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By Universitas Muhammadiyah Sidoarjo

Table Of Contents

Journal Cover	1
Author[s] Statement.....	3
Editorial Team	4
Article information	5
Check this article update (crossmark)	5
Check this article impact	5
Cite this article.....	5
Title page.....	6
Article Title	6
Author information	6
Abstract	6
Article content	7

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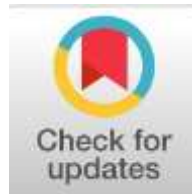
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Predictive Factors Of Peer And Educator Involvement On Special Needs Development: Faktor Prediktif Keterlibatan Teman Sebaya Dan Pendidik Pada Perkembangan Berkebutuhan Khusus

Subli Subli, subli.2025@student.uny.ac.id (*)

Program Studi Magister Pendidikan Luar Biasa, Fakultas Ilmu Pendidikan, Universitas Negeri Yogyakarta, Indonesia

Agus Basuki, Agus_basuki@uny.ac.id

Program Studi Magister Pendidikan Luar Biasa, Fakultas Ilmu Pendidikan, Universitas Negeri Yogyakarta, Indonesia

(*) Corresponding author

Abstract

General Background Education constitutes a fundamental right that demands an environment of inclusive learning catering to the diverse capabilities of all populations. **Specific Background** Within these settings, cultural arts instruction taught collaboratively provides valuable opportunities for marginalized individuals to acquire communication, creativity, and social competencies. **Knowledge Gap** Despite known advantages, prior literature predominantly investigates general pedagogical methods, rarely examining the concurrent variables of educator roles alongside peer participation within collaborative artistic frameworks. **Aims** This quantitative ex post facto study investigates the joint predictive value of teacher facilitation and student involvement concerning the cognitive, social, emotional, and autonomy milestones of marginalized populations. **Results** Multiple linear regression analysis of observational and questionnaire data from an integrated junior high school demonstrates that both independent variables concurrently account for 77.3 percent of the statistical variance in developmental progression. Crucially, peer participation emerged as the most dominant predictive variable. **Novelty** This research uniquely isolates collaborative artistic pedagogy as a distinct domain where non-authoritative interactions supersede traditional authoritative facilitation in predicting holistic growth. **Implications** Schools must prioritize structured cooperative models and peer-tutoring programs over purely authoritative pedagogies, ensuring comprehensive progression.

Highlights

- ♦ Active participation from classmates accounts for the most significant portion of holistic growth within integrated classrooms.
- ♦ Classroom facilitators successfully accommodate learner independence through adaptive and cooperative guidance strategies.
- ♦ Cooperative cultural groupwork explains substantial statistical variance concerning overall cognitive and emotional milestones.

Keywords

Inclusive Education; Cultural Arts; Collaborative Pedagogy; Social Competence; Holistic Growth

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INTRODUCTION

Education is a fundamental right of every citizen, which must be fulfilled without discrimination, also for children with special needs (CSNs). This principle is guaranteed by Article 31 of the 1945 Constitution of the Republic of Indonesia, Law Number 20 of 2003 concerning the National Education System, and further strengthened by the Regulation of the Minister of National Education Number 70 of 2009 on Inclusive Education. These regulations provide that every learner has the right to quality educational services adjusted to their personal characteristics, potential and learning needs. In the implementation of inclusive education, the educational services for children with special needs are not only aimed at improving academic achievement, but also to foster social, emotional, communication, creativity and life skills needed for the independent living. The success of inclusive education therefore depends very much on the ability of schools to create adaptive, participatory and supportive learning environments that accommodate the diversity of learners.

Teachers are central to the learning process in inclusive classrooms, and are central to its success. Their roles are not only to provide instructional content but also to be facilitators, mediators, motivators, and mentors who can respond to the diverse characteristics and abilities of the learners. According to Mulyasa (2013), professional teachers are expected to be able to create an active, innovative, creative, effective, and fun learning atmosphere so that all students can achieve optimal learning outcomes. Therefore, the quality of teachers' roles is one of the key factors affecting the development of children with special needs in the learning process. Besides the roles of teachers, students' active involvement is another crucial element contributing to learning success. Active students who interact with teachers, other students, and instructional materials tend to have better academic and developmental outcomes than passive students. According to Sardiman (2011) learning activities are a basic principle of learning because meaningful knowledge, skills and experience are constructed through active engagement. Active participation is especially important for special needs children, as it improves self-confidence, communication skills and social interaction.

One way that instructors can promote student engagement is through group-based learning, often referred to as cooperative learning. This approach gives learners opportunities for working together, discussing, getting help, and learning through social interaction. Johnson and Johnson (2009) suggest that cooperative learning can be advantageous to academic achievement and social skills by encouraging positive interdependence, individual accountability, face-to-face interaction, and teamwork. Learning in groups provides children with special needs with valuable opportunities to develop communication skills, social competence and adaptive behaviors in an inclusive learning environment. In this context, cultural arts education is particularly appropriate for group learning. Cultural arts instruction emphasizes the creative processes as well as the learning outcomes such as self-expression, collaboration, appreciation, and artistic production. Artistic activities enable students to develop creativity, communication skills, social sensitivity and collaborative skills. Cultural arts also offer another avenue for children with special needs to express ideas, emotions and experiences especially for those who have limitations in verbal communication.

However, although there are many benefits, the implementation of group-based cultural arts learning in inclusive schools is still not optimal. Preliminary results indicate that teachers continue to use traditional teacher-centered instructional approaches, which restrict opportunities for students to work and communicate together. The student's participation in group activities is still low, social interaction among group members is not optimal, and development progress of children with special needs is not significantly improved. These conditions expose a disparity between the ideal of collaborative learning and the reality of classroom practice. In the previous research, it was proved that methods of instruction that involve students actively in the learning process have positive effects on academic achievement and social development. Slavin (2012) found that cooperative learning results in increased academic achievement, motivation to learn, and social competence. Most of the previous research has focused on the role of teachers, general instructional methods or the development of children with special needs without specifically investigating the context of group-based cultural arts learning. Hence, little research has explored how teachers' roles and student participation collaboratively influence the development of children with special needs in group-based cultural arts instruction. In the twenty-first century education, learning should focus not only on academic competence but also the development of collaboration, communication, creativity and critical thinking skills. These are also very important competencies for children with special needs, so that they can successfully participate in broader social and professional contexts. Therefore, group learning of cultural arts is a promising instructional strategy to be used to support the objectives of inclusive education. The researchers' initial study found that group learning has quite the potential to increase learning motivation and social interaction for children with special needs. The effectiveness of this teaching method, however, largely depends on the teacher's ability to manage group dynamics and on students' active participation in the learning process.

The findings suggest that the success of cultural arts learning in a group is not only determined by the model of teaching used, but also by the quality of the role of the teacher and the active involvement of students. From the above discussion, it can be understood that the development of children with special needs is affected by many factors such as individual characteristics, family support, the school environment and classroom learning experiences. This study particularly considers the factors directly related to the process of instruction, specifically teachers' roles and students' participation in group-based cultural arts learning. The factors were selected because they are within the control of schools and can be optimized to improve the quality of inclusive educational services. Thus, this study seeks to examine the effect of the teachers' roles and students' participation on the development of children with special needs through group-based cultural arts learning. The results are expected to offer empirical evidence for developing more effective, collaborative, and inclusive strategies for teaching cultural arts, and will be a valuable reference for teachers and schools in improving educational services for children with special needs.

METHOD

This study used a quantitative approach with an ex post facto research design to investigate the effects of teachers' roles and students' participation on the development of children with special needs (CSNs) through group-based cultural arts learning. The study was of an ex post facto design as it examined naturally occurring phenomena and did not involve any manipulation of independent variables. This research was conducted at SMP Negeri 2 Busang, an inclusive junior high school in the second semester of the 2025/2026 academic year. The population was comprised of all seventh grade students involved in group cultural arts learning, including children with special needs. The sample was determined using purposive sampling with the following criteria: (1) The class applied group-based cultural arts learning, (2) the class consisted of children with special needs, (3) students played an active role in group learning activities, and (4) The teacher actively handled inclusive classroom instruction. From these criteria, the research sample was Class VII-B consisted of 22 students. The data were obtained through a questionnaire, classroom activity observation, and documentation. The main instrument used to measure the teachers' roles, students' participation and development of children with special needs was the questionnaire based on a four-point Likert scale. Classroom observations were carried out to analyze the instructional practices of teachers, the interactions of students in group activities, and the involvement of special needs children in the learning process. Additional quantitative data were collected from documentation, such as student records and reports of classroom activities. The research instruments were validated for content validity through expert judgment and tested empirically for construct validity through Pearson Product-Moment correlation before data collection. The reliability of the instrument was determined through Cronbach's Alpha coefficient. IBM SPSS was used for processing the collected data through descriptive and inferential statistics. Characteristics of each research variable were summarized using descriptive statistics. Data were checked for normality, linearity, multicollinearity and heteroscedasticity before hypothesis testing to confirm the assumptions of multiple linear regression were met. The hypotheses were then tested by Pearson correlation analysis to find the relationships among variables and multiple linear regression analysis to explore the simultaneous effects of teachers' roles and students' participation on the development of children with special needs. Statistical significance was assessed at the 0.05 significance level.

RESULT AND DISCUSSION

This research is a quantitative research with an ex post facto research design, aiming to determine the effect of the role of teachers (X_1) and student participation (X_2) on the development of children with special needs (CSNs) (Y) through group-based cultural arts learning at SMP Negeri 2 Busang. The research sample is 22 students of class VII-B, and the assessment of developmental outcomes is done on eight students identified as children with special needs in the slow learners category. Data were collected by using closed-ended likert scale questionnaires (15 items each) to measure teachers' roles and students' participation and an observation checklist (12 indicators) to measure the development of children with special needs. Descriptive statistics, prerequisite assumption tests, Pearson Product-Moment correlation analysis, and multiple linear regression were used to analyze the collected data using IBM SPSS Statistics version 26 to empirically evidence the relationships and effects among the research variables within the context of inclusive education.

Teachers' Roles in Group-Based Cultural Arts Learning

Teachers' roles (X_1) refer to the effectiveness of teachers in promoting learning, providing guidance, and managing inclusive classrooms in group-based cultural arts instruction. The descriptive analysis of 22 student responses shows that students' perception of teachers' performance was very positive. This means that the learning process was well supported by the adaptive instructional practices that catered for both regular students and children with special needs (CSNs).

Table 1. Descriptive Statistics of Teachers' Roles (X_1)

Statistic	Value
N	22
Minimum	51
Maximum	59
Mean	56.09
SD	2.67

The average score of 56.09 shows that teachers' roles were perceived at a very high level. The relatively small standard deviation (2.67) indicated the high consistency of student perceptions, reflecting the uniform implementation of inclusive teaching practices in the classroom. The results showed that teachers effectively fulfilled their roles as facilitators, mentors, and classroom managers in the group-based cultural arts learning environment. To determine the strengths of each dimension, the mean scores of individual indicators are shown in Table 2.

Table 2. Mean Scores of Teachers' Role Indicators

Indicator	Mean	Percentage (%)	Category
Learning Facilitation	11.45	95.42	Very High
Guidance and Support	11.64	97.00	Very High
Inclusive Classroom Management	11.36	94.67	Very High
Interaction and Communication	11.09	92.42	Very High
Assessment and Feedback	10.64	88.67	High

Of the five indicators, Guidance and Support scored the highest (97.00%), suggesting that teachers were effective in supporting students in collaborative learning activities. In the same vein, the indicators for learning facilitation and inclusive

classroom management obtained high ratings, reflecting the teachers' ability to organize learning activities to meet the diverse needs of learners including CSNs. The subscale Assessment and Feedback obtained the lowest score (88.67%) but was still in the high category, which shows that teachers always give evaluation and feedback. However, there is a need to improve in giving more individualized and constructive feedback to children with special needs. Overall, the findings suggest that the role of teachers in group-based cultural arts learning was implemented at a very high level. The results suggest that teachers were successful in creating an inclusive learning environment by facilitating collaboration, providing instructional support, and managing classroom interactions. It is expected that such positive teaching practices would contribute to improving student participation and promote cognitive, social, emotional and behavioral development of children with special needs. These descriptive findings form the basis for subsequent inferential analyses investigating the impact of teachers' roles on the development of children with special needs.

Students' Roles in Group-Based Cultural Arts Learning

Students' roles (X₂) refer to the extent to which learners were actively involved, collaborated, and displayed an inclusive attitude towards peers during group-based cultural arts learning. A descriptive analysis based on the answers of 22 students suggested that the perception of student participation was very positive, representing a supportive and collaborative classroom atmosphere that promoted the participation of both regular students and children with special needs (CSNs). The findings indicate that group-based learning successfully promoted peer interaction and social responsibility of students in an inclusive classroom.

Table 3. *Descriptive Statistics of Students' Roles (X₂)*

Statistic	Value
N	22
Minimum	51
Maximum	59
Mean	55.14
SD	2.05

The mean score of 55.14 shows that students' roles were classified as very high and the fairly low standard deviation (2.05) indicates that students' perceptions were very similar among respondents. These results indicate that the students were actively engaged in collaborative learning activities and showed supportive actions toward their classmates, including children with special needs. The consistency in data indicates a positive and inclusive classroom environment where peer interaction is a catalyst for meaningful learning experiences. To further identify the strengths of each dimension, the average scores for each indicator were analyzed and are presented in Table 4.

Table 4. *Mean Scores of Students' Role Indicators*

Indicator	Mean	Percentage (%)	Category
Participation	7.45	93.18	Very High
Cooperation	11.09	92.42	Very High
Interaction	10.95	91.29	Very High
Responsibility	7.36	92.05	Very High
Inclusive Attitude	11.05	92.05	Very High
Self-Confidence	7.23	90.34	Very High

Of the six indicators, the highest percentage was in Participation (93.18%) which shows that students were active participants in collaborative cultural arts activities. The high scores for Cooperation, Interaction and Inclusive Attitude also indicate that the students cooperated well with their peers and accepted classmates with different abilities including children with special needs. The lowest score was in Self-Confidence (90.34%), but this was still in the very high category, indicating that in general students were confident in expressing ideas and participating in artistic activities, but still need to be encouraged to improve their individual creativity and independence. Overall, the findings indicate that students played a very positive role in promoting an inclusive learning environment, thus laying a strong foundation for examining their contribution to the development of children with special needs in subsequent inferential analyses.

Development of Children with Special Needs Through Group-Based Cultural Arts Learning

Based on the evaluation of the development of children with special needs (CSNs) (Y), participatory classroom observations were carried out with eight students identified as slow learners in three successive learning sessions. The observation instrument was comprised of 12 indicators in four developmental dimensions: learning participation, social interaction, independence and emotional regulation. The results of the description showed that the students' development performance improved consistently during the implementation of group-based cultural arts learning, indicating that the collaborative learning environment effectively supported the development progress of children with special needs.

Table 5. *Descriptive Results of CSNs' Development Across Three Learning Sessions*

Learning Session	Mean Score
Session 1	31.38
Session 2	40.75
Session 3	46.00

The results indicated a steady increase in the average scores of students from 31.38 in the first session to 40.75 in the second session and 46.00 in the third session. This gradual improvement shows that as the learning activities continued, children with special needs were more and more engaged and independent. At the end of the observation period, half of the students had reached the very high developmental category and the other half was classified in the high category, which

indicates that all observed students showed positive developmental progress without evidence of stagnation. These results suggest that the interaction between the teachers' support and the collaborative interaction among peers contributed to an inclusive learning environment that allowed the continuous improvement of development. To identify which aspects of development improved the most, the mean scores for each developmental dimension were analyzed and are presented in Table 6.

Table 6. Mean Scores by Developmental Dimension

Developmental Dimension	Session 1	Session 2	Session 3	Improvement
Learning Participation	8.25	10.88	11.63	+3.38
Social Interaction	7.63	10.13	11.38	+3.75
Independence	7.75	9.88	11.50	+3.75
Emotional Regulation	7.75	9.88	11.50	+3.75

Social interaction, independence and emotional regulation showed the most improvement of the four dimensions with an increase of 3.75 points each. Learning participation had the highest mean scores in all three learning sessions. These results suggest that cultural arts learning in a group setting not only promoted active participation in the classroom but also students' social engagement, autonomous learning behaviors, and emotional self-regulation. In summary, the descriptive findings provide empirical support for the premise that collaborative cultural arts instruction is a supportive and inclusive learning environment that can foster the holistic development of children with special needs, thus establishing a firm foundation for the subsequent inferential analyses to explore the impacts of teachers' roles and students' participation on developmental outcomes.

Assumption Tests

Before testing the research hypotheses using multiple linear regression, a series of assumption tests were conducted to ensure that the regression model satisfies the assumptions of the Best Linear Unbiased Estimator (BLUE). The normality, linearity, multicollinearity and heteroscedasticity tests were the assumption tests.

Table 7. Result of Regression Assumption Test

Assumption Test	Variable/Relationship	Test Statistic	Sig.	Result
Normality	Teachers' Roles (X ₁)	0.962	0.518	Normal distribution
	Students' Roles (X ₂)	0.945	0.441	Normal distribution
Linearity	Teachers' Roles (X ₁) → CSNs' Development (Y)	F = 14.831	0.000	Linear relationship
	Students' Roles (X ₂) → CSNs' Development (Y)	F = 18.245	0.000	Linear relationship
Multicollinearity	Teachers' Roles (X ₁)	Tolerance = 0.718; VIF = 1.393	–	No multicollinearity
	Students' Roles (X ₂)	Tolerance = 0.718; VIF = 1.393	–	No multicollinearity
Heteroscedasticity (Glejser)	Teachers' Roles (X ₁)	–	0.192	No heteroscedasticity
	Students' Roles (X ₂)	–	0.241	No heteroscedasticity

As seen in Table 7, the significance values of 0.518 for teachers' roles and 0.441 for students' roles were higher than the significance threshold of 0.05. This meant that the data were normally distributed. The linearity test also revealed significant linear relationships between the teachers' roles and the development of children with special needs ($F = 14.831$, $p < 0.001$) as well as between the students' roles and developmental outcomes ($F = 18.245$, $p < 0.001$). These results confirm that the independent variables are linearly related to the dependent variable, which satisfies a basic assumption in regression analysis. The multicollinearity test showed that the tolerance and variance inflation factor (VIF) values of 0.718 and 1.393 respectively for both independent variables indicated no multicollinearity. The Glejser heteroscedasticity test showed significance values of 0.192 for teachers' roles and 0.241 for students' roles, both higher than 0.05, indicating homoscedastic residuals. All assumptions of multiple linear regression are met in the overall results, which supports the validity of further hypothesis testing.

Hypothesis Testing

To analyze the effect of teachers roles (X₁) and students roles (X₂) on the development of children with special needs (CSN) (Y), multiple linear regression was used. All the assumptions of regression were met before the hypotheses testing, which implied that the regression model was suitable for inferential analysis.

Table 8. Results of Multiple Linear Regression Analysis

Variable	B	SE	β	t	p
Constant	6.872	4.215	–	1.630	0.119
Teachers' Roles (X ₁)	0.285	0.118	0.271	2.415	0.026*
Students' Roles (X ₂)	0.478	0.100	0.536	4.772	<0.001***

The findings show that both independent variables have a positive and significant impact on the development of children with special needs. The first hypothesis was supported by the fact that teachers' roles were significant predictors of developmental outcomes ($\beta = 0.271$, $t = 2.415$, $p = 0.026$). The students' role also had a significant positive influence ($\beta = 0.536$, $t = 4.772$, $p < 0.001$) supporting the second hypothesis. In addition, the standardized regression coefficients indicate that the students' roles were more influential than the teachers' roles, which means that the peer participation was the most

dominant predictor of children's developmental outcomes in the group-based cultural arts learning environment. The overall regression model was statistically significant, as presented in Table 9.

Table 9. Overall Regression Model

Statistic	Value
F	32.451
p	<0.001
R	0.879
R ²	0.773
Adjusted R ²	0.750
Std. Error of Estimate	1.819

Regression analysis was statistically significant ($F = 32.451$, $p < 0.001$) and showed the roles of teachers and students as predictors of the development of children with special needs. The coefficient of determination ($R^2 = 0.773$) indicates that the two independent variables explained 77.3% of the variance in developmental outcomes, with the other 22.7% being attributed to factors not accounted for in the current model. The results support the third hypothesis and indicate that the teacher's facilitation and peer engagement are important to facilitate the development of children with special needs in group-based cultural arts learning.

Discussion

The findings of this study suggest that the roles of teachers and students have an important impact on the development of children with special needs (CSNs) through group-based cultural arts learning. The multiple linear regression analysis showed that both independent variables had positive effects on the development of CSNs. The regression model accounted for 77.3% of the variance in developmental outcomes ($R^2 = 0.773$). The results show that the development of children with special needs is not only conditioned by their individual characteristics but also by the quality of interaction in the inclusive learning environment. The average developmental score of CSNs rose progressively from 31.38 in the first observation session to 46.00 in the third observation session, indicating that collaborative learning offered students chances to gradually improve their participation, social interaction, independence, and emotional regulation. These findings lend support to the assumption that inclusive education is best practiced when instructional practices promote meaningful participation of children with special needs in regular classrooms rather than mere physical presence. The important role of teachers' contribution confirms that teachers are still the main facilitators of successful inclusive education. The regression coefficient ($\beta = 0.271$, $p = 0.026$) indicates that improvements in teachers' instructional practices are associated with improvements in children's developmental outcomes. This finding is consistent with Vygotsky's theory of the Zone of Proximal Development (ZPD) which explains that learners develop more effectively when led through appropriate scaffolding by more knowledgeable individuals. In the group-based cultural arts learning, teachers not only arranged classroom activities but also formed heterogeneous learning groups, provided individualized guidance, encouraged interaction among students, and designed learning situations to satisfy the varied learning needs. The descriptive findings indicating a very high mean score of teachers' roles (56.09) further depict that students perceived teachers as efficacious in facilitating learning, providing guidance, and managing inclusive classrooms. One score that particularly stands out is the high score for the guidance and support indicator, which indicates that continuous assistance from the teacher helped children with special needs feel more confident to participate in collaborative artistic activities. These findings are consistent with Mulyasa (2013) which states that the teacher in inclusive classes should be a facilitator, motivator, and manager of learning who is able to adapt learning to the diverse characteristics of students.

Teacher roles were significant predictors of developmental outcomes, but the dimension of teacher role that was related to assessment and feedback received the lowest rating of all teacher-role dimensions. This finding suggests that giving constructive and personalized feedback is still one of the most difficult aspects of inclusive teaching. Children with special needs in particular require effective feedback as they often need repeated explanations, simplified language and positive reinforcements to understand their learning progress. According to Hattie and Timperley (2007), good feedback needs to inform students about their present performance and guide them to future learning goals. Thus, the development of the teacher's capacity in adaptive assessment and formative feedback may improve the effectiveness of inclusive learning especially for students with cognitive learning difficulties such as slow learners.

One of the key findings of this study was that the students' roles were the most significant predictor of the development of CSNs ($\beta = 0.536$, $p < 0.001$), even more than the teachers' roles. This finding indicates that peer support is an important factor in the development of children in inclusive classrooms. This discovery supports Bandura's Social Learning Theory, which states that individuals acquire new behaviors and social skills through observation, imitation, and interaction with others. In group-based cultural arts learning, children with special needs were constantly interacting with their peers while performing the collaborative artistic tasks. Through such interactions they had the opportunity to observe how problems were solved, to imitate socially appropriate behavior, and to obtain immediate assistance when difficulties occurred. It is more spontaneous and less intimidating than formal teacher instruction and more accessible for children with cognitive limitations to gain confidence while participating in classroom activities. The descriptive results also support this interpretation. The participation, cooperation and inclusive attitudes were all very high indicating that regular students showed very supportive behaviors towards their classmates with special needs.

The prevailing role of peer support also confirms the principles of cooperative learning proposed by Johnson and Johnson (2009) and Slavin (2015), who argue that positive interdependence, individual accountability, and face-to-face interaction contribute to both academic achievement and social development. In the present study, cultural arts learning naturally required students to communicate, negotiate and collaborate in the creation of collective artwork. And so, peer interaction went beyond academic support to emotional support, shared responsibility, and mutual appreciation. These experiences

seem to account for the largest gains in the areas of social interaction, independence and emotional regulation. The creative nature of the cultural arts learning offers a psychologically safe environment that children with special needs can express ideas and make mistakes without fear of negative judgment, and gradually develop adaptive behaviors through repeated collaborative experiences. These results are in line with previous studies that have demonstrated the positive role of cooperative learning environments in the social competence, self-confidence and inclusive participation of students.

The joint effects of teachers' roles and students' roles have important implications for implementing inclusive education. Bronfenbrenner's ecological systems theory conceptualizes children's development as mediated by ongoing interactions between individuals and their proximal environments. The instructional structure and learning climate in the classroom microsystem are set by teachers. Peers offer ongoing social support in the course of daily learning activities. The high coefficient of determination obtained in the present study indicates that these two contextual factors jointly explain most of the developmental progress observed among the children with special needs. However, 22.7% of the variance remains unexplained, indicating that other factors such as family support, individual motivation, cognitive characteristics, school facilities, and parental involvement may also play a role in children's development. Future research should therefore include these variables to create a more comprehensive understanding of inclusive educational practices.

Overall, this study provides empirical evidence that group-based cultural arts learning is an effective instructional approach to promote children with special needs' holistic development. Cultural arts learning is not only a subject for artistic skill development but also provides students with opportunities to improve their communication, cooperation, independence, emotional regulation, and social participation in an authentic collaborative situation. The findings indicate that an effective inclusive education needs not only competent teachers, but also active engagement of peers as learning partners. Hence, schools should enhance the practice of collaborative learning, build structured peer-support or peer-tutoring programs, and offer continuous professional development for teachers in the areas of adaptive instruction and formative assessment. With these strategies combined, inclusive classrooms can be learning communities where all students regardless of their abilities can participate meaningfully and achieve optimal developmental outcomes.

CONCLUSION

The study concludes that the roles of teachers and students are significant in children with special needs (CSNs)'s development in the group-based cultural arts learning in an inclusive school setting. The roles of teachers were found to have a positive contribution to students' development through adaptive instruction, guidance and inclusive classroom management, while the roles of students showed a stronger influence, indicating that peer support is a crucial factor in the promotion of participation, social interaction, independence and emotional development of children with special needs. At the same time, both variables explained 77.3% of the variance in the development of CSNs. It was evident that effective teacher facilitation and active peer participation together created an inclusive learning environment that contributed greatly to the holistic development of children with special needs through collaborative cultural arts learning. The results suggest that teachers should keep improving their skills in adaptive instruction, formative assessment, and inclusive classroom management, and actively promote positive interactions between regular students and children with special needs through collaborative learning activities. Schools may wish to set up formal peer-tutoring or peer-support schemes, and offer training to build inclusive attitudes and effective communication skills to support peers with special educational needs. Future research should include larger, more diverse samples, additional explanatory variables (e.g., family support, school resources, learning motivation), and mixed-method approaches to better understand the factors that contribute to the development of children with special needs in inclusive educational settings.

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