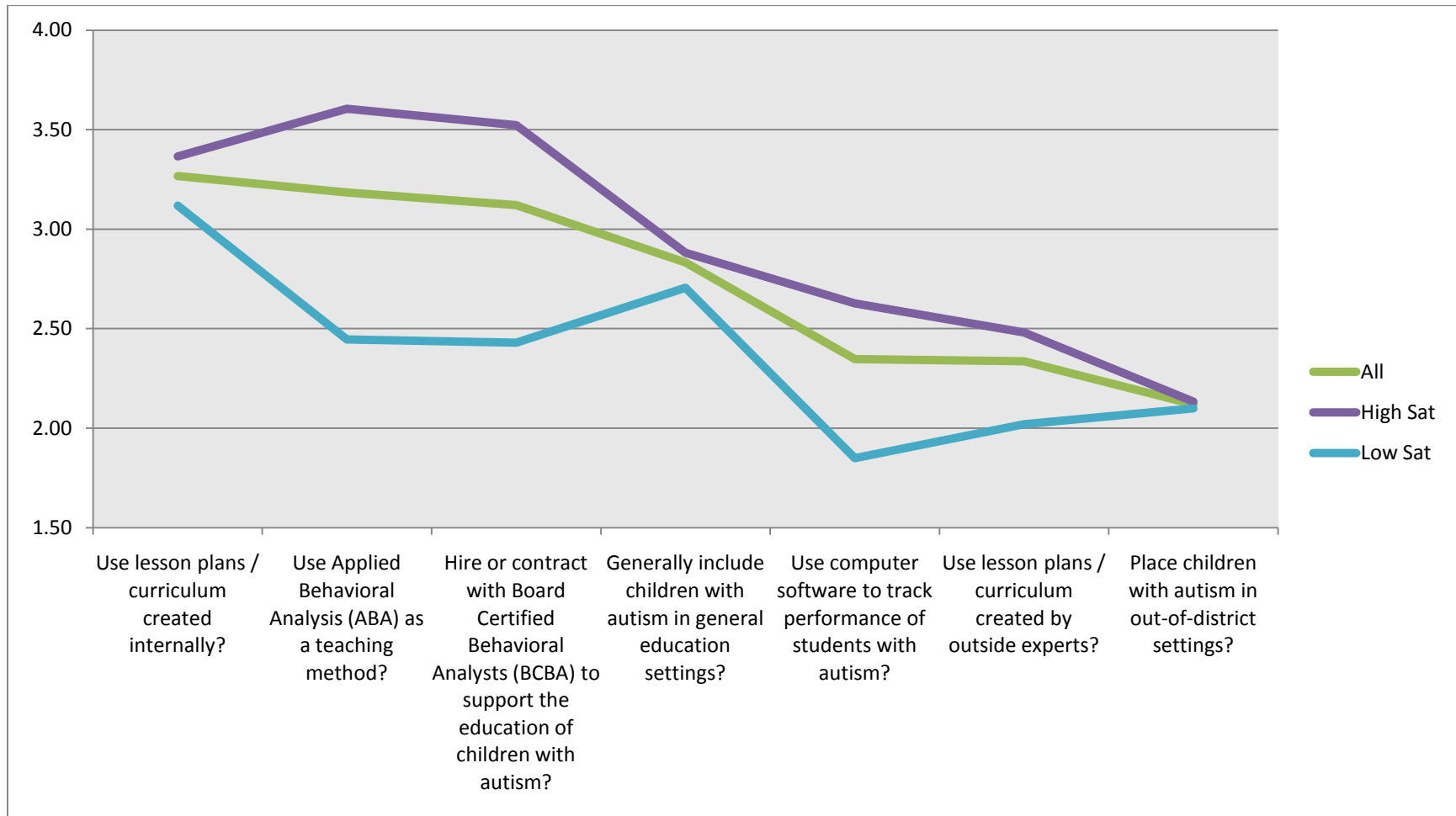
## Satisfaction by Area of Concern

We also compared concerns of the low satisfaction respondents (Very Dissatisfied or Dissatisfied) against those of the high satisfaction group. While budget is understandably a universal top concern, it is NOT a determinant of satisfaction. Satisfaction is affected by the teaching issues and the quality of the facility. The single biggest issue is whether the staff has too many distractions from teaching.



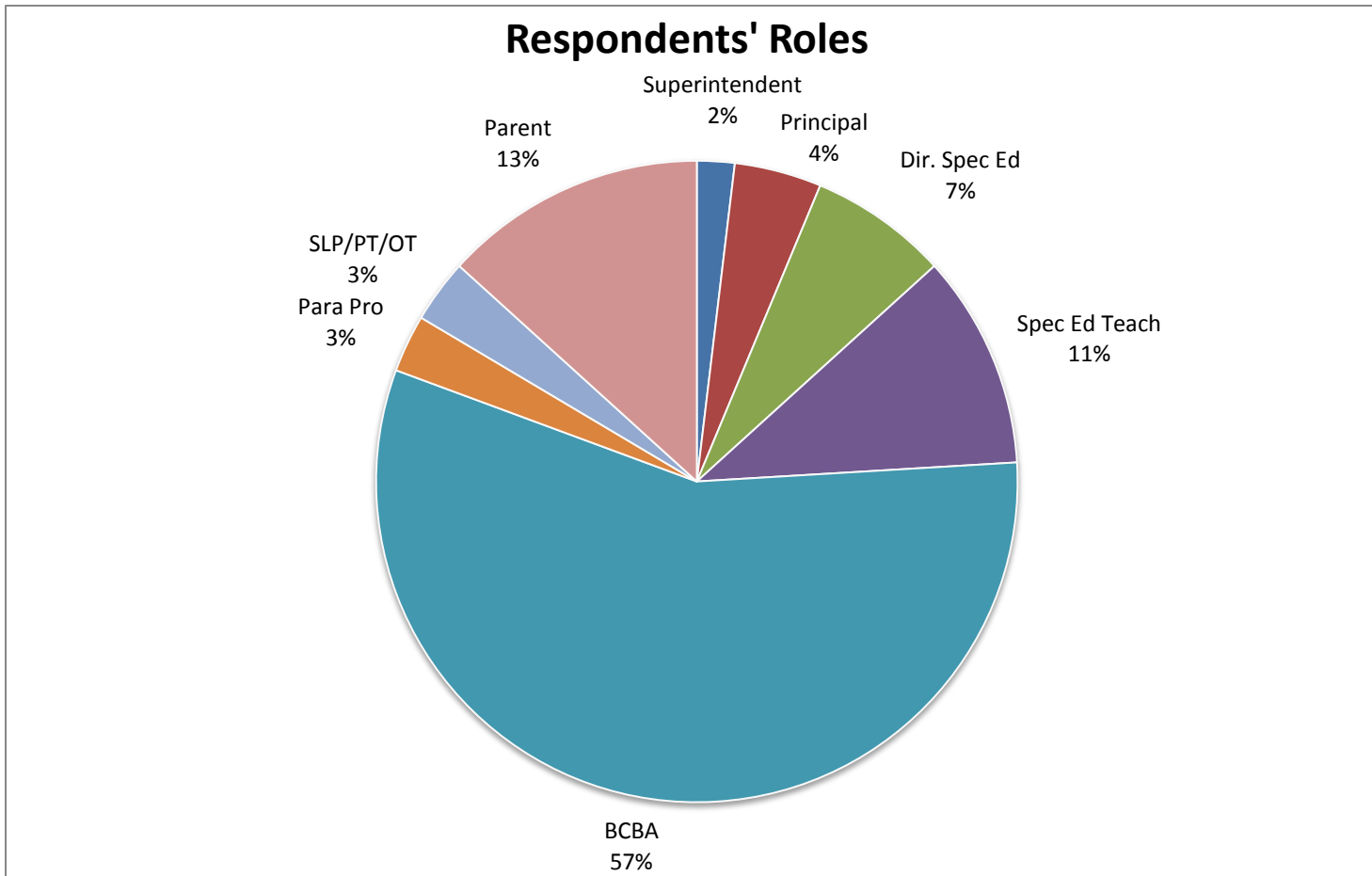
## Satisfaction by Current Practices

Current practices also have a big effect on satisfaction. There is significantly higher satisfaction at schools using ABA and BCBA's backed by progress tracking software and external lesson plans than at other schools.

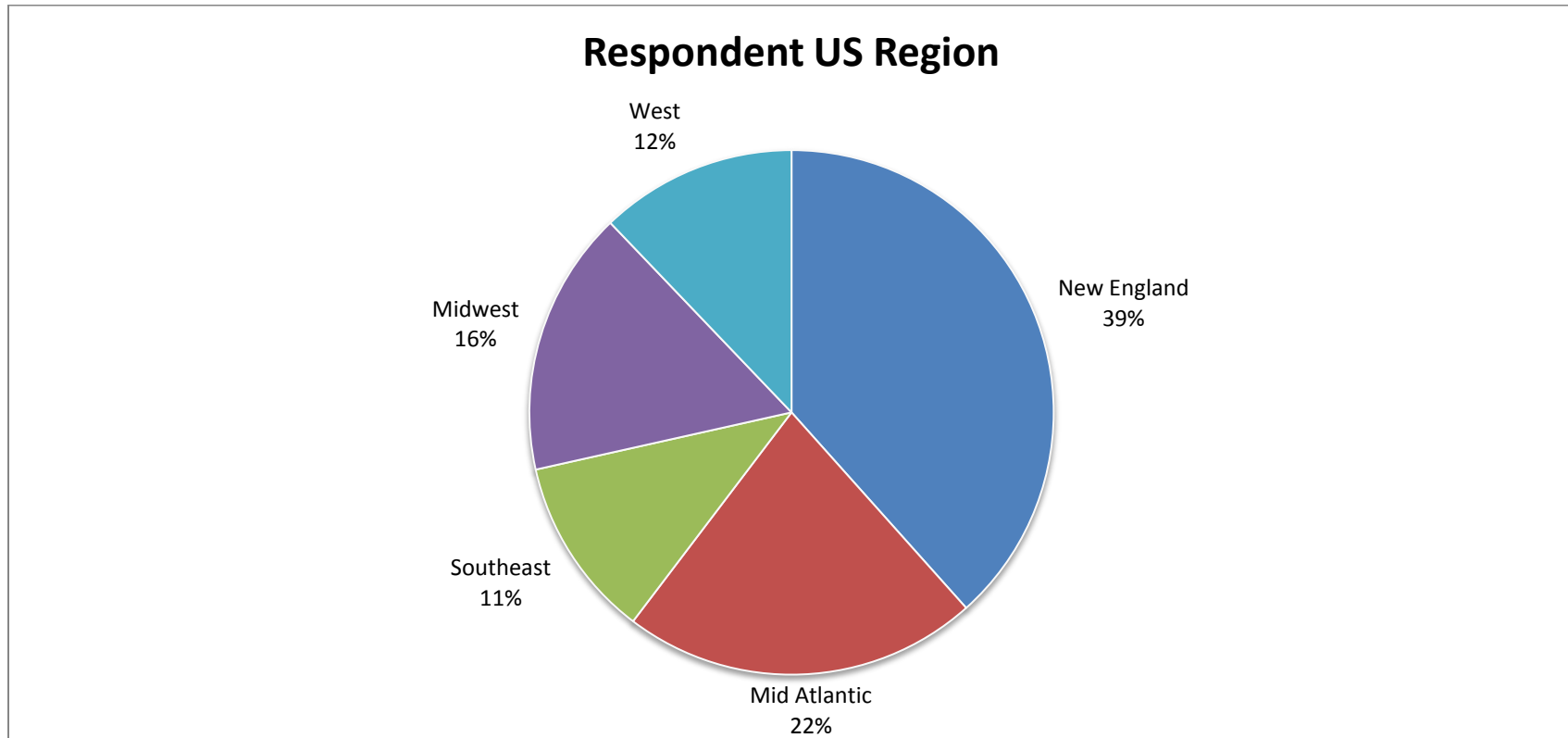


## Appendix: About the Survey Respondents

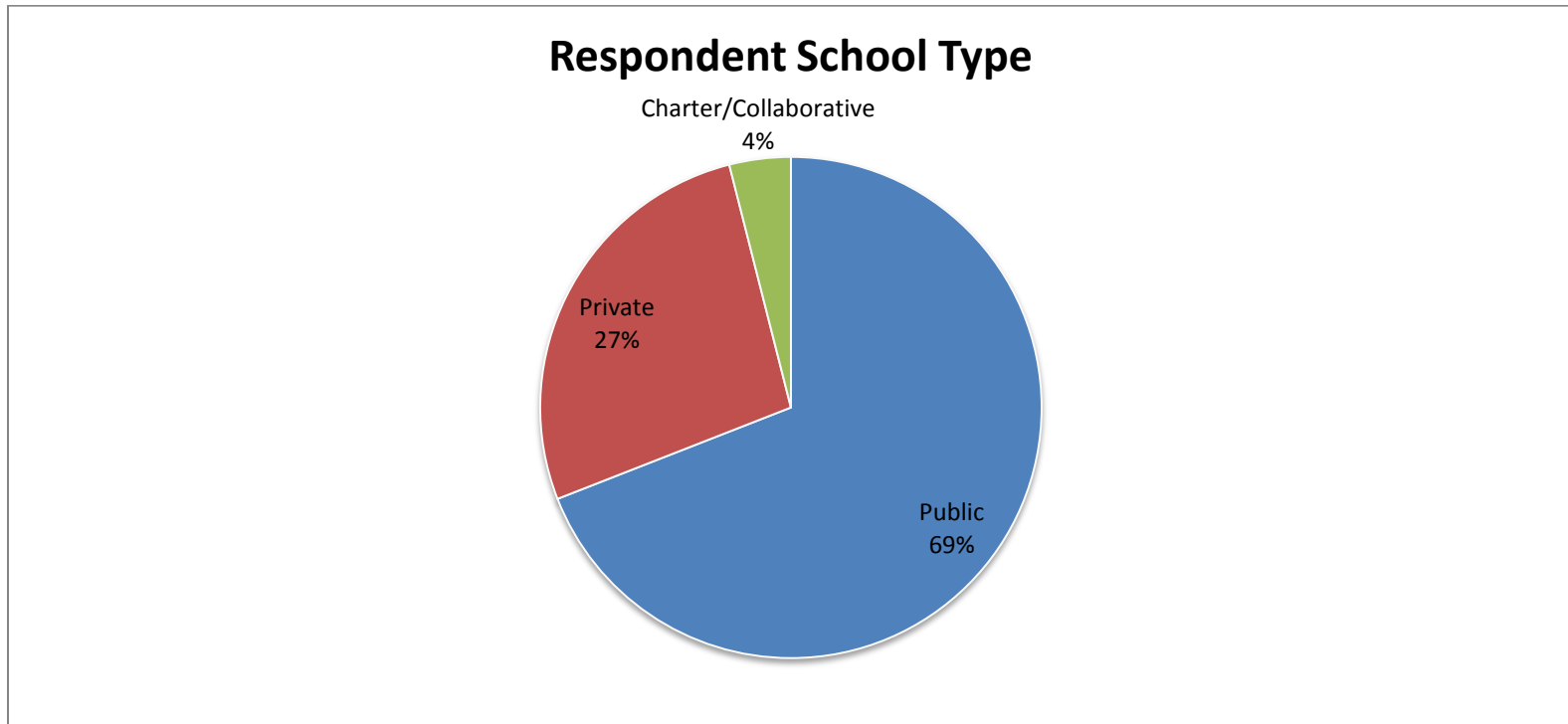
Responses were heavily weighted toward BCBA's who made up 57% of responses. BCBA's were particularly responsive to the survey and this group has extensive knowledge of autism curricula and education. Parents (13%), special education teachers (11%) and special education directors (7%) were the second through fourth largest groups of respondents. Responses of superintendents and principals often have been combined into an "Administrators" group for display purposes.



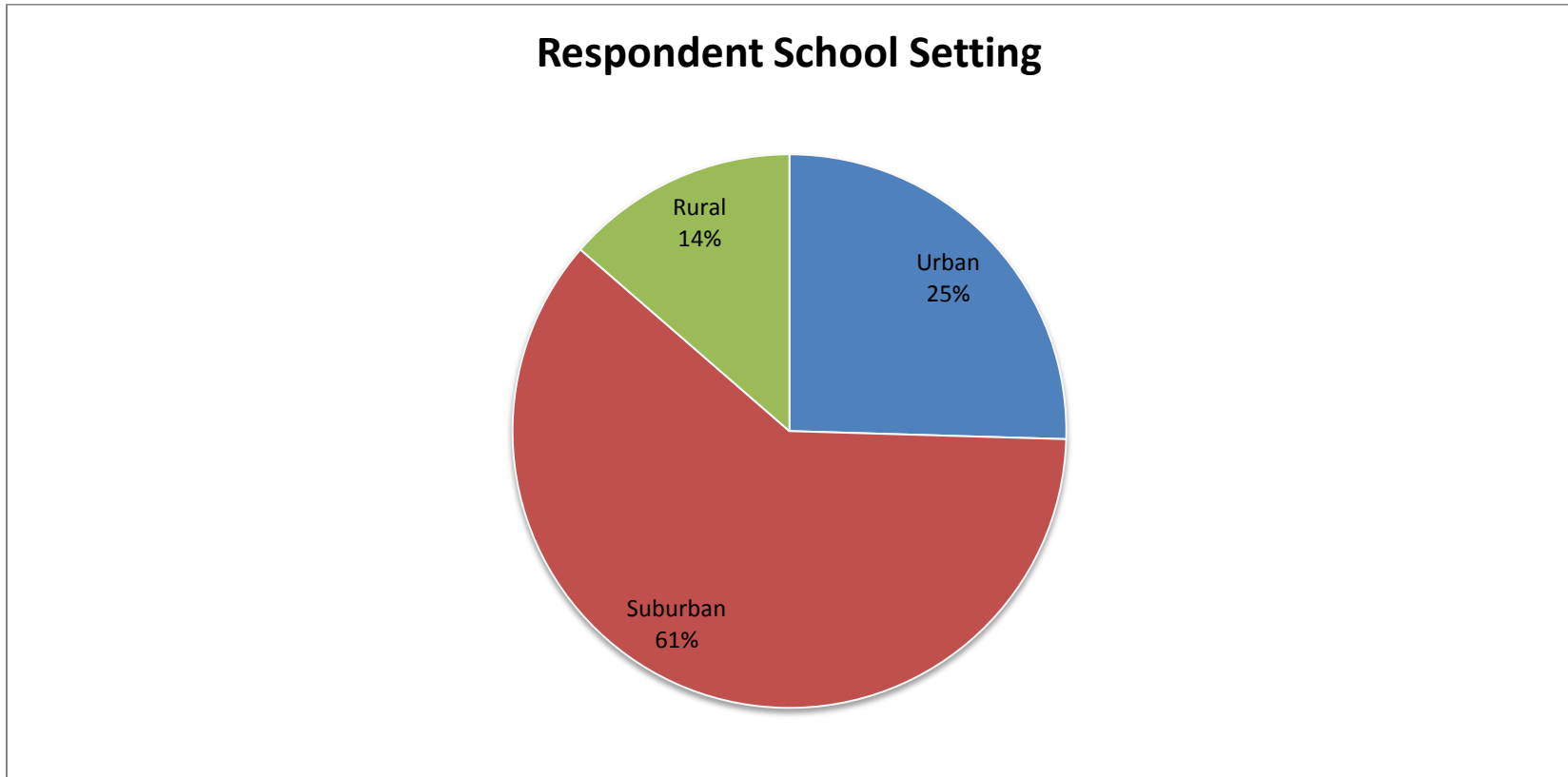
Respondents were also tracked by region. In this report, only responses from the United States of America are included. New England represented 39% of respondents reflecting the heavy weighting of the distribution lists to the region.



Responses were also tracked by school type. Responses were heavily weighted to public school districts (69%) with private schools representing 27% of responses and Charter Schools and Collaboratives the remainder.



Responses were also tracked by school setting (urban/suburban/rural) as self-reported by the respondents. Suburban schools were heavily represented (61%) followed by urban (25%) and rural (14%).



The size of the schools of the respondents is shown below, broken down by the number of students with autism served in-house. There was a good distribution of school sizes with 13% of respondents reporting more than 200 in-house students and 29% of respondents reporting 20 or fewer in-house students. The median was 40 students.

