



A Literature Review on Ability Grouping

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Introduction

Ability grouping as a classroom learning strategy aims to provide a context in which a relatively small number of students can interact and learn together as a group. The groups may be comprised of students at the same learning level (*homogeneous ability grouping*), or they may include a range of student abilities in each group (*heterogeneous* or *mixed-ability grouping*). The makeup of ability groups may be determined by the teacher and maintained throughout a period of time; or, the groups may be formed around a certain learning point, and then disperse once the learning has been achieved (*flexible ability grouping*).

School-to-School's (STS's) use of the flexible ability grouping strategy in primary school classrooms of northern Tanzania is an attempt to manage the difficulties that Tanzanian teachers experience in teaching very large numbers of students in one classroom. STS' approach identifies learners with particular difficulties with a given concept or learning point, and groups those learners for more targeted instruction until the learners demonstrate better understanding of the concept. However, STS has encountered some challenges in using the flexible ability grouping strategy in this context, related primarily to teachers' acceptance and ready use of flexible ability grouping.

The questions arising for STS at this point are:

- How can ability grouping help teachers understand the needs of struggling learners?
- What strategies can help teachers adjust instruction to address the needs of struggling learners?
- What kinds of support do teachers need to optimize the remedial phase of ability grouping?

This document reviews the relevant literature where flexible ability grouping is concerned. We discuss the rationale behind differentiated learning in general, and ability grouping specifically; we then review documented assessments of ability grouping from around the world. Finally, we examine flexible ability grouping, and the benefits and challenges of this classroom pedagogical and management strategy.

The rationale for ability grouping

The rationale for ability grouping (AG) has been outlined by Tomlinson (1995) as a technique to achieve differentiated instruction in mixed-ability classrooms. In most elementary classrooms, students span a wide range of learning abilities: some face challenges, others exceed grade-level expectations, and many fall somewhere in between. Additionally, each student brings unique learning styles and interests. To address this diversity, teachers started using differentiated instruction.

At its core, differentiation involves teachers' efforts to address the varied needs of learners in the classroom. When a teacher adapts their teaching approach to meet the needs of an individual or a small group, they are practicing differentiated instruction. Teachers can differentiate at least four key elements in the classroom based on students' readiness, interests, or learning profiles: (1) content, or what students need to learn and how they access information; (2) process, or the activities students engage in to understand or master content; (3) products, or the final projects that allow students to apply and showcase their learning; and (4) learning environment, or the way the classroom is organized and feels to students. Some examples are provided in Table 1.

Against this backdrop, ability grouping is a technique used in differentiated instruction where students are grouped according to their current skill levels or abilities in a particular subject or skill area. This allows teachers to tailor their instruction more closely to the needs of each group, focusing on appropriate challenge levels and targeted support. For example, a teacher may group students with similar reading levels for literacy activities or separate math groups by proficiency so that each group works on tasks suited to their abilities. This approach aims to maximize learning by ensuring that each student works at a suitable pace and with content that matches their readiness.

Table 1. Types of differentiation, according to Tomlinson (1995)

Type of Differentiation	Description	Examples
Content	Adjusting what students learn or how they access the information.	<ul style="list-style-type: none"> ● Providing reading materials at different complexity levels on the same topic. ● Offering audio, video, and visual aids along with text-based resources. ● Using interest-based resources, such as articles on topics students are passionate about.
Process	Modifying the activities students do to help them understand or practice the content.	<ul style="list-style-type: none"> ● Creating learning centers with different activities for hands-on practice, group work, and independent tasks. ● Allowing students to work individually, in pairs, or small groups. ● Offering graphic organizers, timelines, or interactive games to support learning.
Product	Letting students show what they have learned in varied ways.	<ul style="list-style-type: none"> ● Allowing choices like writing a report, making a poster, or recording a podcast. ● Giving options for creative projects like designing a model or presenting a play. ● Using digital tools for students to create videos or presentations.
Learning Environment	Shaping the classroom atmosphere and organization to meet students' needs.	<ul style="list-style-type: none"> ● Creating flexible seating options, like tables, desks, or beanbags, for different learning preferences. ● Designing quiet areas for focused work and active areas for collaboration. ● Establishing routines that promote independence, collaboration, and engagement.

However, the effectiveness of ability grouping is ultimately determined by how well it supports meaningful differentiation. Successful ability grouping does not simply separate students by perceived ability; it always involves adjusting the content, process, and products within each group. In this way, the true value of ability grouping is seen in how well it achieves the goals of differentiation: to engage each student with relevant, challenging, and personalized learning experiences.

In a more recent review, Tomlinson et al. (2003) suggest the following characteristics of differentiation that effectively responds to learner readiness, interest, and learning profile:

1) *Effective differentiation of curriculum and instruction is proactive, rather than reactive.* A clear and structured model of effective differentiation is essential to help teachers move beyond minor, occasional adjustments and truly address diverse student needs. Differentiation that simply tweaks a one-size-fits-all approach is unlikely to meet the needs of varied learners, especially if it is reactive rather than proactively planned. Effective differentiation requires intentional, consistent efforts to incorporate learner readiness, interests, and profiles into all aspects of instruction, from lesson planning to student practice and assessment. As a case in point, Tomlinson et al. (2003) contrast a reactive approach to differentiation (where teachers plan one lesson for everybody and try to adjust on the spot when they realize that it is not working for everybody) to a proactive one (where the teacher from the outset plans a lesson that will address the full learner variance).

2) *Effective differentiation employs flexible use of small teaching-learning groups in the classroom.* A meta-analysis of 165 studies used by the authors shows that small within-class groups (of three to four students) significantly enhance student achievement, attitudes toward learning, and self-concept compared to whole-class instruction (see Lou et al., 1996). These groups allow teachers greater flexibility to address individual learning needs effectively, with lower-ability students benefiting from heterogeneous groups, medium-ability students from homogeneous ones, and high-ability students performing well in both settings. Given diverse readiness, interests, and learning preferences, varying group configurations within the classroom is recommended to best support all learners.

3) *Effective differentiation varies the materials used by individuals and small groups of students in the classroom.* Student progress is maximized when instructional materials are tailored to the needs of different groups, rather than using identical materials for all. In differentiated classrooms, teachers should align materials with each group's instructional needs, especially when grouping by readiness level.

4) *Effective differentiation uses variable pacing as a means of addressing learner needs.* Studies show that classrooms are less effective when teachers don't adjust the instructional pace to

match students' needs. Setting instructional levels for higher achievers but pacing for lower achievers can frustrate students at all readiness levels, while flexible use of time would better support diverse learners.

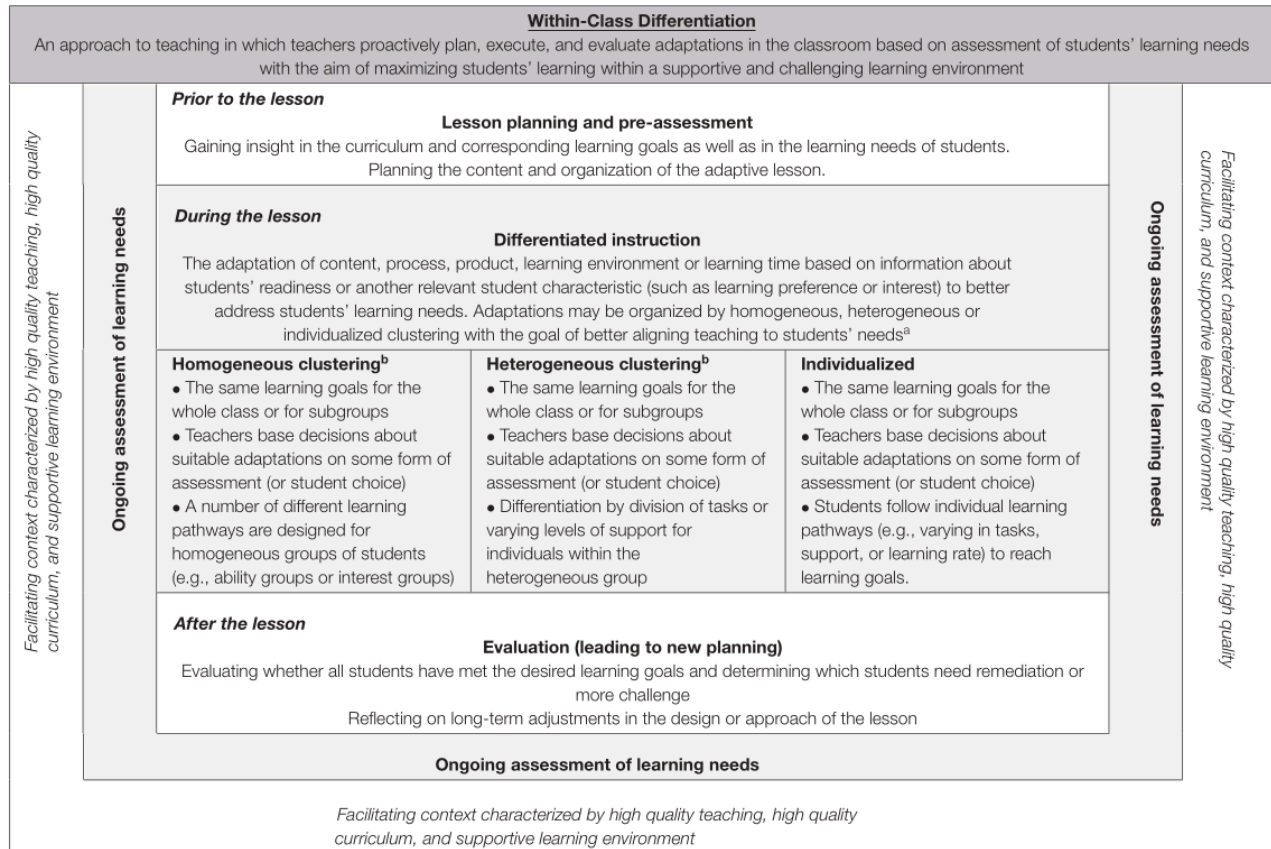
5) *Effective differentiation is knowledge centered.* A strong understanding of their subject enables teachers to guide students toward key concepts, core principles, and essential skills. This knowledge base is crucial for effective differentiation, allowing teachers to help students grasp fundamental ideas and apply skills to meaningful problems.

6) *Effective differentiation is learner centered.* Learner-centered classrooms prioritize student needs within structured frameworks provided by teachers, building on students' prior knowledge and promoting active engagement. Key elements include ongoing assessment, a focus on students' understanding, relevance of content, choice within structure, shared learning management, and student involvement in the learning process. Teachers use diverse instructional strategies and scaffolding techniques to ensure all students connect meaningfully with essential knowledge for deep understanding.

The main conclusion of the literature review by Tomlinson et al. (2003) is that differentiated instruction, when effectively implemented, can significantly improve student engagement, understanding, and achievement in academically diverse classrooms. The review emphasizes that successful differentiation requires deliberate adjustments in content, process, and product based on students' varying readiness levels, interests, and learning profiles. It also highlights the importance of proactive planning, flexible grouping, and a responsive approach to teaching to address each student's unique needs comprehensively.

Smale-Jacobse et al. (2019; see also Figure 1) argue that differentiated instruction includes various organizational structures that teachers can choose to support diverse learning needs. One method is *macro-adaptive grouping*, where students are grouped homogeneously, based on characteristics like readiness or interest, using either fixed or flexible groups. Alternatively, *heterogeneous grouping* brings together students with mixed abilities, allowing differentiation within groups by dividing tasks according to learning preferences or strengths. Teachers may also guide task division or support based on assessed student needs. When instruction is tailored for each student to progress individually at their own pace but toward the same learning goals, this is known as *individualization*. Some educators consider individualization a part of differentiated instruction, while others view it as a separate approach.

Figure 1. Theoretical model of within-classroom differentiation (adopted from Smale-Jacobse et al., 2019)



^aTypically teacher-directed, but ICT applications may also be used to inform or direct the differentiated instruction. ^bOnly settings in which content, process, product, environment, or learning time are purposefully adapted to the learning needs of students within or across groups are included in our model. Merely working together without any planned adaptations does not fit our definition of differentiated instruction.

In their systematic review of 14 papers assessing 12 empirical studies, Smale-Jacobse et al. provide empirical evidence on the effectiveness of within-class differentiated instruction on secondary school students' academic achievement. One core insight of this review is that there are only a few high-quality studies on the effectiveness of differentiated instruction. The few well-designed studies included in the review do report small- to medium-sized positive effects of differentiated instruction on student achievement. The four studies that have been applying homogeneous clustering by means of tiering or ability grouping (Altintas & Özdemir, 2015a, 2015b; Bal, 2016; Bikić et al., 2016; Richards & Omdal, 2007) reported medium to large positive effects. In those studies that reported differential effects for subgroups of students within classes, the intervention was most beneficial for low-achieving subgroups of students, although the learning content was adapted to fit the needs of all ability groups. Finally, the systematic review shows that teachers typically relied on external guidance to implement within-class

differential instruction during the interventions. This finding is in line with previous reviews (e.g., Tomlinson et al., 2003; Subban, 2006) which found that the implementation of differentiated instruction can be quite challenging for the average teacher, requires considerable guidance, and is implemented best by those who receive more professional development.

Variations in assessment outcomes associated with ability grouping, within and between countries

In the following, we review some studies that have implemented ability grouping in diverse countries such as India, Ghana, South Africa, Australia, the United Kingdom, and the United States. The purpose of this overview is to point to the variation in assessment outcomes in the different contexts.

Bali (2023) explores how teachers perceive and implement ability grouping in their classrooms. The study indicates that teachers view ability grouping as a necessary strategy to address diverse student needs and improve academic performance. However, it also reveals that teachers often face challenges in effectively managing these groups, particularly due to varying levels of student engagement and motivation.

The research indicates that pedagogical approaches within ability grouping can vary significantly, with some teachers employing differentiated instruction while others rely on traditional methods. Teachers express concerns about the negative impacts of grouping on lower-performing students, who may feel marginalized or discouraged in their learning environment. The study emphasizes the importance of teachers' voices in shaping classroom practices and policies, advocating for their input in discussions about ability grouping and educational reforms.

Additionally, Bali explores the discursive practices that emerge in ability grouping settings, revealing how language and interactions can reinforce or challenge existing power dynamics among students. The findings suggest that teachers require professional development to enhance their skills in managing ability groups and fostering inclusive practices (see also Smale-Jacobse et al., 2019). The study calls for a critical examination of the discourse surrounding ability grouping, and encourages educators to reflect on their own practices and beliefs. Overall, the research advocates for a more nuanced understanding of ability grouping that considers the perspectives of teachers and the complexities of classroom dynamics in Delhi government schools.

Alam and Mohanty (2023) investigate the impact of cultural beliefs and ability grouping practices on equity in mathematics education. Their research finds that ability grouping, which

sorts students into different instructional levels based on perceived aptitude, often reinforces social inequalities rather than addressing them. Students from underrepresented or disadvantaged backgrounds are more likely to be placed in lower-level groups, which limits their access to high-quality instruction, rigorous content, and enrichment opportunities. These groupings can solidify stereotypes about academic potential and create self-fulfilling prophecies, where students in lower groups may internalize lower expectations and develop weaker self-concepts in mathematics.

Teachers' perceptions of students are also influenced by ability groups, often leading to differentiated expectations and instructional approaches that may not serve all students equitably. The study suggests that ability grouping can inadvertently prioritize compliance with existing cultural beliefs about intelligence and potential rather than fostering a growth-oriented mindset. Furthermore, the authors argue that grouping by ability can undermine inclusive practices, as it restricts student collaboration and the sharing of diverse perspectives. Ability grouping thus contributes to a school culture that often values performance over learning and reinforces fixed beliefs about ability (see Haimovitz & Dweck, 2017). The paper calls for educational reforms that challenge traditional ability grouping, proposing instead flexible, inclusive approaches that support all students in achieving their full potential in mathematics. Finally, the authors advocate for teacher training and institutional policies that recognize and address the cultural dimensions of equity in educational practices.

Abubakari (2020) investigates how ability grouping impacts the academic performance of primary school students in Ghana. The study finds that ability grouping can lead to significant differences in student performance, with those placed in higher ability groups generally achieving better academic results. However, students in lower ability groups often experience diminished performance due to limited access to quality instruction and resources. The research highlights that ability grouping can reinforce existing inequalities, as marginalized students are more likely to be placed in lower groups.

Du Plooy (2019) explores how within-class ability grouping is implemented in educational settings and its effects on student learning. The study finds that homogeneous ability grouping often leads to a clear stratification of students based on perceived academic ability, which can create an environment of competition rather than collaboration. It highlights that teachers tend to form groups based on assessments, which may not fully capture a student's potential, leading to misplacements that can hinder learning.

The research also shows that students in higher ability groups typically receive more challenging and enriching materials, while those in lower groups may experience a diluted curriculum that fails to engage them effectively. This disparity in instructional quality can reinforce existing academic inequalities and limit opportunities for lower-performing students to improve.

Additionally, the paper reveals that students in lower ability groups often internalize negative stereotypes, which can diminish their self-esteem and motivation.

The study emphasizes the importance of flexible grouping practices that can adapt to students' changing needs and abilities, rather than relying on fixed classifications. Moreover, it suggests that effective professional development for teachers is essential to help them implement more inclusive and equitable grouping strategies. Overall, the findings advocate for a critical reexamination of homogeneous ability grouping practices, highlighting the need for approaches that foster collaboration, growth, and equity in the classroom. The paper concludes that addressing these issues is vital for creating a supportive learning environment that meets the diverse needs of all students.

Hove and Phasha (2022) examine how South African primary grade teachers view ability grouping in the context of inclusive education policies. The study reveals that while teachers recognize the intent of inclusion policies to support diverse learners, they often express concerns about the effectiveness of ability grouping in achieving these goals. Many teachers feel that ability grouping helps them manage classroom diversity by allowing them to tailor instruction to different skill levels, but they also acknowledge that it can perpetuate inequalities among students.

The research highlights the fact that teachers frequently struggle with balancing the demands of ability grouping and the principles of inclusivity, leading to mixed perceptions about its value. Some educators reported feeling pressure to group students based on perceived ability, which can lead to lower expectations for those in lower groups. Additionally, the study indicates that teachers may lack adequate training or resources to implement inclusive practices effectively, which hampers their ability to support all students.

The findings also show that teachers' perceptions are influenced by their own experiences and beliefs about intelligence and ability, impacting how they implement grouping strategies. Despite the challenges, many educators expressed a desire for professional development that focuses on inclusive teaching practices and flexible grouping methods. Overall, the paper calls for a more coherent approach to teacher training that aligns with inclusive education policies while addressing the complexities of ability grouping. It concludes that fostering a deeper understanding of inclusivity among teachers is essential for improving educational outcomes for all students.

A study by Hove (2022) comes from the same research group and context. It investigates how mixed-ability grouping practices contribute to inclusivity in primary education. The study finds that mixed-ability grouping is generally viewed positively by teachers, as it fosters collaboration and peer learning among students of varying skill levels. Educators believe that this approach

helps create a more supportive classroom environment, allowing all students to engage with the curriculum.

However, the research also highlights challenges associated with mixed-ability grouping, such as the difficulty of meeting diverse learning needs and managing varying levels of student engagement. Some teachers express concerns that, without adequate training and resources, they may struggle to implement inclusive practices effectively. Additionally, the study reveals that while mixed-ability grouping promotes a sense of community, it can also lead to frustrations when students feel overwhelmed by their peers' varying abilities.

The paper emphasizes, too, the need for ongoing professional development to help teachers navigate the complexities of mixed-ability grouping and enhance their instructional strategies. It also calls for better alignment between educational policies and classroom practices to ensure that inclusivity is genuinely realized in mixed-ability settings. The findings connect with the previous paper, which noted teachers' mixed perceptions of ability grouping, reinforcing the importance of training and resources for effective inclusive education. Overall, the study advocates for a more cohesive approach to mixed-ability grouping that prioritizes equity and supports all students in their learning journeys.

Marks (2016) examines the practice of ability grouping in primary education through various case studies. The author finds that ability grouping is widely implemented in many schools in England as a strategy to tailor instruction to students' perceived skill levels. However, the paper highlights significant concerns regarding the equity and effectiveness of this practice, as it often reinforces existing social inequalities among students.

The study reveals that while some educators believe that ability grouping can enhance learning outcomes for high-achieving students, it can simultaneously disadvantage those in lower groups by limiting their access to challenging content (which the educators believe would be beneficial for them, at least at a later time point). Furthermore, the paper discusses how ability grouping can impact students' self-esteem and motivation, particularly for those placed in lower groups. The research also emphasizes the role of teachers' beliefs and pedagogical practices in shaping the outcomes of ability grouping, noting that professional development is crucial for effective implementation.

Critical debates within the literature highlight the tension between the intent to personalize learning and the potential for exclusion that ability grouping entails. The paper calls for schools to consider alternative grouping strategies that promote collaboration and inclusivity, rather than rigidly categorizing students. Additionally, it suggests that ongoing dialogue among educators, policymakers, and researchers is essential to critically evaluate the impacts of ability grouping on student learning. Ultimately, the paper advocates for a balanced approach to ability

grouping that prioritizes equity while addressing the diverse needs of all students in primary education.

Webb-Williams (2021) investigates how teachers utilize ability grouping and the implications of social comparison among students. The study finds that teachers often employ within-class ability groups to manage diverse learning needs and tailor instruction effectively. However, the research highlights the potential negative consequences of social comparison, as students are frequently aware of their group placements and compare their abilities to peers.

This awareness can impact students' self-esteem and motivation, particularly for those placed in lower ability groups, who may feel stigmatized or discouraged. The mixed methods approach reveals that while some teachers are mindful of the social dynamics at play, many struggle to mitigate the negative effects of comparison among students. Furthermore, the study shows that teachers' beliefs about ability and intelligence influence their grouping decisions and instructional strategies.

These findings indicate a need for professional development focused on inclusive practices that reduce reliance on rigid ability grouping. Additionally, the research emphasizes the importance of fostering a growth mindset among students to counteract the detrimental effects of social comparison. The paper concludes that while ability grouping can provide targeted support, educators must carefully consider the social implications and strive to create a classroom environment that promotes equity and collaboration. Overall, the study calls for ongoing reflection and dialogue among teachers regarding the practices and consequences of within-class ability grouping.

Finally, Webel (2021) explores strategies that educators use to implement alternatives to traditional ability grouping in elementary mathematics classrooms. The study reveals that teachers increasingly recognize the limitations of ability grouping, particularly its impact on student motivation and engagement. Through field-based observations and interviews, the research highlights various inclusive instructional practices that promote collaborative learning among diverse student groups.

Teachers employed strategies such as heterogeneous grouping, peer tutoring, and differentiated tasks to accommodate different learning needs while fostering a supportive classroom environment. The findings indicate that these alternatives not only enhance student interactions but also allow for richer mathematical discourse and understanding. However, the study also uncovers challenges, including limited resources, varying teacher beliefs, and the need for professional development to effectively implement these practices.

Educators expressed a desire for more training in inclusive pedagogy and curriculum design that prioritizes equity and collaboration over rigid grouping structures. The paper emphasizes that successful alternatives to ability grouping require a cultural shift within schools, encouraging ongoing reflection and adaptation of teaching practices. Overall, the research advocates for systemic support and resources to facilitate inclusive mathematics instruction that benefits all students. By highlighting field-based perspectives, the study underscores the importance of teacher agency in rethinking grouping practices and fostering a more equitable learning environment.

In synthesizing the findings from the various studies on ability grouping in educational contexts, several similarities and differences emerge that illuminate the complexities surrounding this practice. Across the research, a common theme is the recognition of the challenges posed by ability grouping. Many studies indicate that grouping students by perceived ability can reinforce social inequalities, limit access to high-quality instruction for lower-performing students, and negatively impact their self-esteem and motivation. For instance, both Bali (2023) and Alam and Mohanty (2023) highlight that lower-performing students often feel marginalized and develop negative self-concepts as a result of their placement in lower groups. Similarly, Abubakari (2020) and Du Plooy (2019) note that such grouping strategies often lead to a stratification of instructional quality, where higher ability groups receive more enriching materials, further entrenching academic disparities.

Another commonly shared observation is the necessity for professional development and training for teachers. Multiple studies, including those by Hove and Phasha (2022) and Webb-Williams (2021), emphasize the importance of equipping educators with the skills needed to implement inclusive practices effectively and to manage classroom dynamics that arise from ability grouping.

However, the studies also present differing perspectives on the effectiveness and potential benefits of ability grouping. For example, while Hove (2022) argues that mixed-ability grouping can foster collaboration and peer learning, Bali (2023) and Marks (2016) raise concerns about the efficacy of ability grouping in achieving educational equity. The mixed views on ability grouping suggest a nuanced landscape, where some educators may find value in tailored instruction for diverse learning needs, while others are wary of its reinforcing effects on social stratification.

Additionally, the context of the studies plays a crucial role in shaping their findings. Research conducted in Delhi government schools (Bali, 2023) contrasts with the perspectives gathered from Ghana (Abubakari, 2020) and South Africa (Hove & Phasha, 2022), highlighting how cultural beliefs and systemic factors influence teachers' views and practices regarding ability grouping. Alam and Mohanty (2023) also focus on how cultural beliefs impact students'

placements, suggesting that local sociocultural dynamics must be considered when evaluating the effectiveness of ability grouping strategies.

In conclusion, while the body of research underscores the potential drawbacks of ability grouping—namely the reinforcement of inequities and the negative impact on student self-concept—it also reveals a spectrum of pedagogical responses and contextual factors that influence educators' practices. A critical examination of these studies advocates for more inclusive and flexible approaches to grouping that prioritize equity, collaboration, and ongoing professional development for teachers, ultimately fostering an educational environment that supports the diverse needs of all students.

Flexible ability grouping

Flexible ability grouping as a strategy for differentiated instruction is a variation on the broader ability grouping strategy (Wahl 2023¹). The unique feature of flexible ability grouping is that the grouping of learners is not permanent or static for a given class, but responds to students' periodic needs for augmented or different lessons and activities in order to learn particular curriculum content. As Tomlinson and Imbeau (2023: 38) observe, “flexible student grouping capitalizes on student strengths and allows effective attention to student weaknesses.”

Valentino (2000)² notes that, at least in the American education context, flexible ability grouping is not new:

It has its roots in the original one-room rural schoolhouse where students of varying ages, backgrounds, and abilities were grouped and regrouped to meet instructional needs.

Proponents of flexible ability grouping maintain that this approach avoids the challenges of status difference, social comparison and lowered expectations of certain students which can accompany homogeneous ability grouping practices, and which have been harshly critiqued (Webel, Dames, Woldruff, Lindaman, Daugherty & Brown 2021; Alam & Mohanty 2023). As noted by the education consultant firm Room to Discover, the goal of flexible ability grouping is specifically *not* to “create a permanent underclass of students.”³ Rather, as Brulles and Brown (2018: 2) argue, flexible ability grouping is an exercise in equity, with a focus on what each student needs in order to achieve at his or her own level:

when schools consciously plan for equitable measures, they can more easily demonstrate students' achievement gains, since they are routinely collecting and analyzing achievement data to form flexible learning groups and document student growth in the various groups.

¹ [Flexible Grouping: Strategies and how it to use in your classroom | Kodable](#). Accessed 14 October 2024.

² <http://www.eduplace.com/science/profdev/articles/valentino.html>. Accessed 21 October 2024.

³ [Flexible Groupings: The Right Way to Group Students by Ability - Room to Discover](#). Accessed 18 October 2024.

Assessment in the flexible ability grouping strategy is frequent and may be primarily informal. Caroleo (2024: 26) states that, “[i]nstead of a reliance on school-mandated, standardized tests, flexible grouping typically relies upon frequent and formative assessments conducted by the teacher.” Flexible ability groups may be teacher-guided, allowing the teacher to respond to the ability of a group to successfully complete an assessment; or, students may be allowed to group themselves according to interests and lead their own learning (McKeen 2019). McDonald (2014)⁴ describes the use of “pull-back groups”: after administering a formative assessment, the teacher identifies the handful of learners who are struggling with the content. The teacher then holds a brief meeting with the group at the teacher’s desk or table, to provide targeted assistance to those learners.

The flexible ability grouping strategy has also been positively linked to learners with special needs or disabilities. Davies & Henderson’s 2020 guidance report on special educational needs in mainstream schools decries the use of standard ability grouping, based on pupils’ overall learning rather than on their individual strengths and weaknesses. The report references the research of Rix et al (2009), in which pupils who had been identified as having special education needs or disabilities were segregated from the rest of their peers. The guidance report also references Webster et al (2017), who found that such grouping (or streaming), can hinder the learning of such pupils and negatively affect their long-term attitudes and engagement with education.

Instead, Davies and Henderson recommend the flexible allocation of pupils to groups, based on the individual needs that they currently share with other pupils. Such groups can be formed for an explicit purpose and disbanded when that purpose is met. It may be that a small group of pupils share the need for more explicit instruction to independently carry out a skill, remember a fact, or understand a concept (Davis and Henderson 2020: 22).

From this same perspective, Aubin (2023)⁵ maintains that “the way we allocate groups should not reinforce the idea that intelligence is pre-determined or that support is for some pupils all the time, rather than all pupils some of the time”. Aubin recommends that flexible ability grouping be among the “...teaching strategies that teachers should consider emphasising for pupils with SEND [Special Educational Needs and Disabilities].”

However, along with the benefits of flexible ability grouping come some cautions. Bennett (2024)⁶ notes that flexible grouping takes time to implement. Students need to become familiar with how this type of group work functions, and setting standards for in-group cooperation can be time-consuming. Bennett also notes that collaboration in the group may be uneven, with some students taking the burden of those who contribute less. In addition, evaluation of the

⁴ [Flexible Grouping as a Differentiated Instruction Strategy - TeachHUB](#). Accessed 24 October 2024.

⁵ [EEF blog: Flexible grouping: what is it and why use it? | EEF](#). Accessed 24 October 2024.

⁶ [Pros and Cons on Flexible Grouping in Grades 7-12](#). Accessed 25 October 2024.

effectiveness of flexible grouping strategies requires ongoing assessment and feedback, to identify areas of growth for each student as well as learning areas for each student that are lacking and may require further support.⁷

Further challenges to the flexible ability grouping strategy include managing time and resources, maintaining equity and fairness, balancing individual and group needs, and maintaining student engagement. Planning and organizing group activities can also be time-consuming, especially when teachers have multiple groups to oversee.⁸

Conclusion

The literature reviewed above provides an understanding of ability grouping, including flexible ability grouping, and the advantages and cautions associated with this teaching strategy. In response to the questions posed by STS above, the literature reviewed provides insights into the benefits of ability grouping for helping teachers understand and engage appropriately with the needs of struggling learners. Strategies for helping teachers to adjust their instructional strategies with struggling learners, particularly in the context of ability grouping, are also discussed. The support needed by teachers to optimize the remedial phase of ability grouping is touched on, though not in great detail. What the literature reviewed (largely research studies) does not provide at this point is step-by-step, practical advice for teachers who are attempting to implement flexible ability grouping in large classes of the global South.

The studies reviewed here show evidence of the benefits arising from ability grouping, and they equally point out the challenges of this pedagogical and classroom management strategy. Whether homogeneous ability grouping, mixed-ability grouping or flexible ability grouping, the potential impact of any grouping strategy must be carefully thought through. Preparations must be made to maximize the positive impact of the strategy, and to ameliorate its potential negative impact on the learning of the students involved.

⁷ [How Can I Use Flexible Grouping Strategies To Differentiate Instruction? - Inspiring Today's Teachers.](#)

⁸ *ibid.*

References

- Abubakari, A. (2020). Effects of ability grouping on the performance of basic school pupils in Ghana. *The International Journal of Humanities and Social Studies*, 8, 24–19.
[doi:10.24940/thejihss/2020/v8/i1/HS2001-001](https://doi.org/10.24940/thejihss/2020/v8/i1/HS2001-001)
- Alam, A., & Mohanty, A. (2023). Cultural beliefs and equity in educational institutions: exploring the social and philosophical notions of ability groupings in teaching and learning of mathematics. *International Journal of Adolescence and Youth*, 28, 2270662.
[doi:10.1080/02673843.2023.2270662](https://doi.org/10.1080/02673843.2023.2270662)
- Altintas, E., & Özdemir, A. S. (2015). The effect of the developed differentiation approach on the achievements of the students. *Eurasian Journal of Educational Research*, 61, 199–216.
[doi:10.14689/ejer.2015.61.11](https://doi.org/10.14689/ejer.2015.61.11)
- Altintas, E., & Özdemir, A. S. (2015b). Evaluating a newly developed differentiation approach in terms of student achievement and teachers' opinions. *Educational Sciences: Theory and Practice*, 15, 1103–1118. [doi:10.12738/estp.2015.4.2540](https://doi.org/10.12738/estp.2015.4.2540).
- Bal, A. P. (2016). The effect of the differentiated teaching approach in the algebraic learning field on students' academic achievements. *Eurasian Journal of Educational Research*, 63, 185–204. [doi:10.14689/ejer.2016.63.11](https://doi.org/10.14689/ejer.2016.63.11).
- Bali, M. (2023). Teachers' voices, pedagogy and discursive practices in ability grouping classrooms in Delhi government schools. *Contemporary Education Dialogue*, 20, 39–64.
[doi:10.1177/09731849221149254](https://doi.org/10.1177/09731849221149254)
- Bennett, C. (2024). *Pros and Cons to Flexible Grouping in Middle and High School*.
<https://www.thoughtco.com/pros-and-cons-to-flexible-grouping-7603>.
- Bikić, N., Maričić, S. M., & Pikula, M. (2016). The effects of differentiation of content in problem-solving in learning geometry in secondary school. *Eurasia Journal of Mathematics, Science and Technology Education*, 12, 2783–2795.
[doi:10.12973/eurasia.2016.02304a](https://doi.org/10.12973/eurasia.2016.02304a)
- Brulles, D and Brown, K. (2018). *A Teacher's Guide to Flexible Grouping and Collaborative Learning: Form, Manage, Assess and Differentiate in Groups*. Minneapolis: Free Spirit Publishing.
- Caroleo, S. (2024). From fixed to flexible: Needed conditions to promote elementary teachers' equitable use of within-class ability grouping. *Neag School of Education Journal*, Spring 2024. Pp. 19-41.
- Davies, K. & Henderson, P. (2020). *Special Education Needs in Mainstream Schools; Guidance Report*. Education Endowment Foundation.
[EEF_Special_Educational_Needs_in_Mainstream_Schools_Guidance_Report.pdf](#).
Accessed 25 October 2024.

- Dennis, M. S., Sharp, E., Chovanes, J., Thomas, A., Burns, R. M., Custer, B., & Park, J. (2016). A meta-analysis of empirical research on teaching students with mathematics learning difficulties. *Learning Disabilities Research & Practice*, 31(3), 156–168. doi:10.1111/lrdp
- Du Plooy, L. L. (2019). The manifestations of the practice of within-class homogeneous ability grouping. *South African Journal of Childhood Education*, 9, 1–11. doi:10.4102/sajce.v9i1.690
- Haimovitz, K., & Dweck, C. S. (2017). The origins of children's growth and fixed mindsets: New research and a new proposal. *Child Development*, 88, 1849-1859. doi:10.1111/cdev.12955
- Hove, N. (2022). The inclusiveness of mixed ability grouping in Johannesburg primary schools. *South African Journal of Childhood Education*, 12, 1047. doi:10.4102/sajce.v12i1.1047
- Hove, N., & Phasha, N. T. (2022). Teachers' perceptions of ability grouping in the face of policy on inclusion: A case of Johannesburg metropolitan mainstream primary schools. *South African Journal of Childhood Education*, 12, 1081. doi:10.4102/sajce.v12i1.1081
- Lou, Y., Abrami, P., Spence, J., Poulsen, C, Chambers, B., & d'Apollonia, S. (1996). Within-class grouping: A meta-analysis. *Review of Educational Research*, 66, 423–458. doi:10.2307/1170650
- Marks, R. (2016). *Ability-grouping in primary schools: Case studies and critical debates*. Critical Publishing.
- McKeen, H. (2019). The impact of grade level flexible grouping on math achievement scores. *Georgia Educational Researcher* Vol. 16(1). <https://digitalcommons.georgiasouthern.edu/gerjournal/vol16/iss1/5>.
- Richards, M. R. E., & Omdal, S. N. (2007). Effects of tiered instruction on academic achievement in a secondary science course. *Journal of Advanced Academics*, 18, 424–453. doi:10.4219/jaa-2007-499
- Rix, J., Hall, K., Nind, M., Sheehy, K. & Wearmouth, J. (2009). What pedagogical approaches can effectively include children with special educational needs in mainstream classrooms? A systematic literature review. *Support for Learning*, 24.
- Subban, P. (2006). Differentiated instruction: A research basis. *International Education Journal*, 7, 935–947. Available online at <https://files.eric.ed.gov/fulltext/EJ854351.pdf>
- Tomlinson, C. (1995). *How to differentiate instruction in mixed-ability classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. & Imbeau, M. (2023). *Leading and Managing A differentiated Classroom*. 2nd ed. ASCD.
- Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C. M., Moon, T. R., Brimijoin, K., et al. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted*, 27, 119–145. doi:10.1177/016235320302700203.

Webb-Williams, J. L. (2021). Teachers' use of within-class ability groups in the primary classroom: A mixed methods study of social comparison. *Frontiers in Psychology, 12*, 728104. doi:10.3389/fpsyg.2021.728104

Webel, C. (2021). Field-based perspectives on enacting alternatives to ability grouping in elementary mathematics instruction. *Mathematics Teacher Education and Development, 23*, 111–131.

Webster, R. & Blatchford, P. (2017). *The Special Educational Needs in Secondary Education (SENSE) Study*. <http://maximisingtas.co.uk/assets/content/sense-final-report.pdf>.