
A COMPARISON OF IN-SERVICE SPECIAL AND MAINSTREAM SCHOOL TEACHERS' PERCEPTIONS ABOUT THE PROVISION OF ADAPTATION STRATEGIES FOR INCLUSIVE EDUCATION

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ABSTRACT

This study evaluates the readiness of mainstream and special education teachers to implement adaptation strategies for students with disabilities (SWDs), examining their approaches, attitudes, and willingness to use specialized inclusive education techniques. The study involved 145 teachers from Karachi's east and central districts, using a quantitative cross-sectional descriptive survey research approach. The survey assesses teachers' willingness to accommodate, analyzes attitudes towards disabled individuals using Lambert et al.'s (1996) and Yuker and Block's (1988) instruments, and collects demographic data. The results showed a significant difference between mainstream and special education teachers at the 0.05 alpha level, with the majority accepted at the 0.01 level. Special education teachers' responses were slightly higher on average than general education teachers' responses.

KEYWORDS

Inclusive Education, Mainstream Teachers, Special Educators, Adaptations,

INTRODUCTION

Since 1975, special education has evolved into a separate system with its own instructors, administrators, certification process, programs, and finances. Critics argue that the current system is dysfunctional, unproductive, and expensive, often segregating and stigmatizing students who could benefit from traditional educational settings, leading to its failure (Martin & Osborne, 1992; Hocutt, Gerber, 2017; Blanton, Pugach & Boveda, 2018; Francisco, Hartman & Wang, 2020; Lengyel & Vanbergeijk, 2021).

As inclusion progresses, teachers face challenges in adjusting group lessons, enhancing textbook presentations, altering assignments, and standardizing grades for students with disabilities (Ngadni, Singh, Ahmed & Baharudin, 2023). This requires extra meetings with specialists, teachers' training, and policy framing (Greenidge, 2022). Teachers can tailor their programs, curriculum, track progress, and involve special education professionals to meet the academic needs of their students (Otukile-Mongwaketse, Mangope & Kuyini, 2016).

An early attempt was made by Schultz (1982) stated that 29% of teachers were unaware of special needs students in their classrooms, and 85% made no explicit modifications for exceptional students. Common modifications included social inclusion and individualization of lessons or materials. Ammer's 1984 study found that elementary school teachers face challenges in preparing for individual variations in curriculum and instruction for children with impairments, and confusion about their roles and duties. However, few studies have explored the frequency of engagement and implementation of changes in inclusion programs for regular education teachers.

Rainforth (1992) found that inclusion models lead to more innovative and adaptable instruction by teachers. However, more information on adjustments and accommodations is needed to anticipate potential issues and plan effective inclusive practices, as teachers are the primary service providers (Vaughn et al., 1996). Few studies have looked at how different labels affect regular education teachers' willingness to make adaptations and frequency for students with diverse abilities (Green, 1983; Jamieson, 1984; Larrivee & Cook, 1979).

Inclusive educational settings enhance academic and social outcomes for students with disabilities, as evidenced by Baker, Wang, and Walberg's 1994 meta-analysis, which found that these students outperform those without inclusion in both academic and social categories. In 2010, Robbins's study on reading and math examination rankings found that inclusive placement significantly enhances student success, suggesting that

instructors should provide pre- and in-service training for special needs students. Jobe, Rust, and Brissie (1996) found a significant correlation between teachers' professionalism towards inclusive education and their teaching on inclusion. As continuing education in education expands, views on inclusion have shifted. Hammond and Ingalls (2003) suggest professional development training is necessary for implementing inclusive methods. Ross-Hill's (2007) proposal for trainers to receive professional development training on inclusive practices is sound, but data indicates that such training is necessary for successful integration efforts.

LITERATURE REVIEW

Facilitation is crucial for children with special needs to succeed in school, providing access to necessary accommodations. Reading assistance can help students with their grade level, course, and subject. Individualized Education Plans (IEPs) may require specific accommodations for academic success. Mainstream and special education instructors make frequent modifications to ensure students' success. Without essential and suitable changes, students may struggle to learn (Zirkel, 1994). Friend and Bursuck (2009) emphasize the crucial role of school instructors in special education, especially in accommodating students with disabilities. Teixeira, Mosquera & Stobäus (2015) suggested that mainstream teachers should systematically implement interventions and be knowledgeable about various accommodations, as they often need to create modifications specifically for these students.

Ezeh (2023) pointed out that teachers should differentiate between adaptations when providing educational assistance to students with disabilities (SWDs). Bhatia & Singh (2021) clarified that modification involves changing, lowering, or diminishing learning expectations, while accommodation involves reducing cognitive demands to alter the learning objective of a long-term task. McLaughlin (2004) define modification as a change in content, achievement, and outcome expectations for students, often involving using different reading passages for those struggling with reading, requiring caution in its use.

Role conflict happens when a teacher's professional life clashes with their official duties (Washburn-Moses, 2005). To avoid role ambiguity caused by a lack of knowledge, general education teachers must understand their roles in IEP implementation, including modifications, accommodations, and support. Gerstein and Gerstein (2004) further support this concept.

Heward (2003) suggests that professors of general education courses have a unique responsibility to help students with impairments. He recommends identifying and prioritizing each student's educational goals, creating learning tools and activities that encourage positive reactions to guided and autonomous practice, and implementing

systematic consequences for student achievement.

According to Gokbulut, Akcamete & Güneyli (2020), Co-teaching is a way for collaborating between general and special education teachers to help children with disabilities. It promotes a welcoming classroom environment, allowing all students to participate. Effective co-teaching is crucial for successful inclusion, often involving multiple instructors teaching mixed cohorts in the same classroom (Friend & Cook, 2007).

In mainstream education classrooms, collaboration between general and special educators is crucial for helping students with disabilities (Rofiah, 2023). Collaboration between general and special educators is critical in mainstream education when serving students with challenges (Rofiah, 2023). Pickl, Holzinger & Kopp-Sixt (2016) recommended that instructors prioritize professional development, teaching group evaluations, program adaptation, guidance, personal support, and technology.

The study of teachers' adaptability and attitudes towards disabled individuals is crucial for educational administrators as it aids in determining the appropriate placement of students with disabilities, the appropriate type of professional development for teachers, and who will benefit from it.

Hunt and Hunt (2000) and Ginevra, Maggio, Valbusa, Santilli & Nota (2022) emphasized the importance of research on teachers' attitudes towards students with disabilities, as attitudinal barriers can lead to increased inhibitions and difficulties. Gourneau (2005) emphasizes the importance of studying teachers' attitudes as they can have a positive impact on their students' lives. Ketterlin-Geller, Alonzo, Braun-Monegan, and Tindal (2007) suggest that assistance can help minimize personal characteristics that limit access to key knowledge and abilities, demanding an examination of teachers' capacity to make modifications and improvements, particularly when teaching SWDs in the least restricted environment.

RESEARCH OBJECTIVE

1. To implement adaptation strategies for SWDs, focusing on their approach, attitudes, and the relationship between attitudes and specialized inclusive education techniques.

RESEARCH QUESTION

1. The study investigated whether mainstream and special education teachers have vastly different perspectives on the execution of adaptation strategies for students with disabilities.

RESEARCH METHODOLOGY

Research Design

The study utilized a quantitative cross-sectional descriptive survey to examine teachers' willingness to apply adaptation strategies for students with disabilities, considering factors like gender, school system, schooling type, impairment, and having a disability-related family or friend.

Population and Sample

The target population comprises of mainstream and special education teachers drawn from schools in Karachi's east and central districts. Overall, the sample of the study included one hundred forty-five (145) teachers who volunteered to participate in the data-gathering procedure. The study adopts a non-random purpose sampling strategy, in which the researcher sets the search criteria for survey respondents. Johnson and Christensen (2008) and Stratton (2024) define purposeful sampling as the process of defining the characteristics of a group and locating individuals who meet those requirements.

Instrumentation

The survey was divided into three sections: assessing instructors' readiness to make modifications, studying attitudes toward people with disabilities, and collecting demographic data. For section I, Lambert et al.'s (1996) survey questionnaire was used, while section II was based on Yuker and Block's (1988) O-Point Attitudes toward Persons with Disabilities (ATDP). The third section contained demographic information about the participants, such as gender, age, education level, job title, personal handicap, and family members with impairments.

Data-Collection

This study utilized a survey containing a structured form that was delivered to all teachers in the selected schools. Following the principal's consent, each teacher in the targeted schools received a cover letter and a survey questionnaire. The cover letter acknowledged responders, explained the study's purpose, and provided instructions on how to take the survey. The survey application prevents the researcher from obtaining the respondent's identity while simultaneously informing them that their replies are voluntary and anonymous.

Data Analysis

The study utilized descriptive analysis to explore teachers' perspectives on curricular adaptations for SWDs, considering factors like teacher characteristics, school environment, and adaptive activities.

FINDINGS AND DATA ANALYSIS

The data analysis revealed that out of 145 participants, 79 (54%) were general education teachers and 66 (46%) were special educators. Further, demography identified that 57% (N=83) were middle school teachers, and 43% (N=62) were teaching at high school level. Table 1 shows demographics and response rates for teachers, including gender, school level, teaching assignment, personal disability, and family member with a disability.

Table 1: Demographics Characteristics of the Participants

Characteristic		N	Percentage of Sample
1] Gender	1.1 Male	55	38
	1.2 Female	90	62
2] School level taught	2.1 Middle school	83	57
	2.2 Secondary school	62	43
3] Type of school	3.1 Special school	66	46
	3.2 Mainstream school	79	54
4] Has disability?	4.1 Yes	21	14
	4.2 No	124	86
5] Disability in family	5.1 Yes	48	33
	5.2 No	97	67

In response to question 2, participating teachers are asked if they have received training on how to teach SWDs in general education settings, as well as the type of training they got. Twenty-six teachers (18%) decided not to answer the question. In the regular classroom, forty (28%) individuals confessed that they lacked certified training. Fifty-two teachers (36%) reported receiving training through workshops or seminars, followed by 47 (32%) who read online materials for information, 11 (08%) who reported receiving formal training, and 13 teachers (10%) who responded through other channels such as peer discussions, newspaper articles, flyers, brochures, and so on.

Table 2: Teachers' Responses about Getting Knowledge of Accommodation/Modification (N=145)

Response	N	Percentage
None	40	28
Certificate course	11	08
Workshops/Seminars	52	36
Reading online	47	32
Other	13	10
No response	26	18

Note: Participants may have answered more than one response.

Table 3: Comparison of Teachers' Willingness to Use Strategies by Group

Types of Accommodations/Modifications Strategies	Special Education Teachers	Mainstream Teachers
1. Collaborative training	4.87	4.90
2. Prolonged period of examination time	4.83	4.82
3. Mind map	5.00	4.83
4. Verbal exam	4.91	4.54
5. Conventional lecture	4.83	4.56
6. Marking modifications	4.78	4.05
7. Reduce disturbances	4.83	4.63
8. Buddy system	4.87	4.56
9. Substitute homework	4.87	4.44
10. Split homework	4.78	4.58
11. Minimize homework	4.52	3.96
12. Alternate exercises	4.78	4.43
13. Sort out text	4.83	4.35
14. Alternate conventional exam	4.91	4.48
15. Increase practice exercises	4.70	4.13
16. Short/brief answer	4.78	4.67
17. Changes in classroom management	4.91	4.45
18. Make simpler instructions	4.70	4.44
19. Task analysis	4.91	4.28
20. Allow calculator	5.00	3.94

Participants used a five-point Likert scale to score their willingness to implement twenty (20) adaption techniques. Table 3 reveals that teachers are generally willing to make adaptations for SWDs, but three major difficulties fall into the "don't know" category; including support for learning arithmetic, assigning less homework, and assessment procedures. In general education, the lowest average score for allowing calculators or math boards remains high. Special education teachers get the lowest average score for "less homework," but are still considered prepared. Respondents are most willing to let students engage in hands-on activities.

Table 4: Comparison of Teachers' Readiness to Use Strategies by Group

Types of Accommodations/Modifications Strategies	Special Education Teachers	Mainstream Teachers
1. Collaborative training	4.70	4.53
2. Extra time for examination	4.96	4.56
3. Mind map	4.70	4.30
4. Verbal exam	4.96	4.30

5. Conventional lecture	4.00	3.98
6. Marking modifications	4.57	3.68
7. Reduce disturbances	4.57	4.22
8. Buddy system	4.70	4.39
9. Substitute homework	4.61	3.92
10. Split homework	4.43	4.09
11. Minimize homework	4.74	4.09
12. Alternate exercises	4.43	4.11
13. Sort out text	4.61	4.06
14. Alternate conventional exam	4.74	4.27
15. Increase practice exercises	4.30	3.85
16. Short/brief answer	4.83	4.34
17. Changes in classroom management	4.91	4.33
18. Make simpler instructions	4.48	4.05
19. Task analysis	4.74	4.24
20. Allow calculator	4.96	3.94

As seen in Table 4, no variable had a mean less than 3.0, suggesting that neither the mean nor the range of variables were "definitely unprepared" or "maybe unprepared." The lowest average was really 3.68, putting all averages solidly in the top two quarters. Most groups discounted the written material's simplicity, as well as the students' direct methodological assistance. As a result, teachers are generally more qualified to adapt and adjust to children who have special needs. The data was sorted by mean score and standard deviation, with frequency tables displaying the top and bottom modifications and changes in each group. Table 5 reveals that 11 out of 20 variables are significant for cohort types at the 0.05 level. A Bonferroni correction was performed due to the large number of variables in the study. It seems that mainstream education teachers are less likely to change than special education teachers.

Table 5: Differences in Attitudes between Mainstream and Special Education Teachers

Strategies	F	Sig.	t	df	Sig. (2-tailed)	Bonferroni correction
1] Mind map	17.945	p<.001	5.031	188	.001	p<.001
2] Verbal exam	18.249	p<.001	3.762	70.753	.001	p<.001
3] Marking modification	12.582	p<.001	5.087	55.060	.001	p<.001
4] Substitute homework	16.462	p<.001	3.633	55.461	.001	p<.001

5]Alternate exercises	23.808	p<.001	1.888	28.436	.069	p<.001
6]Make simpler instructions	18.295	p<.001	4.177	55.487	.001	p<.001
7]Conventional lecture	5.495	p<.020	1.427	31.662	.163	p<.05
8] Classroom management	16.167	p<.001	3.609	72.102	.001	p<.001
9] Sort out text	14.027	p<.001	3.020	50.001	.001	p<.001
10] Task analysis	13.412	p<.001	2.548	53.421	.007	p<.001
11] Allow calculator	17.652	p<.001	4.212	86.052	.001	p<.001

DISCUSSION

The research examines teachers' ability to adjust the curriculum for SWDs in general education. Data from 145 teachers were analyzed using Bonferroni's equality of variance and correction. There was an observable difference in responses between mainstream teachers and special educators, with in-service special educators scoring somewhat higher on average. The findings have influenced future studies. Klehm (2014) stated that teachers' perspectives on SWDs can significantly impact their achievement. These students in mainstream education must achieve mastery based on grade-level expectations. Kayabaşı (2020) also concluded that teachers shall make specific accommodations and adaptations to each student when teaching and assessing, ensuring they understand and perform at their level.

Lloyd, Kameenui & Chard (2014) define the contemporary issues in education, which include students with disabilities, as a hierarchical structure based on learner responses to instructions. However, special education has developed dramatically in recent decades, necessitating a rethinking and strengthening of the routines of special education in delivering the best possible education for all at-risk students. In another study; Vansteenkiste, Swart, Van Avermaet & Struyf (2020) found that without in-service training, mainstream teachers are unprepared to use inclusive techniques. General education teachers often prefer group teaching, while special education teachers seldom provide highly tailored instruction for students with specific needs. In general, there may be a variety of barriers to inclusive education. The fundamental literacy needed for reading, writing, science, and math is a challenge. Students confront significant challenges in secondary education (Dash, 2018). According to Veradegita et al. (2021), teachers are less likely to alter the curriculum for children with special needs at higher grade levels, when inclusion studies are the major focus.

However, past researches indicate that teachers who have a negative attitude toward children with disabilities or fail to deliver appropriate teaching are less likely to be effective (Jury, Laurence, Cèbe & Desombre, 2023).

The study found that the time required to comply with adaptations doesn't affect their acceptance. Participant teachers found modifications acceptable, including practice materials, peer tutoring, and additional exercises. Boulton (2003) found that other classroom strategies, such as grading adjustments, smaller homework units, alternative textbook formats, and student drawing as part of homework written, are not widely accepted. Furthermore, the outcomes of this study are broadly consistent with previous research indicating teachers' readiness to modify and accommodate SWDs. The results tend to support Adams, Mohamed, Moosa & Shareefa's (2023) assertion that the type of adaptations does not influence the teacher's willingness to make modifications. There were no significant differences in preparedness or motivation to help and change students with special needs between newly appointed mainstream school teachers and those who had been teaching for a long time. This study emphasizes the importance of social interaction and cultural development for learning (Moll, L., 1990). The study highlights the growing social divide due to technology and the Internet, requiring students to compete and cooperate in a global marketplace. To prepare the workforce for the 21st century, schools must rapidly change curricula and teaching strategies to equip students with critical and creative skills to face challenges.

Senge (2001) suggests that classroom education must evolve from a passive, whole-group method to a more active, collaborative one. This adjustment is especially crucial when educating SWDs in regular classrooms. Teachers should accept this challenge with enough administrative assistance to plan and prepare adaptations for the successful inclusion of children with disabilities.

RECOMMENDATIONS

1. Provide regular, structured professional development and training for both mainstream and special education teachers to improve their understanding and application of adaptive strategies for SWDs. Training should be focused on inclusive education techniques, behavior management, and individualized instruction strategies tailored to students with disabilities.
2. Encourage collaborative teaching between mainstream and special education teachers. Creating joint planning sessions, peer observations, and mentorship programs can help bridge the gap in perceptions and promote the exchange of best practices regarding inclusive education strategies.
3. Schools should promote the consistent use of evidence-based instructional strategies that have proven effective for SWDs. This could involve the integration of

differentiated instruction, Universal Design for Learning (UDL), and assistive technologies that cater to various student needs in both mainstream and special education settings.

4. Addressing negative attitudes toward inclusion by fostering a more positive, accepting environment for students with disabilities is critical. School leadership can promote awareness campaigns and provide resources to shift teacher attitudes towards more empathy, understanding, and commitment to inclusive education.

5. Implement a system for regular assessment of teachers' use of adaptation strategies for SWDs, coupled with constructive feedback. Schools could create self-assessment tools, peer evaluations, and direct feedback from administrators to ensure that teachers are continually improving their practices in inclusive education.

REFERENCES

- Adams, D., Mohamed, A., Moosa, V., & Shareefa, M. (2023). Teachers' readiness for inclusive education in a developing country: fantasy or possibility? *Educational studies*, 49(6), 896-913.
- Ammer, J.J. (1984). The mechanics of mainstreaming: Considering the regular educators' perspective. *Remedial and Special Education*, 5 (6), 15-20.
- Baker, E. T., Wang, M. C., & Walberg, H. J. (1994). The effects of inclusion on learning. *Educational Leadership*, 52(4), 33-35.
- Bhatia, R., & Singh, R. (2021). Inclusion: Historical perspectives, inclusive education and current status. *Ilkogretim Online*, 20(1), 8587-8605.
- Blanton, L. P., Pugach, M. C., & Boveda, M. (2018). Interrogating the intersections between general and special education in the history of teacher education reform. *Journal of Teacher Education*, 69(4), 354-366.
- Boulton, B. (2003). An examination of the relationship between the acceptability and reported use of accommodations for students with disabilities by general education teachers and teachers' sense of efficacy (Unpublished doctoral dissertation). Louisiana State University, Baton Rouge.
- Dash, N. (2018). Problems and challenges of inclusive education for students with special needs. *Online International Interdisciplinary Research Journal*, 8(1), 155-162.
- Ezeh, G. E. (2023). *Elementary School Teachers' Challenges in Teaching Students with Special Needs in an Inclusion Classroom* (Doctoral dissertation, Northcentral University).
- Francisco, M. P. B., Hartman, M., & Wang, Y. (2020). Inclusion and special education. *Education Sciences*, 10(9), 238.
- Friend, M., & Bursuck, W. D. (2009). *Including students with special needs: A practical guide for classroom teachers* (5th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Friend, M., & Cook, L. (2007). *Interactions: Collaboration skills for school professionals*. Boston, MA: Allyn & Bacon.
- Gerber, M. M. (2017). A history of special education. In *Handbook of special education*
-

- (pp. 3-15). Routledge.
- Gerstein, R. M., & Gerstein, L. (2004). *Education law: An essential guide for attorneys, teachers, administrators, parents and students*. Tucson, AZ: Lawyers & Judges Publishing Company Inc.
- Ginevra, M. C., Di Maggio, I., Valbusa, I., Santilli, S., & Nota, L. (2022). Teachers' attitudes towards students with disabilities: The role of the type of information provided in the students' profiles of children with disabilities. *European Journal of Special Needs Education*, 37(3), 357-370.
- Gokbulut, O. D., Akcamete, G., & Güneyli, A. (2020). Impact of Co-Teaching Approach in Inclusive Education Settings on the Development of Reading Skills. *International Journal of Education and Practice*, 8(1), 1-17.
- Gourneau, B. (2005). Five attitudes of effective teachers: Implications for teacher training. In T. Lintner (Ed.), *Essays in Education*, 13, 1-8.
- Green, C.S. (1993 March). Attitudes of regular teachers and administrators toward mainstreaming (Inclusion). In C.J. Liberton (Ed). And Others. *A system of care for children's mental health: Expanding the research base*. (pp. 241-246) Annual Research Conference Proceedings, Tampa, FL. (ERIC Document Reproduction Service No ED 372 524).
- Greenidge, N. A. (2022). *Teachers' Perceptions of Their Roles and Challenges with Inclusion* (Doctoral dissertation, Walden University).
- Hammond, H., & Ingalls, L. (2003). Teachers' attitudes toward inclusion: Survey results from elementary school teachers in three southwestern rural school districts. *Rural Special Education Quarterly*, 22(2), 24-30.
- Henning, M. B., & Mitchell, L. C. (2002). Preparing for inclusion. *Child Study Journal*, 32(1), 19-29.
- Heward, W. L. (2003). Ten faulty notions about teaching and learning that hinder the effectiveness of special education. *Journal of Special Education*, 36(4), 186-205.
- Hoover, J. J., & Patton, J. R. (2008). The role of special educators in a multi-tiered instructional system. *Intervention in School and Clinic*, 43(4), 195-202.
- Jamieson, J.D. (1984). Attitudes of educators toward the handicapped. In R.L. Jones (Ed). *Attitudes and attitude change in special education: Theory and practice*. (pp. 206-222). (Report No. EC 170 495). ERIC Clearinghouse on Handicapped and Gifted Children, Reston, VA. (ERIC Document Reproduction Service NO. ED 249 694).
- Jobe, D., Rust, J. O., & Brissie, J. (1996). Teacher attitudes toward inclusion of students with disabilities into regular classrooms. *Education*, 117(1), 148-154.
- Jury, M., Laurence, A., Cèbe, S., & Desombre, C. (2023, January). Teachers' concerns about inclusive education and the links with teachers' attitudes. In *Frontiers in Education* (Vol. 7, p. 1065919). Frontiers Media SA.
- Kayabaşı, Z. E. K. (2020). Teachers' opinions on inclusive education. *International Journal of Psychology and Educational Studies*, 7(4), 27-36.
- Ketterlin-Geller, L. R., Alonzo, J., Braun-Monegan, J., & Tindal, G. (2007). Recommendations for accommodations: Implications of (in)consistency. *Remedial and Special Education*, 28(4), 194-206.
- Klehm, M. (2014). The effects of teacher beliefs on teaching practices and achievement of students with disabilities. *Teacher Education and Special Education*, 37(3), 216-240.

-
- Lambert, M.J., Burlingame, G.M., Umphress, V., Hansen, N.B., Vermeersch, D.A., Clouse, G.C., & Yanchar, S.C. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology and Psychotherapy*, 3, 249-258.
- Larrivee, B., & Cook, L. (1979). Mainstreaming: A study of the variables affecting teacher attitude. *The Journal of Special Education*, 13, 315-324.
- Lengyel, L. S., & Vanbergeijk, E. (2021). A Brief History of Special Education. *The Exceptional Parent (Online)*, 51, 25-29.
- Lloyd, J. W., Kameenui, E. J., & Chard, D. J. (2014). *Issues in educating students with disabilities*. Routledge.
- Martin, G. L., & Osborne, J. G. (1992). *Psychology, Adjustment and everyday living* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- McLaughlin, M. J. (2004). *What every principal needs to know about special education*. Thousand Oaks, CA: Corwin Press.
- Michael, M. & Trezak, B. J. (2006). Universal design and multiple literacies: Creating access and ownership for students with disabilities. *Theory into Practice*, 45(4), 311-318.
- Ngadni, I., Singh, G. K. S., Ahmed, R. Y. B., & Baharudin, S. N. A. (2023). Challenges faced by teachers inclusive classrooms in early childhood education (ECE) setting. *International Journal of Academic Research in progressive education and development*, 12(2), 1635-1649.
- Otukile-Mongwaketse, M., Mangope, B., & Kuyini, A. B. (2016). Teachers' understandings of curriculum adaptations for learners with learning difficulties in primary schools in B otswana: issues and challenges of inclusive education. *Journal of Research in Special Educational Needs*, 16(3), 169-177.
- Pickl, G., Holzinger, A., & Kopp-Sixt, S. (2016). The special education teacher between the priorities of inclusion and specialisation. *International Journal of Inclusive Education*, 20(8), 828-843.
- Rainforth, B. (1992). *The effects of full inclusion on regular education teachers: Final Report*. San Francisco, California Research Institute, San Francisco State University.
- Robbins, J. (2010). *The effect of inclusion on student performance on state assessments* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.
- Rofiah, N. H. (2023). The progress of inclusive education toward agenda 2030 in Indonesia. In *Progress Toward Agenda 2030* (Vol. 21, pp. 191-207). Emerald Publishing Limited.
- Ross-Hill, R. C. (2007). *Regular education teacher attitudes on the inclusion of students with special needs in elementary and secondary school classrooms* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database.
- Schultz, L.R. (1982). Educating the special needs student in the regular classroom. *Exceptional Children*, 48 (4), 366-367.
- Senge, P. (2001). *The fifth discipline: The art and practice of the organization*. New York, NY: Currency Doubleday.
- Smith, J. D. (1998). *Inclusion: Schools for all students*. Belmont, CA: Wadsworth Publishing.
- Stratton, S. J. (2024). Purposeful sampling: advantages and pitfalls. *Prehospital and disaster medicine*, 39(2), 121-122.
- Teixeira, T. C., Mosquera, J. J. M., & Stobäus, C. D. (2015). Teachers tell us about full inclusion. *Creative Education*, 6(10), 1044-1052.
-

-
- Vansteenkiste, D., Swart, E., Van Avermaet, P., & Struyf, E. (2020). Professional development for inclusive education. In Oxford Research Encyclopedia of Education.
- Vaughn, S., Schumm, J.S., Jallad, B., Slusher, J., & Saumell, L. (1996). Teachers' views of inclusion. *Learning Disabilities Research, & Practice*, 11 (2), 96-106.
- Veradegita, M., Najmah, L., Ulvia, R., Batubara, A. N., Tanjung, S. H., & Umily, I. (2021). Curriculum Implementation in School of Inclusive Education. *International Journal of Multidisciplinary Research of Higher Education*, 4(1), 36-43.
- Washburn-Moses, L. (2005). Roles and responsibilities of secondary special education teachers in an age of reform. *Remedial and Special Education*, 26(3), 151-158.
- Yuker, H. E. (1988). *Attitudes toward persons with disabilities*. Springer Publishing Company.
- Zirkel, P. A. (1994). Costly lack of accommodations. *Phi Delta Kappan*, 75(8), 652-653.