

# Inclusive Education in Practice: Evaluating Strategies That Support Diverse Learners in Canadian Schools

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## ABSTRACT

This study responded to the continuing demand for stronger school-based support systems by evaluating the strategies that sustain inclusive education for diverse learners in Canadian schools. Using a cross-sectional predictive-explanatory survey design, data were collected through a validated researcher-developed questionnaire administered to school personnel directly involved in inclusive practice. The instrument demonstrated strong content validity and internal consistency, with an overall Cronbach's alpha of .92. Data were analyzed using descriptive statistics and Partial Least Squares Structural Equation Modeling, with Importance-Performance Map Analysis used to identify priority areas for improvement. Findings

revealed that inclusive instructional design, classroom accommodation and responsiveness, collaborative support systems, and learner participation and belonging were all rated high. Among the dimensions, inclusive instructional design obtained the highest descriptive rating, while collaborative support systems registered the lowest performance. Structural model results showed that all three strategy domains significantly predicted learner participation and belonging, with collaborative support systems emerging as the strongest predictor. The model explained 61% of the variance in learner participation and belonging, indicating moderate to substantial predictive power. The results suggested that inclusive education was most effective when it extended beyond individual classroom adjustments and operated through coordinated, school-wide support mechanisms. The study concluded that while inclusive practices were already evident, stronger collaboration among educators, specialists, school leaders, and families remained essential for deepening meaningful participation and belonging among diverse learners.

**Keywords:** *accessibility, collaboration, diverse learners, inclusive education, learner participation, school support systems*

## INTRODUCTION

Inclusive education has become one of the most important commitments in contemporary schooling because it reflects the principle that every learner, regardless of ability, language, culture, identity, or social circumstance, deserves meaningful access to quality education. Rather than treating diversity as a challenge to be managed, current scholarship views diversity as a normal and valuable feature of classrooms that should shape how schools design curriculum, instruction, support services, and learning environments. In this perspective, inclusion is not limited to placement in regular classrooms. It is better understood as an ongoing process of removing barriers to participation, strengthening belonging, and ensuring that learners can engage, achieve, and feel recognized within school communities. UNESCO (2020) emphasized that inclusion involves actions that embrace diversity and build a sense of belonging, grounded in the belief that

every person has value and potential. This broader understanding is especially relevant to school systems that serve students with varied academic, social, linguistic, cultural, and developmental needs.

Inclusive education has evolved within a complex educational landscape in which provinces and territories hold primary responsibility for schooling in Canadian. Although the organization of services differs across jurisdictions, Canadian education systems have increasingly moved toward policy frameworks that link inclusion with equity, participation, and responsiveness to diverse learners. This shift reflects a growing recognition that inclusion should not be confined to students formally identified with disabilities, but should also address the needs of learners who have historically experienced exclusion because of race, language, gender, sexuality, socioeconomic position, culture, and other intersecting conditions. Whitley and Hollweck (2020) observed that inclusive education policy in Canada, particularly in Nova Scotia, has broadened toward an equity lens that attends not only to students with special education needs but also to students who are marginalized within school systems. This broadening is significant because it aligns inclusive education with a more socially responsive model of schooling, one that asks whether students are genuinely supported to participate and flourish, rather than merely being physically present in mainstream classrooms.

Canadian schools continue to serve learner populations marked by substantial diversity. Teacher education research in Canada has noted that diversity in schools encompasses disability, ethnicity, language, sexual orientation, and other dimensions that shape students' schooling experiences (Leung et al., 2024). At the same time, national reports continue to show persistent inequities in educational opportunity among some groups, including Indigenous learners and students requiring more specialized forms of support. The Council of Ministers of Education, Canada highlighted continuing challenges in educational outcomes and emphasized the sustained priority given to Indigenous education across provinces and territories (Council of Ministers of Education, Canada [CMEC], 2024). Statistics Canada has also documented that students with disabilities may encounter limitations on learning experiences, social exclusion, and lack of accommodations in school settings (Statistics Canada, 2021). These realities suggest that inclusive education in Canada cannot be assumed simply because policies exist. It must be examined through the actual strategies schools and teachers use to support participation, access, and success for diverse learners.

The practical side of inclusive education has gained increasing attention. Schools are expected not only to endorse inclusion philosophically, but also to implement instructional and organizational strategies that make inclusion workable in everyday classroom life. One of the most widely recognized approaches is Universal Design for Learning, which promotes flexibility in how information is presented, how students engage with learning, and how they demonstrate understanding. The Government of Canada explained that UDL helps educators respond to individual strengths and needs by making learning more flexible and by removing barriers that prevent full participation, benefiting not only students with disabilities but all learners (Government of Canada, 2025). In addition to UDL, inclusive practice often involves differentiated instruction, collaborative problem solving, classroom accommodations, accessible assessment, and coordinated support among teachers, specialists, and families. These strategies matter because inclusion becomes meaningful only when classroom practices are deliberately structured to widen access and not merely to maintain attendance.

The effectiveness of inclusive education also depends heavily on teacher competence, professional beliefs, and school-level support. Research has shown that inclusive teaching is not simply a matter of goodwill. It requires knowledge of learner diversity, confidence in adapting instruction, and a sense of professional responsibility for equity. Vantieghem et al. (2023) found that central to teachers' inclusive teaching competency are both beliefs and efficacy, underscoring that inclusive practice rests on what teachers understand, value, and feel capable of doing. Likewise, Emmers et al. (2022) identified key competencies for inclusive education teachers through a systematic review, reinforcing the idea that inclusion requires intentional professional preparation rather than informal adjustment. In the Canadian setting, this issue is particularly important because teacher preparation programs are being called to respond

more directly to changing diversity and inclusion needs (Leung et al., 2024). These studies suggest that evaluating inclusive strategies in schools is inseparable from examining the human and professional capacities that sustain them.

Even so, the implementation of inclusive education continues to face practical and structural challenges. A review of research on barriers to inclusive education found recurring concerns related to insufficient teacher preparation, limited resources, and systemic conditions that weaken implementation (Kurowski et al., 2022). In Canada, national disability data also indicate the continuing relevance of this issue, with Statistics Canada reporting that disability affected a substantial proportion of the population and that youth represented a significant share of this reality in recent data collections (Statistics Canada, 2025). When schools are unable to provide timely accommodations, culturally responsive teaching, accessible learning materials, or coordinated support systems, diverse learners may remain formally enrolled yet still experience exclusion in more subtle ways. This is why evaluating strategies in practice is crucial. It allows researchers to move beyond policy language and assess whether inclusive efforts actually improve participation, responsiveness, confidence, and learning conditions for students with varied needs.

Although inclusive education is well established as a policy aspiration, there remains a continuing need to examine how schools translate inclusive principles into concrete strategies that support diverse learners in real settings. Canadian schools operate within a socially diverse and institutionally varied educational system, making it important to understand which practices are perceived as supportive, responsive, and sustainable. By evaluating inclusive strategies in practice, the study may contribute to a more grounded understanding of what inclusion looks like in actual school environments and how educational institutions can better respond to learner diversity. More importantly, it can help clarify whether current approaches are sufficient to meet the needs of students who require not only access to schooling, but also meaningful participation, recognition, and support within it.

## Literature Review

### *Conceptual Foundations of Inclusive Education*

Inclusive education is widely understood as a continuing effort to ensure that all learners, regardless of disability, identity, language, culture, or social condition, can participate meaningfully in school life. Contemporary literature no longer treats inclusion as mere physical placement in a regular classroom. Instead, it emphasizes presence, participation, belonging, and achievement as interconnected elements of a truly inclusive learning environment. UNESCO (2020) explained that inclusion requires education systems to identify and remove barriers that prevent learners from fully accessing educational opportunities. In the same vein, Ainscow (2020) argued that inclusion and equity should be treated as central principles of school improvement rather than as peripheral concerns limited to specific student groups. These perspectives show that inclusive education is not a single intervention but a whole-school orientation grounded in fairness, responsiveness, and shared responsibility.

Earlier models often concentrated primarily on students with disabilities, but more recent work frames inclusion within a wider equity agenda that addresses the experiences of all learners who may be marginalized in school settings. Whitley and Hollweck (2020), in their discussion of policy reform in Canada, noted that inclusive education has increasingly been linked with equity, especially for students who are underserved by existing systems. This broader framing is important because it recognizes that exclusion may arise not only from disability-related barriers, but also from culture, language, race, identity, or social disadvantage. Such a view strengthens the argument that inclusive education must be understood as both an ethical and pedagogical commitment.

### ***Inclusive Instructional Strategies and Accessible Learning Design***

A major strand of the literature focuses on the classroom strategies that make inclusive education practical and sustainable. Among the most frequently cited frameworks is Universal Design for Learning, which encourages educators to provide multiple means of engagement, representation, and action or expression in order to respond to learner variability. Al-Azawei et al. (2016) found that UDL has increasingly been used to improve accessibility and bridge the gap between instructional design and diverse student needs. More recently, the Government of Canada (2025) described UDL as a framework that avoids a one-size-fits-all approach by promoting flexible methods and materials that can support a wider range of learners. These sources suggest that inclusive classrooms become more effective when educators deliberately design instruction to anticipate difference rather than react to it after difficulties appear.

Beyond UDL, the literature also supports differentiated instruction, flexible assessment, curriculum adaptation, and responsive classroom supports as essential inclusive strategies. These approaches help teachers adjust content, processes, products, and learning conditions in ways that better accommodate learner diversity. The importance of such strategies lies in their practical value: they move inclusion from policy language into daily teaching practice. In this sense, inclusion is strengthened when instruction becomes flexible, accessible, and responsive rather than standardized and rigid. Literature on inclusive practice consistently suggests that when schools employ such approaches thoughtfully, learners are more likely to experience participation, recognition, and academic engagement.

### ***Teacher Competence, Collaboration, and Student Voice in Inclusive Practice***

The literature consistently identifies teachers as central to the success of inclusive education. However, inclusive practice requires more than positive intentions. It depends on professional competence, efficacy, beliefs about diversity, and the ability to design instruction that responds to varied learner profiles. Emmers et al. (2022), through a systematic literature review, identified key competencies for inclusive education teachers, emphasizing that effective inclusion is tied to specific professional capacities rather than general goodwill alone. Similarly, Vantieghem et al. (2023) found that teachers' inclusive teaching competence is closely related to both beliefs and efficacy, showing that what teachers think about diversity and how capable they feel in responding to it are both vital for inclusive action. This body of literature indicates that inclusive education rests heavily on teacher preparation and professional learning.

Inclusive education often requires coordinated work among classroom teachers, specialists, school leaders, and families. Sannen et al. (2021) found that teacher collaboration is positively associated with beliefs toward inclusion and with differentiated instructional practice. Their findings suggest that inclusion is more likely to be realized in schools where professional relationships are strong and where teachers do not work in isolation. In addition, the literature highlights the importance of listening to learners themselves. Ainscow and Messiou (2018) argued that student voice can challenge assumptions, stimulate reflection, and encourage schools to develop more inclusive ways of working. Together, these strands of literature show that inclusive education is both relational and participatory. It depends not only on what teachers do individually, but also on how educational communities collaborate and how learners are heard within the process.

### ***Persistent Barriers and Conditions for Effective Implementation***

Although inclusive education is widely endorsed, the literature makes clear that implementation remains uneven. One of the recurring themes across studies is the gap between policy aspirations and classroom realities. Kurowski et al. (2022), in their review of research articles on barriers to inclusive education, identified persistent issues such as discrepancies between legislation and practice, classroom-level teaching barriers, and the need for stronger interprofessional collaboration. These concerns suggest that schools may support inclusive principles in theory while still struggling to enact them consistently in practice. Ainscow (2020) likewise emphasized that inclusive reform must be understood within context,

since educational systems differ in their resources, structures, and social conditions. The literature therefore shows that successful inclusion depends not only on ideals, but also on institutional capacity and contextual responsiveness.

Leung et al. (2024) observed that diversity in education encompasses a wide range of dimensions, including disability, language, ethnicity, and sexual orientation, and they examined whether teacher preparation programs are responding adequately to these realities. Their work suggests that inclusive education requires stronger preparation pathways if educators are to respond effectively to increasingly complex classrooms. This aligns with broader literature showing that inclusion cannot be sustained through isolated teacher effort alone. It requires supportive leadership, coherent policy, ongoing professional development, accessible learning design, and school cultures that value diversity as a strength rather than a disruption. Taken together, the literature indicates that the effectiveness of inclusive education depends on both classroom practice and the wider structures that enable or constrain it.

## **METHODS**

### **Research Design**

This study employed a cross-sectional predictive-explanatory survey design. The design was selected because the inquiry did not merely seek to describe inclusive practices in schools, but to examine how school-based strategies functioned as interrelated support mechanisms for diverse learners within a naturally occurring educational context. A predictive-explanatory approach was appropriate because the study treated inclusive education practices as latent constructs that could be measured through multiple indicators and examined in terms of their combined and direct contributions to supportive learning conditions. This design also suited the study's aim of evaluating practice as it existed during the period of data collection rather than manipulating school conditions experimentally. For latent, prediction-oriented educational models, structural equation modeling approaches have been recognized as suitable when the focus is on explaining and predicting relationships among constructs rather than testing a purely experimental intervention framework.

### **Research Locale**

The study was conducted in selected Canadian schools operating within inclusive education frameworks. These schools were situated in educational settings where classroom diversity, learner support, accommodation practices, and inclusive teaching policies formed part of regular school operations. The Canadian setting provided an appropriate environment for the investigation because inclusive education in Canada has been shaped by strong policy attention to equity, access, participation, and school responsiveness. The locale was therefore suitable for examining how support strategies were enacted in day-to-day educational practice across school contexts that recognized learner diversity as a central concern rather than as a peripheral issue.

### **Participants and Sampling Technique**

The participants were educators and school-based personnel who had direct involvement in the planning, delivery, or support of inclusive educational practices. They were selected because of their first-hand engagement with strategies intended to accommodate learner variability and support participation in classroom and school life. A multistage purposive-stratified sampling technique was used. In the first stage, schools were identified based on their implementation of inclusive practices and willingness to participate in the study. In the second stage, participants were grouped according to professional role and school level to ensure that the data reflected varied perspectives on inclusive practice without reducing the study to a single occupational viewpoint. This sampling strategy was appropriate because the inquiry required

information-rich participants with direct experience of inclusive education rather than a purely random selection detached from the phenomenon being examined.

### **Research Instrument**

Data were gathered using a researcher-developed questionnaire designed to measure the extent to which school practices supported diverse learners through inclusive strategies. The instrument was organized into four substantive domains: inclusive instructional design, classroom accommodation and responsiveness, collaborative support systems, and learner participation and belonging. The items were framed as perception statements and rated using a five-point Likert scale ranging from strongly disagree to strongly agree.

Instrument development followed a structured validation process. First, the items were generated from current scholarship on inclusive education and accessible instructional practice. Second, the draft instrument underwent expert review for content and face validity. The panel consisted of specialists in inclusive education, educational measurement, and school leadership. Item wording, construct alignment, clarity, relevance, and contextual suitability were reviewed before revision. This step was important because content and face validity procedures help establish whether the instrument adequately represents the intended domains and whether the statements are understandable to the intended respondents.

After expert review, the revised questionnaire was pilot tested with a group of participants drawn from schools that were not included in the main study. The pilot phase was conducted to examine item clarity, internal consistency, response flow, and administration feasibility. Based on the expert validation results, the instrument obtained an item-level content validity index ranging from .83 to 1.00, while the scale-level content validity index was .96, indicating strong content representation. Reliability testing using Cronbach's alpha yielded an overall coefficient of .92, which indicated excellent internal consistency. The subscale coefficients ranged from .86 to .91, showing that the domains were sufficiently stable for use in the main data collection. In educational instrument development, such procedures are commonly used to strengthen both validity evidence and reliability before full administration.

### **Data Gathering**

Prior to data collection, the researcher secured the necessary ethics clearance and institutional permissions. Coordination with participating schools was undertaken to explain the objectives of the study, the voluntary nature of participation, and the procedures for handling responses. After approval was obtained, the questionnaire was administered either through secure online forms or printed copies, depending on the preferred mode of the participating schools. Participants received an informed consent form before answering the instrument. The consent form clearly stated the purpose of the research, the expected time for completion, the voluntary nature of participation, the right to withdraw without penalty, and the measures used to protect confidentiality. Completed responses were screened for completeness before they were prepared for coding and analysis.

### **Data Analysis**

The study used a combination of descriptive statistics and Partial Least Squares Structural Equation Modeling (PLS-SEM). Descriptive statistics, specifically weighted mean and standard deviation, were first used to summarize the observed level of each inclusive practice domain. However, because the study was designed to evaluate relationships among interconnected latent constructs rather than isolated variables, PLS-SEM served as the principal analytical technique. This method was selected because it is especially appropriate for prediction-oriented educational research, for models containing multiple constructs and indicators, and for datasets that may not fully satisfy the normality assumptions typically required in covariance-based modeling.

The analysis proceeded in two stages. First, the measurement model was evaluated using outer loadings, composite reliability, average variance extracted, and discriminant validity indices. Second, the structural model was assessed through path coefficients, bootstrapped t-values, p-values, coefficient of determination, and predictive relevance. To deepen interpretation, the study also used Importance-Performance Map Analysis (IPMA) after the structural model estimation. This added procedure allowed the researcher to identify not only which inclusive strategies exerted the strongest influence, but also which ones showed lower performance and therefore required greater practical attention. This analytical combination moved the study beyond routine association testing and made the findings more useful for decision-making in educational settings.

### **Ethical Consideration**

The study adhered to the ethical principles set out in the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, TCPS 2 (2022), which serves as the guiding framework for human-participant research in Canada. The research process was anchored in respect for persons, concern for welfare, and justice. These principles informed the procedures for informed consent, voluntary participation, privacy protection, and fair treatment of all participants. The study did not collect unnecessary identifying information, and responses were stored in password-protected files accessible only to the researcher. No participant was coerced to join the study, and all were informed that they could decline or withdraw at any point without disadvantage. Where relevant, the study also recognized the need for context-sensitive ethical practice in relation to equity, confidentiality, and responsible handling of school-based information, all of which are emphasized in TCPS 2 (2022) (Panel on Research Ethics, 2022).

### **RESULTS AND DISCUSSION**

Table 1. *Level of Inclusive Education Strategies and Learner Participation and Belonging*

Construct	Mean	SD	Descriptive Interpretation
Inclusive Instructional Design	4.08	0.56	High
Classroom Accommodation and Responsiveness	3.74	0.63	High
Collaborative Support Systems	3.69	0.67	High
Learner Participation and Belonging	3.82	0.60	High

Scale: 4.21 to 5.00, Very High; 3.41 to 4.20, High; 2.61 to 3.40, Moderate; 1.81 to 2.60, Low; 1.00 to 1.80, Very Low.

Table 1 presents the overall level of inclusive education strategies and learner participation and belonging. The findings showed that Inclusive Instructional Design obtained the highest mean of 4.08 with a standard deviation of 0.56, indicating that accessible lesson planning, varied instructional formats, and flexible learning tasks were commonly practiced. This result suggested that participating schools had made visible efforts to embed inclusivity into classroom instruction. The relatively low dispersion also indicated that these practices were fairly consistent across participating settings.

By contrast, Collaborative Support Systems obtained the lowest mean of 3.69 with a standard deviation of 0.67. Although the construct still fell within the high range, it was the weakest among the dimensions. This result pointed to a practical concern in implementation. It implied that while teachers were generally trying to support diverse learners, coordination among classroom teachers, special education personnel, school leaders, and families was less stable and less uniformly practiced. This pattern reflected a common challenge in inclusive education, where classroom-level intention may be stronger than school-wide coordination.

The mean of 3.74 for Classroom Accommodation and Responsiveness further revealed that adjustment practices were present but not yet maximized. This suggested that accommodations were being made, yet they may not have been consistently individualized or timely for all learners. Meanwhile, Learner

Participation and Belonging posted a mean of 3.82, indicating that students were generally perceived as included in classroom processes and school life, but the result also showed room for strengthening deeper forms of participation, confidence, and school connectedness. Overall, the descriptive findings suggested that inclusive practice was established at a positive level, yet certain support mechanisms remained uneven, especially those requiring stronger collaboration and coordinated response.

Table 2. *Measurement Model Assessment*

Construct	Indicator Loading Range	Composite Reliability	Cronbach's Alpha	AVE Interpretation
Inclusive Instructional Design	0.741–0.846	0.90	0.87	0.64 Acceptable
Classroom Accommodation and Responsiveness	0.718–0.832	0.89	0.85	0.61 Acceptable
Collaborative Support Systems	0.729–0.851	0.91	0.88	0.66 Acceptable
Learner Participation and Belonging	0.752–0.864	0.92	0.89	0.68 Acceptable

Table 2 shows the results of the measurement model assessment. All constructs achieved indicator loadings above 0.70, indicating that the observed items were sufficiently aligned with their respective latent constructs. This supported the adequacy of the retained indicators in representing the domains under study. The strongest loadings were recorded under Learner Participation and Belonging, suggesting that the items under this construct were particularly stable and coherent.

The values for Composite Reliability, which ranged from 0.89 to 0.92, and Cronbach's Alpha, which ranged from 0.85 to 0.89, confirmed strong internal consistency across the constructs. These results indicated that the measures were reliable for structural analysis. Likewise, the Average Variance Extracted (AVE) values, which ranged from 0.61 to 0.68, exceeded the minimum acceptable threshold of 0.50. This demonstrated satisfactory convergent validity, meaning that the items under each construct shared enough common variance to justify their use as measures of the same concept.

The results established that the study's latent variables were measured with sufficient reliability and convergent validity. This was important because it strengthened confidence in the subsequent structural model analysis. In practical terms, it meant that the predictive relationships observed later could be interpreted as reflecting meaningful patterns among well-measured constructs rather than statistical artifacts arising from weak instrumentation.

Table 3. *Discriminant Validity Based on HTMT Ratio*

Constructs	IID	CAR	CSS	LPB
Inclusive Instructional Design (IID)				
Classroom Accommodation and Responsiveness (CAR)	0.71			
Collaborative Support Systems (CSS)	0.68	0.74		
Learner Participation and Belonging (LPB)	0.77	0.79	0.81	

Table 3 presents the discriminant validity of the constructs using the Heterotrait-Monotrait Ratio (HTMT). All HTMT values were below the conservative threshold of 0.85, indicating that the constructs were empirically distinct from one another. This meant that although the variables were related, they did not overlap excessively. Each construct captured a separate aspect of inclusive education in practice.

This result was analytically important because inclusive education often involves conceptually connected processes. For instance, instructional design, classroom accommodations, and collaborative support may naturally occur together in school settings. However, the HTMT results confirmed that the study was not merely measuring the same phenomenon repeatedly under different labels. Instead, it was

capturing related but distinguishable dimensions of support for diverse learners. This strengthened the credibility of the structural paths examined in the model.

Table 4. *Structural Model Results*

Path	Path Coefficient ( $\beta$ )	Standard Error	t-value	p-value	Decision
Inclusive Instructional Design → Learner Participation and Belonging	0.29	0.08	3.56	0.001	Significant
Classroom Accommodation and Responsiveness → Learner Participation and Belonging	0.17	0.07	2.14	0.033	Significant
Collaborative Support Systems → Learner Participation and Belonging	0.36	0.09	4.12	0.000	Significant

Model Summary

Endogenous Construct	R <sup>2</sup>	Adjusted R <sup>2</sup>	Q <sup>2</sup>	Interpretation
Learner Participation and Belonging	0.61	0.59	0.39	Moderate to substantial predictive power

Table 4 presents the structural model results. The findings showed that all three inclusive education strategy domains significantly predicted Learner Participation and Belonging. Among them, Collaborative Support Systems emerged as the strongest predictor with a path coefficient of 0.36, a t-value of 4.12, and a p-value of 0.000. This result indicated that the quality of coordination among teachers, specialists, school personnel, and families exerted the greatest influence on whether learners felt meaningfully included and connected in school. In practical terms, this suggested that inclusion became more effective when it was carried collectively rather than being left solely to the individual classroom teacher.

Inclusive Instructional Design also showed a significant positive effect with a path coefficient of 0.29 and a p-value of 0.001. This implied that when instruction was intentionally varied, accessible, and flexible, learners were more likely to participate and experience belonging. The result supported the view that inclusive education was not simply about support services, but also about how learning itself was designed and delivered.

The weakest yet still significant predictor was Classroom Accommodation and Responsiveness, with a path coefficient of 0.17 and a p-value of 0.033. Although it contributed positively to the outcome, its effect size was lower than those of the other two constructs. This suggested that accommodations were useful but may have been implemented in a narrower or more reactive manner. The lower coefficient may reflect a school reality in which accommodations were present but not always sufficiently individualized, timely, or embedded in the broader culture of instruction.

The model explained 61% of the variance in learner participation and belonging, indicating a moderate to substantial predictive capacity. This meant that the three inclusive strategy domains jointly accounted for a meaningful portion of how learner inclusion outcomes were experienced in school settings. The Q<sup>2</sup> value of 0.39 further showed that the model had good predictive relevance. These findings affirmed that inclusive education strategies were not merely symbolic commitments. Rather, they had measurable explanatory value in relation to learner outcomes that mattered.

Table 5. *Effect Size of Exogenous Constructs on Learner Participation and Belonging*

Predictor	f <sup>2</sup>	Interpretation
Inclusive Instructional Design	0.12	Small to moderate effect
Classroom Accommodation and Responsiveness	0.06	Small effect
Collaborative Support Systems	0.18	Moderate effect

Table 5 shows the effect size of each predictor construct on learner participation and belonging. The results reinforced the earlier structural findings. Collaborative Support Systems posted the largest effect size at 0.18, indicating a moderate practical influence. This meant that beyond being statistically significant, collaboration had a meaningful contribution to the model. It was not simply associated with learner inclusion outcomes but carried notable practical weight in shaping them.

Inclusive Instructional Design produced an  $f^2$  of 0.12, showing a small to moderate effect. This finding suggested that flexible and accessible instructional planning had a meaningful role in improving learner participation and belonging, although its influence was somewhat less pronounced than collaboration. By contrast, Classroom Accommodation and Responsiveness yielded a smaller effect size of 0.06. While still relevant, this result indicated that accommodation practices alone were less powerful when compared with strategies that were more systemic and proactively designed.

These findings pointed to an important implication. Inclusive education appeared to be strongest when schools combined thoughtful classroom design with shared responsibility across professionals and support systems. Accommodation remained necessary, but it seemed less transformative when it functioned in isolation or only as an adjustment after barriers had already emerged.

Table 6. *Importance-Performance Map Analysis (IPMA)*

Construct	Total Effect on Learner Participation and Belonging	Performance Index	Rank for Action Priority
Collaborative Support Systems	0.36	67.40	1
Inclusive Instructional Design	0.29	74.85	2
Classroom Accommodation and Responsiveness	0.17	69.10	3

Table 6 presents the Importance-Performance Map Analysis, which identified which constructs should receive the greatest practical attention. The results showed that Collaborative Support Systems had the highest total effect on learner participation and belonging at 0.36, yet its performance index was only 67.40, the lowest among the three predictors. This made it the top area for intervention. The finding was especially important because it revealed a hidden implementation gap. Although collaboration had the greatest influence on learner inclusion outcomes, it was also the area that was least fully developed in practice. Inclusive Instructional Design displayed both a strong total effect and the highest performance score of 74.85. This suggested that schools had already made relatively solid progress in designing instruction that addressed learner variability. Since its performance was stronger, it represented a sustaining strength rather than the most urgent deficit area. Classroom Accommodation and Responsiveness showed moderate performance but lower importance, which meant it still needed attention but was not as strategic a priority as collaboration. The IPMA findings enriched the structural results by identifying where improvement efforts would likely produce the greatest benefit. If schools aimed to improve learner participation and belonging more effectively, strengthening collaborative systems among educators, support personnel, and families would likely yield the strongest practical gains. This result also explained why inclusion may be visible at the classroom level while still feeling incomplete from a broader school perspective. A school may have capable teachers and reasonable accommodations, yet still experience inconsistency if support structures remain fragmented.

## CONCLUSION

Inclusive education in practice was generally well established, as schools demonstrated high levels of inclusive instructional design, classroom accommodation and responsiveness, collaborative support systems, and learner participation and belonging. However, the findings also showed that the strength of inclusive practice was not evenly distributed across all areas. Collaborative support systems, although rated

lowest in performance, emerged as the strongest predictor of learner participation and belonging, indicating that inclusion became more meaningful and sustainable when teachers, specialists, school leaders, and families worked in a more coordinated manner. Inclusive instructional design also played a substantial role, confirming that flexible, accessible, and varied teaching practices helped diverse learners engage more fully in school life. Classroom accommodation and responsiveness contributed positively as well, although its smaller effect suggested that accommodations alone were not sufficient when implemented without stronger systemic support. Overall, the study affirmed that inclusive education was most effective when it functioned as an integrated school-wide process rather than as isolated classroom adjustments. In light of these findings, it was recommended that schools strengthen collaborative structures through regular case-based planning, interdisciplinary consultation, and clearer coordination among personnel involved in learner support. Professional development should also be intensified to help educators deepen their competence in inclusive instructional design, responsive accommodation, and participatory classroom practices. School leaders should prioritize systems that promote shared accountability for inclusion, while future interventions should focus on improving the lower-performing but high-impact aspects of collaboration that most strongly influence learner participation and belonging.

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