

The Impact of Inclusive Education on Learning Outcomes of Students with Diverse Needs

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Abstract: *The concept of inclusive education is to make sure that learners who are able, with various backgrounds, and who need support can be meaningfully involved in education. This paper explored its links with academic achievement, engagement and social participation with a focused narrative review of selected research syntheses, a review of student experiences and international and Indian policy documents. There is no literature available to support a clear-cut answer that it is true that mainstream placement automatically improves learning. Evidence is different among learner groups, outcomes of inclusion and definition of inclusion. There was some research that suggests students with general learning difficulties experienced cognitive benefits while a wider review gave mixed academic and psychosocial outcomes. The paper draws these differences from a division between placement and the quality of the education provided. It suggests that being taught, supported, assessed and in a safe classroom setting are feasible settings for improved outcomes. Teacher collaboration and tracking student progress and providing student feedback in assessments are recommended. No primary data were gathered and the paper therefore provides an evidence-informed interpretation and does not provide an original causal estimate.*

Keywords: Inclusive education; learning outcomes; learner diversity; disability; differentiated instruction; educational equity

I. INTRODUCTION

Differences in how information is accessed, communicated and engaged in classroom life must be met by education systems. A common curriculum can provide shared opportunities but a common approach to teaching it may not allow some learners to take advantage of these opportunities. An important practical question then comes into mind when considering inclusive education: what changes in the way in which we teach and organise schools allow for students with diverse needs to learn together in meaningful ways?

Learner diversity includes disability, general learning difficulties, language differences and social disadvantage. There is overlap with these categories but they are not to be confused with one another. The student who needs and uses accessible text may experience a different instructional barrier than another student learning in an unfamiliar language. It is more useful for planning support to identify the barrier than assume that a category is a predictor of all educational needs.

This paper adopts the meaning of inclusion as having access to equal opportunities for learning, with access to appropriate support and significant participation. It argues that the educational outcomes of inclusion are dependent on what happens in classrooms. Internationally, inclusion is set in a broader context of educational equity. The evidence discussed here, however, is the strongest comparative evidence in relation to disability and special educational needs. For other types of diversity, conclusions are thus made as implications for practice, rather than as effects for all learner groups.

II. OBJECTIVES

The paper had three objectives:

- To explore evidence on the outcomes of inclusive education.
- To determine areas of variance that may be due to conditions.
- To make suggestions for how to teach and how to measure performance at school

III. LITERATURE REVIEW

Van Herwegen et al. (2026)¹ combed through a number of interventions aimed at enhancing educational outcomes for students with special educational needs and disabilities and found them. A narrative review of 467 studies was included and a meta-analysis of 349 studies was included. Positive outcomes were achieved with targeted interventions in reading, writing and mathematics, though with significantly different results. There were no differences in reading or writing achievement when comparing mainstream and special-school settings however mathematics interventions demonstrated greater achievement gains in mainstream settings. This research indicates that instructional support is important and that placement is not sufficient for explaining educational progress.

Jung and Lansey (2026)² conducted a systematic review of academic interventions in inclusive school settings for students with extensive support needs. Their analysis was based on 18 single case studies, and Tau-U indices were used to analyze intervention effects. Self-management and self-monitoring strategies were consistently found to be large positive academic effects, as were explicit systematically delivered instruction. Peer-support interventions and story-based interventions, however, had more mixed results. Clear instructional responsibilities and appropriate training and sustained implementation fidelity were emphasised. Based on these findings, the present study will conclude that meaningful inclusion cannot be achieved without proper implementation of teaching strategies, but just by having students physically present in general education classrooms.

Sedláčková et al. (2025)³ conducted a qualitative systematic review to explore the experiences of students with physical disabilities. The review comprised 19 studies with the age range 6–20 years and incorporated evidence relating to participation, access and the day to day life in school. Students still faced challenges in mainstream schooling, some of which may have an impact on how self-perceived, their educational journey and their future plans. The review revealed that curriculum accommodations and appropriate support and student involvement in decision-making were important responses. It is relevant because it demonstrates a need to include evidence of belonging and meaningful participation, as well as academic achievement, in evaluation, and highlights that the qualitative evidence does not provide causal evidence of impacts on academic achievement.

¹ Van Herwegen, J., Masterman, T., Dockrell, J., Marshall, C., Gordon, R., & Thomas, M. S. C. (2026). Raising educational outcomes for students with special educational needs and disabilities: A systematic review and meta-analysis. *Review of Education*, 14(1), Article e70127. <https://doi.org/10.1002/rev3.70127> [doi.org](https://doi.org/10.1002/rev3.70127)

² Jung, S., & Lansey, K. R. (2026). Academic intervention effectiveness in inclusive education settings for students with extensive support needs: A systematic review. *Education and Training in Autism and Developmental Disabilities*, 61(1), 68–95. <https://doi.org/10.1177/21541647261440540> [journals.sagepub.com](https://doi.org/10.1177/21541647261440540)

³ Sedláčková, D., Kantor, J., Belkin, L., Marečková, J., Smrčková, A., Du, J., Li, J., Svobodová, Z., & Munn, Z. (2025). The experiences of students with physical disabilities in inclusive education: A qualitative systematic review. *Educational Research Review*, 49, Article 100715. <https://doi.org/10.1016/j.edurev.2025.100715> [www.sciencedirect.com](https://doi.org/10.1016/j.edurev.2025.100715)

Hunt et al. (2025)⁴ provided a systematic review of interventions that enhance educational outcomes for individuals with disabilities in low and middle income countries. There was a degree of diversity in how inclusion is defined and understood, and this was recognised in the review, which covered mainstream and specialised provision. It found no systematic differences in effectiveness of interventions across these settings, but warned the predominantly positive results make interpretation difficult. They emphasized the importance of education-system-level change, such as policy and infrastructure changes. The review contributes to the current paper by focusing on resources, implementation conditions and contextual barriers for measuring educational outcomes.

Krämer et al. (2021)⁵ performed a meta-analysis to compare cognitive and psychosocial outcomes of inclusive and segregated educational settings. A total of 40 studies, 428 effect sizes and 11,987 students were analyzed. The cognition effect in inclusive settings was positive and significant with $d = 0.35$ for students with general learning difficulties, and $d = 0.00$ for the pooled psychosocial effect. Cognitive and psychosocial differences between settings were not significant for students who do not have general learning difficulties. The results indicate possible educational advantages for the students with learning disabilities, but not the same social advantages. However, placement inferences are also subject to possible selection effects.

Conceptual Framework

The analysis was based on three distinctions. Access is the first as concerns the ability to enter and access to use education provision. Participation is focused on being engaged in lessons, interactions and decision making. Achievement relates to how far towards educational objectives. A student could be in school but not able to access or understand the task.

Secondly, academic and social achievements are correlated, but not identical. Knowledge of the subject, literacy and numeracy cannot be assumed from attendance and acceptance by peers. Conversely, a student's test scores are not necessarily indicators of his or her sense of safety or inclusion. Assessing inclusion needs to consider learning and the context of learning.

Third, the job of universal design and the job of individual support are complementary. Universal Design for Learning is centered around three strands: multiple means of engagement, multiple means of representation and multiple means of action and expression. This structure could help guide planning for variations prior to the start of lessons. One implication is to provide easy-to-understand explanations and multiple ways to respond without becoming unclear about the learning goal. A few pupils also needed one to one support or special help. A generally accessible lesson will not negate the need to consider individual support needs.

IV. METHODOLOGY

A focused narrative review was employed in this paper. Information was found by purposeful online searches on inclusive education, academic achievement, student learning difficulties and student experiences, and accessible teaching. The priority was given to publisher pages, review-organisation summaries and official institutional resources. The chosen materials consisted of two research syntheses of learner outcomes, a qualitative evidence synthesis of students' experiences, and three materials on policy or instructional design. The sources were from 2020 to 2024, and

⁴ Hunt, X., Saran, A., White, H., & Kuper, H. (2025). Effectiveness of interventions for improving educational outcomes for people with disabilities in low- and middle-income countries: A systematic review. *Campbell Systematic Reviews*, 21(1), Article e70016. <https://doi.org/10.1002/cl2.70016> pubmed.ncbi.nlm.nih.gov

⁵ Krämer, S., Möller, J., & Zimmermann, F. (2021). Inclusive education of students with general learning difficulties: A meta-analysis. *Review of Educational Research*, 91(3), 432–478. <https://doi.org/10.3102/0034654321998072> journals.sagepub.com

the research took place in October 2026. This time period reflected the range of sources selected and not meant to indicate a large number of recent publications.⁶

Selection was purposive: material was kept if it directly addressed the research questions and it could be identified as having some identifiable material authorship or institutional responsibility. The learners groups, types of outcome, and the definition of inclusion and the extent of the evidence available were compared. Educational priorities were set in policy documents, rather than as evidence that interventions have an impact on achievement.⁷

This review was non-systematic review and meta-analysis. An exhaustive database search and duplicate screening was not performed, nor was a formal risk-of-bias assessment conducted. If an accessible summary of the evidence was provided by a publisher or the organisation, the interpretation was limited to what was provided by this source. Neither student records were collected nor were new effect sizes calculated nor were new significance tests performed. The interpretations below are thematic and based on published evidence.

V. RESULT

Table 1. Distribution of Sources Included in the Narrative Review

Type of source	Number	Percentage
Research syntheses on learner outcomes	2	33.33%
Qualitative evidence synthesis on student experiences	1	16.67%
Policy or instructional-design resources	3	50.00%
Total	6	100.00%

Interpretation

Table 1 shows the distribution of six sources included in the narrative review. The most numerous type of resources are policy or instructional-design resources, which make up three resources (50.00%). There are two sources of research syntheses (33.33%) and one source of qualitative evidence synthesis (16.67%) of student experiences. This composition is a blend of teaching directions and proof of learning outcomes and learners' experiences. But with more policy resources, half of the samples will offer contextual and/or instructional support as opposed to outcome evidence. These percentages are a description of the composition of the sources and do not reflect the quality or effectiveness of the research.⁸

⁶ Ainscow, M. (2020a). Inclusion and equity in education: Making sense of global challenges. *Prospects*, 49, 123–134. <https://doi.org/10.1007/s11125-020-09506-w> [Springer Nature Link](#)

⁷ Ainscow, M. (2020b). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587> [tandfonline.com](https://www.tandfonline.com)

⁸ CAST. (2024). *CAST Universal Design for Learning Guidelines version 3.0*. <https://udlguidelines.cast.org/>

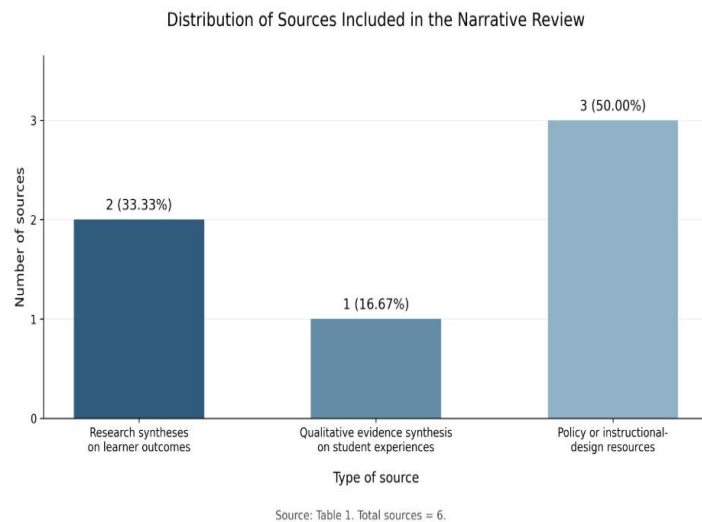


Figure 1. Distribution of Sources Included in the Narrative Review

VI. FINDINGS AND DISCUSSION

The evidence identified revealed that inclusive education is not a one size fits all intervention. The studies varied in what they measured, how students were supported, and who was included in the studies. Any discussion of placement must be accompanied by a consideration of the quality of provision; the following themes provide reasons for this.⁹

6.1 Academic Achievement and Variation Across Learner groups

A review of literature, which included a meta analysis of inclusive and segregated settings for students with general learning difficulties, found that more inclusive education was beneficial for cognitive outcomes. This helps to consider common learning opportunities with this group.

A wider overall Campbell review gave a more measured picture. The summary mentioned that 15 non-randomised studies were included in the meta-analyses, which found that there was no consistent impact on academic or psychosocial outcomes. Inclusion had also small and statistically insignificant average effects. The methodological shortcomings result in limited causal certainty. An average grade of Not Significant should not be taken as an indication that all types of provision are equal.

These syntheses differ in a few ways that could be due to population, study-selection and outcome differences. Their underlying studies were not reanalysed in this paper and it was not possible to identify the contribution of each explanation. The two messages are related and are: Do not make universal promises based on placement labels. Schools should evaluate if each student is getting the proper instruction and making progress over the course of time.¹⁰

⁹ Dalgaard, N. T., Bondebjerg, A., Viinholt, B. C. A., & Filges, T. (2022). The effects of inclusion on academic achievement, socioemotional development and wellbeing of children with special educational needs. *Campbell Systematic Reviews*, 18(4), Article e1291. <https://doi.org/10.1002/cl2.1291> journals.sagepub.com

¹⁰ Gee, K., Gonzalez, M., & Cooper, C. (2020). Outcomes of inclusive versus separate placements: A matched pairs comparison study. *Research and Practice for Persons with Severe Disabilities*, 45(4), 223–240. <https://doi.org/10.1177/1540796920943469> journals.sagepub.com

6.2 Participation and the Students' Experience

The experiences of children and young people with disabilities and special needs were at the centre of a meta-aggregative review. This attention highlights the importance of studying inclusion from the learner's viewpoint as well as institutional markers. The school's self-concept of inclusiveness must be evaluated in terms of the working access that students have to participation and how they actually participate.

Implication for practice: in the classroom, should students be able to join in discussions, to get help without embarrassment, and to participate in group activities? Proximity is not necessarily enough of a signal. A learner may be seated in a mixed group and given tasks which are not part of the main lesson and/or a passive role.

Structured group roles, explicit participation routines and confidential feedback are some of the ways that teachers can detect these barriers. These are pedagogical recommendations that are derived from the review and not interventions tested in this paper. They should be assessed for success by observation and student feedback and evidence of learning.

6.3 Instruction and Assessment

When accessible teaching is provided, it should maintain the same knowledge or skill being taught, but lower the level of barriers. When a task evaluates scientific reasoning, a student may provide an oral description of a conclusion, a student-friendly written explanation or a communication support that is suitable to the task. Reading out loud alters what is being measured if the task is specifically measuring unaided reading. Thus, suitability of an accommodation will depend on the assessment purpose.¹¹

Teachers can use formative assessment to determine whether the student did not understand the content or struggles with the response format. Time is provided for short checks, guided practice and feedback to adjust support prior to a final assessment. These measures should be designed to support students' individual learning objectives, not as a long-term placement of students in 'low expectations'.

The proposed approach is a blend of common curricular participation (CCP) and targeted instruction. Students may require extra practice, explanations or support from professionals without leaving the classroom community. It is important to document the support provided and the learner's reaction to the support as well since an accommodation on paper does not provide an explanation of improvement in outcomes.

6.4 Implications for the Indian School Context

Equitable and inclusive education have been identified as an Education priority in the National Education Policy 2020 and support for learners with disabilities and disadvantaged learners have been mentioned in relation to equitable and inclusive education. Its commitments serve as a policy framework for the consideration of access, teacher preparation and educational support. They are not in isolation indicators of implementation quality or measured learning gains.¹²

The review recommends to start a practical account of barriers for school planning. Schools are able to identify materials that are inaccessible to learners, communication challenges, and gaps in learning support and then take responsibility for doing something about it. For such environments where resources are scarce, print materials, instructions and planned teacher consultation can be useful starting points. When selecting resources, decisions should be made based on the needs identified, not assuming that one set of resources or teaching style will be suitable for all learners.

¹¹ Kuntz, E. M., & Carter, E. W. (2021). Effects of a collaborative planning and consultation framework to increase participation of students with severe disabilities in general education classes. *Research and Practice for Persons with Severe Disabilities*, 46(1), 35–52. <https://doi.org/10.1177/1540796921992518> journals.sagepub.com

¹² Mansouri, M. C., Kurth, J. A., Lockman Turner, E., Zimmerman, K. N., & Frick, T. A. (2022). Comparison of academic and social outcomes of students with extensive support needs across placements. *Research and Practice for Persons with Severe Disabilities*, 47(2), 111–129. <https://doi.org/10.1177/15407969221101792> journals.sagepub.com

Family involvement should provide information on communication, strengths and learning priorities. Students should be consulted also by available means. Consultation should impact teaching decisions, but should not be a replacement for school's responsibility to teach and track progress.¹³

6.5 A Proposed Framework for Evaluating Learning Outcomes

The conceptual analysis was translated into an evaluation framework, as shown in Table 1. It is a proposed tool – not an observed finding. Schools should select indicators that are relevant to the age level, the curriculum and individual objectives, to set a baseline and to monitor change over more than one time point.

Table 1 Proposed indicators for evaluating inclusive provision

Domain	Suggested evidence	Interpretation
Academic progress	Curriculum tasks and individual goal reviews	Compare progress with baseline and intended learning
Participation	Structured lesson observations	Examine active involvement and access to tasks
Student experience	Accessible interviews or feedback	Identify belonging, safety and barriers
Support delivery	Accommodation and consultation records	Check whether planned support was provided

Recommendations

Schools' definition of inclusion must be based on access, participation and progress, and this must be tied to classroom planning. Teacher development needs to encompass opportunities to practise accessible teaching, adaptation of assessment and consultation with specialists. Collaborative efforts are recommended over individual teachers taking on the role of providing support where it is identified as a need.¹⁴

The learning evidence should be checked with experience and support records from learners. The first step to take when progress is poor is to look at instructional barriers and sufficiency of instructional support. Attendance and examination results are still valid but have limited explanatory power in regard to educational inclusion.

Future research should provide a description of both the teaching and the resources of each setting, not just the labels of inclusive vs. segregated. Baseline differences, prior attainment, support intensity should be looked at in the longitudinal studies. Findings for the different needs in the research should be reported and generalisation of disability-specific information should be avoided in relation to other forms of disadvantage.

Limitations

The selection bias and the incompleteness of these data are a result of the purposive source selection. The paper did not review all the papers that underlie each synthesis or summary available. Due to varying definitions, populations and measures, there is not a single pooled conclusion. The majority of the comparative evidence considered is related to special educational needs, and is, therefore, limited in terms of applicability for linguistic and socioeconomic diversity. The suggested evaluation model has not been tested. Such restrictions dictate that the paper should raise questions and make planning rather than forecast a numerical impact for a specific school.¹⁵

¹³ UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education: All means all*. https://doi.org/10.54676/JJNK6989_gem-report-2020.unesco.org

¹⁴ Ministry of Human Resource Development. (2020). *National education policy 2020*. Government of India. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf www.education.gov.in

¹⁵ Paul, T., Di Rezze, B., Rosenbaum, P., Cahill, P., Jiang, A., Kim, E., & Campbell, W. (2022). Perspectives of children and youth with disabilities and special needs regarding their experiences in inclusive education: A meta-aggregative review. *Frontiers in Education*, 7, Article 864752. <https://doi.org/10.3389/feduc.2022.864752> www.frontiersin.org

VII. CONCLUSION

Shared learning opportunities can be increased through inclusive education, and better outcomes do not necessarily follow from mainstream placement of children. The review was supportive of a conditional interpretation, with evidence of benefits in some groups of learners, but with inconsistent evidence and methodological limitations in the general review. Schools should, therefore, consider the instruction, access to instruction, and support that students receive. The two measures of academic progress and meaningful participation and student experience should be assessed in tandem. The goal of the practical is to create provision which will support individual needs whilst also supporting students to be part of an education community.

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