



# The Impact of an Educational and Activity Based Program on Inclusion of Children With Disabilities or Disorders

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## Introduction

### Background:

- The 2019 U.S. Census Bureau reported an increase in children with disabilities and an increase in prevalence of multiple disabilities found in children around 5 years of age (Young, 2021).
- Teachers often report feeling ill-equipped to manage classrooms when trying to include children with disability/disorder (D'Agostino & Douglas, 2021). Thus, teachers were less likely to have inclusive classrooms and were more likely to support discharging or never enrolling children with disabilities due to lack of confidence in managing the disabilities.
- Stacy McGuire and Hedda Meadan (2022) conducted a study to create inclusive environments for children with emotional or social delays, handle children with persistent challenging behaviors (PCBs), and help typically developing children understand how to interact with peers who had a disability or disorder. The researchers also discussed how exclusionary disciplines hinders children that exhibit PCBs. McGuire and Meadan (2022) found that teachers that made extra effort to create socially inclusive environments saw benefits not only for the children with disabilities or PCBs but also for the typically-developing children. The challenging behaviors decreased, which eventually led to improvements in the functional well-being of students and teachers individually.
- The Model of Human Occupation (Kielhofner & Burke, 1980) demonstrated the relationship between environment, volition, and habituation on individuals' performance. Having teachers learn the advantages of choosing to be more inclusive incorporates the concept of volition. Engaging in activities that require teachers to practice including others embraces the theory's aspect of habituation. Furthermore, giving educators chances to learn to adapt physical aspects of classrooms shows how dynamics of the environment can impact performance.

### Purpose:

To address preschool teachers' ability to:

- Understand the benefits and importance of incorporating inclusive principles for typically and non-typically developing children in preschools
- Use occupational therapy-oriented strategies (adaptive equipment and environmental modifications) to promote inclusive principles in preschools

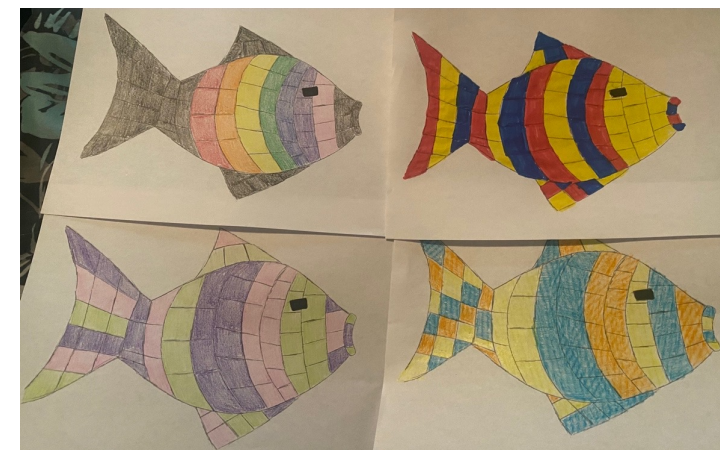
## Methods

### Recruitment:

- Through email/letter and associations with UCP/CCEP
- From preschools within of Montgomery, Alabama

### Icebreaker Activity:

- Told to complete puzzle to create an "inclusive School of Fish"
- Given disproportionate amount of specific color pieces required to complete puzzle
- Encouraged to seek resources/help from others in exchange for resources required to complete puzzle
- Debriefed on intent behind icebreaker and what each element in puzzle represented



### Education Module:

- 45 minute PowerPoint presented with opportunities for small discussion throughout
- Informed of occupational therapy techniques, adaptive equipment recommendations, and environmental modifications

### Pre-Test and Post-Test Survey:

- Pretest with Likert scale and open-ended questions administered prior to icebreaker activity and PowerPoint Presentation
- Post-test administered 2 weeks after post-test with Likert scale from pre-test and additional open-ended questions

## Results

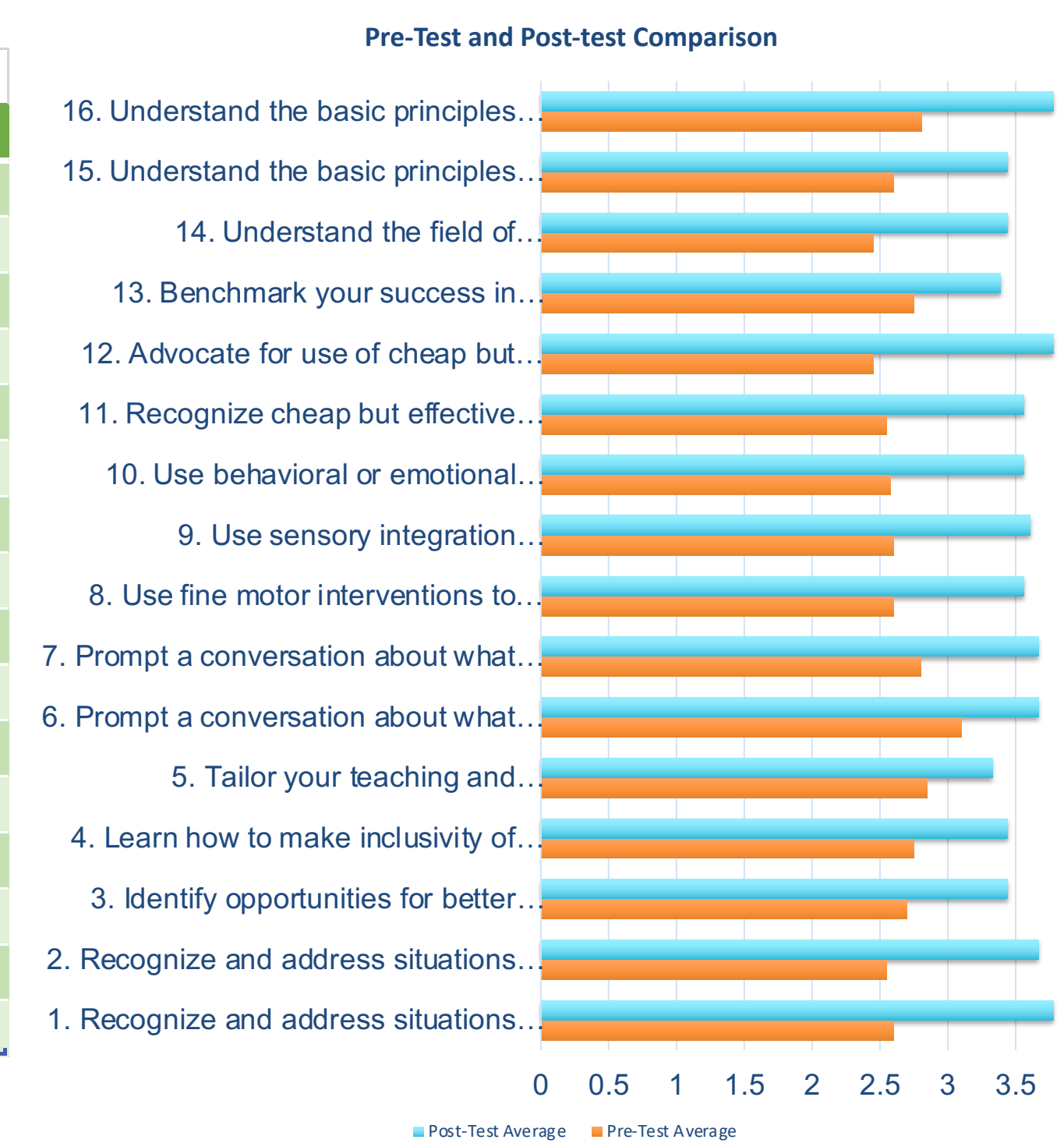
### Participants:

- 20 participants, 18 remained throughout, 2 dropped out at post-test
- 2 different preschools in Montgomery, AL

### Survey Responses:

- Increased understanding of occupational therapy noted through written explanation of the field
- Increased use of occupational therapy interventions to include non-typically developing children reported by teachers
- Increased understanding of inclusive principles reported by teachers in open-ended questions and through Likert scale

Inclusion Survey Results			
Survey	Pre-Test Average	Post-Test Average	Percent Increase
1. Recognize and address situations...	2.6	3.78	45%
2. Recognize and address situations...	2.55	3.67	44%
3. Identify opportunities for better...	2.7	3.44	27%
4. Learn how to make inclusivity of...	2.75	3.44	25%
5. Tailor your teaching and...	2.85	3.33	17%
6. Prompt a conversation about what...	3.1	3.67	18%
7. Prompt a conversation about what...	2.8	3.67	31%
8. Use sensory integration...	2.6	3.56	37%
9. Use fine motor interventions to...	2.6	3.61	39%
10. Use sensory integration...	2.58	3.56	38%
11. Recognize cheap but effective...	2.55	3.56	40%
12. Advocate for use of cheap but...	2.45	3.78	54%
13. Benchmark your success in...	2.75	3.39	23%
14. Understand the field of...	2.45	3.44	40%
15. Understand the field of...	2.6	3.44	32%
16. Understand the basic principles...	2.81	3.78	35%



## Discussion

### Icebreaker Activity:

- Teachers were able to take initial steps in understanding importance of creating classrooms that were more inclusive and that could potentially result in classrooms with far less challenges.

### Educational Module:

- Teachers and directors asked questions regarding specific children and challenging behaviors noted throughout the school year to learn more about how to better help the children succeed.
- The teachers' interest in specific strategies and interventions demonstrated need for more education and more resources to be provided to teachers on how to better support children within their classrooms.

### Pretest and Post-test Survey:

- Results of the pretest survey revealed lower levels of confidence to manage inclusive classes than the post-test survey revealed
- The posttest survey results depicted that learning about inclusive principles, adaptive equipment, and environmental modifications can increase teachers' level of confidence in ability to manage inclusive classrooms

### Justification for OT Intervention:

- The results of this study suggest that many directors or faculty members are willing to implement some cost-effective inclusive principles if provided with the resources or instruction to do so.
- The lack of knowledge about occupational therapy in general and occupational therapy-specific interventions that improve skills vital to children's success in the classroom also demonstrates an area where occupational therapists can intervene on behalf of children to improve overall quality of life.

## Discussion continued

### Unexpected Results:

- Multiple reports of burnout experienced during training revealed additional challenges to educating teachers on the importance of inclusive techniques
- Lack of motivation to respond to survey or provide written feedback demonstrated some teachers' negative regards and perception of inclusive environments.
- Reluctance to adopt interventions citing parent complaints demonstrated additional need for educating parents on benefits of inclusion as well as educating teachers on how to promote inclusive classrooms to parents of both typically and non-typically developing children.

### Limitations:

- Small Sample Size
- Lack of consideration of regional differences
- Time frame of study activities
- Differences in levels of prior exposure to inclusivity training with CCEP inclusion consultants
- Short duration of time in between collection of pre-test and post-test results

## Conclusion

### Implications:

- Continuing to provide education about the importance of inclusion and cost-effective strategies to better include children within preschools allows all children to advance in the social and academic setting of a preschool classroom.
- Allowing more occupational therapists or occupational therapy students into various school, workplace, and social settings to teach inclusive principles, modifications, and interventions will ultimately improve quality of life for both typically developing and nontypically developing people.

Future Research: Impact of affluence of surrounding communities regarding preschool inclusion, regional differences in support for inclusive classrooms, prevalence of teacher burnout in inclusive classrooms, and parental attitudes toward inclusive classrooms

## References

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## Acknowledgement & Contact information

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