

Changing Views on Autism Spectrum Disorders at North Topsail Elementary School

Needs Assessment Report

MIT 530

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Executive Summary

The mission of the Pender County School System is to facilitate student growth and learning so that each child develops to their maximum potential. The student population at North Topsail Elementary School (NTES) will be changing in the upcoming school year to include a larger number of students with autism spectrum disorders than ever before. Currently, only five staff members have experience with educating and managing students on the autism spectrum in the classroom, while the rest of the faculty and staff have little to no knowledge of these students' personal and educational needs. To prepare faculty and staff for this new student population, Principal Dr. Georgia Fonville decided to recruit a Needs Assessment Team to determine the faculty and staff's level of motivation to adapt classroom techniques and instruction to meet the needs of students on the autism spectrum and to find solutions to this forthcoming problem.

To determine causes of this problem, a Training Needs Assessment (TNA) was conducted at NTES. The stages of the TNA included: observations of faculty and staff, literature review, interviews with subject matter experts, survey of faculty and staff, and interview with school administration. These stages were carefully planned to ascertain actual behaviors, expected behaviors, feelings of NTES faculty and staff, and possible causes and solutions to the problem.

Introduction

North Topsail Elementary School is located on the eastern side of Pender County just north of Hampstead, North Carolina. Currently, enrollment is at 647 students in grades K-5. For the past three years NTES has been identified as a Title I school due to a greater than forty percent enrollment of students who receive free and reduced lunch.

Additionally, NTES employs a faculty and staff of 70. Of these 70 employees, ten work in Kindergarten, eight work in First Grade, six in Second Grade, four in Third Grade, three in Fourth Grade, four in Fifth Grade, three in the Library, ten Cafeteria staff, five Office staff (including two Administrators), eight Exceptional Children staff, two Title I Reading Specialists, three Janitorial staff, one School Resource Officer, and three elective teachers.

The 2005-2006 school year brought a new population of learners into NTES. Three students with autism spectrum disorders were enrolled including a kindergarten student with low-functioning autism, a second grade student with high-functioning autism, and a third grade student with mid-range autism. In addition, seven new students with varying levels of autism related disorders will begin attending NTES at the start of the 2006-2007 school year.

According to the Individuals with Disabilities Education Act (IDEA), all students must be afforded the best possible education in the least restrictive environment. This federal law mandates that the faculty and staff in affected schools must do everything possible to provide that education; therefore school employees must be educated about students' needs, specifically those students on the autism spectrum (IDEA, 2006). The goal for NTES, according to Dr. Fonville, is to correctly implement the standards for providing special needs students with an education, in order to serve all their students to the best of their ability, and to maintain Title I funding status and accreditation.

Educational levels among the staff vary widely. The janitorial and cafeteria staff all completed an accredited high school degree program, the School Resource Officer and nine of the paraeducators have associates degrees, the remaining staff members all have a minimum education level of a bachelors degree in their respective fields, six classroom teachers as well the assistant principal and guidance counselor have their masters degree, and the principal has both a masters level degree and a doctoral degree.

Similarly, experience levels vary greatly among faculty with years of teaching experience ranging from one year to thirty-three years. Only five staff members have direct experience in working with children with autism. Three of these staff members have received a "crash course" style education in dealing with this specific disability over the course of the fall of 2005. Staff members were given a short and concise introduction to dealing with students on the autistic spectrum in the classroom along with behavioral modifications and techniques to use to help their integration into a traditional classroom go as smoothly as possible. Other faculty members discussed autism on a limited scope during their educational degree programs, but have no relevant experience with these children and their specific needs.

The administration, faculty, and staff at NTES have a positive attitude and see the relevance of learning to meet the behavioral and communication needs of this new population of students. The mission of the Pender County Schools is to facilitate student growth and learning so that each child develops to their maximum potential. Achieving

this mission will enable each child to obtain a higher standard of living and be a contributing member of society. The staff sees that the only way to adhere to the district's mission is to constantly find ways of adapting their current instruction based on the needs of their learners. Support for this change will be provided to the staff by both the school administration and county oversight administration because they know the importance of providing the best possible education for these children. Therefore, this project has been given a high priority due to its relevance and the immediate induction of student body changes at NTES. The school and county administration will make resources available as needed for this project to facilitate rapid development and implementation of the chosen solution.

Unfortunately, there are several constraints that have been identified for this project (see Appendix A). One major constraint is the short amount of time that is available to implement the appropriate solution. One possibility for bypassing this constraint is to incorporate a solution into the current school schedule and operations systems, which will alleviate any need for additional time and money commitments, as much as possible. Our time limit is also very constrained for the actual collection of data, so all data collection will be performed during faculty and staff meetings to ensure that information is collected from everyone in the most convenient and feasible manner. Additionally, there is limited extant data available on staff interaction and reaction to autistic students' behavioral and communication needs. This is due to the staff having only brief and limited experience with autistic students at NTES. In order to lessen the effects of this constraint, data will be collected using observations of the behavioral and communication strategies being used with the current student population. Subject Matter Experts will be also be interviewed as a part of the subject matter analysis, as well as a literature review.

The purpose of this needs assessment was to identify solutions that will help faculty and staff appropriately deal with potentially violent behavior and lack of basic communication with autistic students. In addition, we wanted information related to best practices for physically restraining students, interacting with emotionally volatile children, and understanding non-verbal communication of basic wants and needs. The needs assessment also focused on identifying the attitudes of staff concerning this population of students and their willingness to work with them. These data was gathered through observation, literature review, interviews, and surveys. Multiple techniques such as extant data analysis, subject matter analysis and needs assessment were conducted using these tools.

Needs Assessment Process

Description of Needs Assessment Methodology

This needs assessment was conducted according to Allison Rossett's Training Needs Assessment (TNA) model. This model present needs assessment as a logical examination of data that has been gathered using various techniques and tools. This model was utilized to collect information on best practices, current practices, feelings of stakeholders, and solutions based on the introduction of a new student population into the

school. Rossett outlines the steps for conducting a successful needs assessment as follows:

- 1) Assessing the Context
- 2) Determining Purposes
- 3) Selecting Techniques and Tools
- 4) Developing a TNA Plan
- 5) Developing TNA Stage Planners
- 6) Implementation of the Plan
- 7) Communication of the Results to Stakeholders.

The needs assessment team for this project consisted of three MIT students, Melissa Ennis, Amanda Hodges, and Kristen Lee. Throughout the course of the needs assessment each team member had individual roles and responsibilities in addition to time spent working as a cooperative team.

Melissa Ennis's individual responsibilities were the development of stage planner two, three, and four. Melissa gathered the relevant literature related to the field of Autism and organized the research for the team as a whole to study in stage two. Additionally, she wrote the interview questionnaires for stage three as well as the survey instrument for stage four.

Amanda Hodges's individual responsibilities were the development of stage planner one, serving as contact liaison with the Principal and Special Education Department Chair at North Topsail Elementary, and editing all documents and collection tools. Amanda conducted observations of current practices at North Topsail related to behavior and communication.

Kristen Lee's individual roles were the development of stage planner 5, the development of the needs assessment team timeline, and contact liaison with SME-Trish Torkildsen. Kristen was responsible for conducting follow-up interviews with NTES administration and staff based on survey results. She also managed the project's timeline throughout the progression of the project.

The implementation of stage one required Amanda to make contact with the administration and department chair at North Topsail and receive permission to observe the teachers in their regular classrooms conducting instruction.

Stage two required Melissa to gather relevant literature related to the field of Autism Spectrum Disorder and organize it into a packet which was reviewed extensively by all three team members. The information was prioritized by the team and used in outlining interview and surveys.

In stage three, Melissa developed the interview questionnaires while Kristen conducted the interviews with the SMEs. The team analyzed the data from the interviews as a group.

Surveys were used during stage four that were developed by Melissa. Surveys were implemented by Amanda and Kristen and followed up by both Amanda and Kristen as well. Completed survey results were compiled and analyzed by Melissa and results were interpreted by the team as a whole.

Stage five was conducted by Kristen who used the data from the surveys to develop final interview questions that followed up on any unanswered questions related to previous interview and survey results.

The team as a whole chose the tools and techniques to use as well as conducted analysis and interpretation of final data. The team worked together to complete all final write-ups of the data and results, make recommendations about solutions, and communicate results of the TNA to the administration of North Topsail Elementary.

The TNA began on February 17, 2006 and concluded on March 24, 2006. (Appendix) The tools used for conducting this training needs assessment included interviews, surveys, observations, and literature review. The techniques used in this TNA include extant data analysis, subject matter analysis, and needs assessment. The needs assessment plan broke the project into the five stages listed in chart 1-1. (See Appendix for Stage planners and Gantt Chart Timeline)

1-1 Needs Assessment Plan Stages

Stages/Techniques	Tools and Sources
1) Extant Data Analysis	Observation of teachers, paraeducators, and other staff of current practices related to behavior management and curriculum as related to communication needs of current student population.
2) Subject Matter Analysis	Conduct literature review of relevant materials to familiarize the needs assessment team with background information on autism.
3) Subject Matter Analysis	Interview SMEs: Julie Ather (Special Education Department Chair-NTES) and Trish Torkildsen (Special Needs Teacher-CFCI) for best practice information.
4) Needs Assessment	Survey faculty and staff at NTES to gather information on knowledge, attitudes and skills related to autism.
5) Needs Assessment	Interview NTES administration with questions concerning possible solutions, their feasibility, and also with any follow up questions based on survey results.

Data Collection

In order to collect data on what teachers at North Topsail Elementary School must change in their teaching practice in order to most effectively serve students with Autism Spectrum Disorder, five stages of data collection were used.

Faculty and staff were observed to collect extant data on their current practices in behavior management as well as communication styles with students of varying ability levels. The data for the observations was collected in a narrative format in which specific

situations such as violent behavior outburst and/or communication problems were given special attention.

Additionally, a literature review was conducted as part of the subject matter analysis to gather information that would allow the team to familiarize themselves with Autism Spectrum Disorder and as well as research on the best practices for serving the needs of students with the disorder.

Further information about best practices was gathered through interviews with the subject matter experts. These interviews included questions related to their experience with Autism Spectrum Disorder, challenges they have faced in working with this specific group of students, and the most important needs teachers have when working with this student population.

The data concerning the level of knowledge and skill as well as the attitudes of the faculty and staff concerning Autism Spectrum Disorder and students with this disorder was gathered through surveys conducted during stage four of the needs assessment. These anonymous surveys provided information on faculty and staff's previous experience with Autism, knowledge about the subject matter, and attitudes towards students with the disorder as well as openness to receiving more information about Autism.

Finally, further data was collected through interviews of the administration about possible solutions and their feasibility as well as follow-up interviews with faculty and staff based on survey results.

Data Analysis and Findings

Recommendations

Appendices