

Assessing The Impact Of Dei Initiatives On Educational Outcomes In South East Asia: A Critical Analysis

Saroda Chatterjee^{1*}, Dr. Sanghamitra Brahma², Dr. Meghdoot Ghosh³

¹Phd Research Scholar - Management, (Amity University, Kolkata) & Senior Assistant Professor & Coordinator-BBA (Nopany Institute of Management Studies), saroda.

Email:ID: chatterjee@s.amity.edu

²Associate Professor, Amity Business School, Amity University, Kolkata

Email:ID: sbrahma@kol.amity.edu

³Principal, Post Graduate Institute of Hospital Administration Peerless Campus, Kolkata

Email:ID: meghdoot.ghosh@gmail.com

ABSTRACT

This paper explores the effectiveness of Diversity, Equity and Inclusion (DEI) programs in enhancing the education outcomes in Southeast Asia because it is necessary to develop evidence-based knowledge about the role of DEI in improving student achievement and equity. The study is inspired by the increasing regional educational inequalities and the rising importance of DEI in education policy-making. The data were collected using a quantitative, cross-sectional design in a survey of 296 education practitioners using an online survey and using SPSS to analyse the data. The analysis encompassed the descriptive statistics and ANOVA testing to define the impact that four factors influence student outcomes, i.e. Inclusive Teaching Practices, DEI Leadership Support, Resource Availability and Teacher Professional Development, are DEI-related.

The findings indicate that the general model explains educational outcomes significantly with the four independent variables explaining 85.1% of the variance. Professional development of teachers was found to be the most predictive factor, then resource availability, and leadership support. However, no significant effect was observed with inclusive teaching practices, which implies some gaps in implementation or training. The findings imply that structural and capacity-building aspects of DEI are important to enhance learning outcomes within the region. The research suggests specific investment in educator training, fair resource allocation and accountability of the leadership to improve the success of the DEI programs

Keywords: DEI initiatives; Southeast Asia; educational outcomes; ANOVA; teacher professional development

INTRODUCTION:

1.2 Background and context

Educational systems across Southeast Asia are navigating a complex post-pandemic recovery while confronting long-standing inequities that shape students' access, attainment and future opportunities. Many countries in the region saw dramatic learning losses during COVID-19; estimates indicate that roughly one in four children in East Asia and the Pacific struggled with "learning poverty" (an inability to read and understand a simple text by age 10) before or during the recovery period. Evidence from regional assessments (SEA-PLM and national learning assessments) also shows persistent gaps in foundational literacy and numeracy between wealthier and poorer

students and between urban and rural schools—signalling that broad access alone has not produced equitable learning outcomes (Gibbs et al. 2023). At the same time, governments and multilateral partners in Southeast Asia are increasingly emphasising equity, diversity and inclusion (DEI) in education policy — from disability-inclusive schooling to gender parity and programmes addressing socioeconomic disadvantage — and investing in teacher development, digital learning and targeted support for marginalized learners (Brancaccio-Taras et al. 2022). Despite these commitments, translation of DEI intentions into measurable improvements in outcomes is uneven across the region.

1.2 Rationale and significance



Figure 1: DEI Training

(Source: Inspired by Corsino and Fuller, 2021)

Both the scholarly and policy literatures record the moral imperative and economic rationale of inclusive education: the level of equity is correlated with an aggregate level of human capital, productivity and social cohesion. However, there is a remarkable gap in the research with strong, regionally based research evaluations explicitly relating the DEI initiatives (policies, school practices, teacher training, targeted resources) to quantifiable educational results in Southeast Asian settings (Conway et al. 2021). Current regional reports reveal the issue (high learning poverty, disparities by socioeconomic level and geography), but do not go further to conduct rigorous and comparative analytical investigation of what DEI interventions can improve, to whom, and under what institutional circumstances.

This gap is important as the countries of the ASEAN differ in many ways in terms of income, governance, funding, and capacity of education and education implementation; consequently, evidence concerning the ways in which DEI actions lead to attainment and equity are crucial in prioritization of scarce resources and tailoring reforms that are scalable. The aim of the current research is to offer an empirical, critical analysis which would provide a relationship between policy and program characteristics and student level outcomes in selected Southeast Asian contexts, thus providing practical recommendations to policy, donor and school leaders.

1.3 Research questions and objectives

Research Questions

1. **RQ1:** How are Diversity, Equity and Inclusion (DEI) initiatives currently implemented across educational systems in Southeast Asia, and what forms do these initiatives take?
2. **RQ2:** What is the relationship between DEI initiatives (e.g., inclusive pedagogy, targeted funding, teacher training, accessibility measures) and student educational outcomes in Southeast Asian countries?
3. **RQ3:** How do contextual factors—such as socioeconomic status, school location (urban/rural), and institutional capacity—moderate the impact of DEI initiatives on learning outcomes?

Research Objectives

1. **RO1:** To identify, map and classify existing DEI initiatives implemented across selected Southeast Asian educational systems.
2. **RO2:** To critically examine the impact of DEI interventions on key educational outcomes such as literacy, numeracy and school completion rates.
3. **RO3:** To analyse how contextual and structural conditions shape or influence the effectiveness of DEI initiatives in improving learning outcomes across different student groups.

2. Literature Review

2.1. Mapping and Classification of DEI Initiatives in Southeast Asian Education Systems



Figure 2: DEI as competitive advantages

(Source: Inspired by Lafferty et al. 2024)

Recent research on Diversity, Equity and Inclusion (DEI) in Southeast Asian education systems has indicated an increase in the policy priorities of equitable access, inclusive pedagogy as well as more focused assistance to marginalised learners. Most of the nations in the region have embraced models based on international programs on inclusive education but the extent of their application differs widely. Research has generally categorized DEI interventions into three types, namely, policy-driven reforms, practices in schools and community-based support. The interventions may include policy changes such as curriculum changes, training requirements on teachers, policies and strategies of disability inclusion, and gender equity. DEI interventions in schools incorporate various methods, such as differentiated instruction, available learning environments, remedial programs and multilingual education of ethnic minority students. As per Lafferty et al. (2024), the activities of community-based programs are usually aimed at overcoming socioeconomic obstacles by involving

parents, offering scholarship opportunities, providing access to digital learning or collaborating with non-governmental organizations.

2.2. Impact of DEI Interventions on Educational Outcomes

Mogilski et al. (2025) examined the way DEI interventions affect learning outcomes, including literacy, numeracy, school retention, and student wellbeing in general. Scholarly studies indicate that inclusion pedagogical approach improves student interaction and academic achievement especially among poor learners. Different instruction, Universal Design of Learning (UDL), and culturally responsive pedagogy have been discovered to be methods used to enhance understanding and engagement of diverse students. Social economic inequality programmes, including subsidies, school meals, tech access and community tutoring, are also linked to better attendance and continuation of learning (Chung et al. 2023).

Along with such positive tendencies, the literature points out a small number of studies which directly follow the causal relationship between the inputs of DEI and particular learning outcomes within the context of Southeast Asian learning settings. To a large extent, the evidence is descriptive or case-based, which limits generalisation. Moreover, although teacher training has been universally recognized as one of the pillars of effective DEI implementation, its quality and resources differences undermine its efficacy. The other barrier that has been identified is the need to be more integrated in terms of the institutional support systems like the learning assistants or specialised services that must be used to ensure the maintenance of the inclusive practices (Powell et al. 2021). Altogether, the evidence on the positive outcomes of DEI interventions seems to be skewed, with increased consideration of the methodology suggested as a good opportunity to further develop it.

2.3. Influence of Contextual and Structural Factors on DEI Effectiveness

The existing literature of Colosimo et al. (2022) on the analysis of contextual factors proved that the results of DEI are strongly linked to structural, socioeconomic, and institutional factors. Socioeconomic status is one of the most discussed factors that determine access to resources (both in households and in schools). Lower-income schools tend to have problems with a lack of trained teachers, learning resources and technology, and implementing DEI becomes more complicated. These problems are further exacerbated by urban-rural differences where schools in rural and remote areas have higher student-teacher ratios, irregular policy implementation and inadequate services.

The institutional capacity is also identified as an important moderator of DEI effectiveness. Studies highlight that effective school leadership, effective accountability systems and positive organisational climates promote the processes and the results of DEI programmes. On the other hand, those schools that are characterized by poor governance systems tend to have uneven practices of inclusion. Attitudes to diversity and inclusion are also shaped by culture, where people in certain cultures are stigmatized because of a disability or gender roles, which do not allow people to engage in the process with equal opportunities. Moreover, the level of political commitment and funding also defines the sustainability of the DEI reforms since those countries which have low education budgets find it hard to expand successful pilot programs to national levels (Taylor et al. 2023). Altogether, the literature indicates that the DEI initiatives should not be measured independently, and their effectiveness is greatly dependent on the World contextual factors that influence the opportunities as well as the limitations.

3. Methodology

3.1 Research Design

The current study is quantitative, cross-sectional research, which will be implemented to explore the effectiveness of Diversity, Equity and Inclusion (DEI) programs on education in Southeast Asia. The study is based on a ~~positivist philosophical position since it attempts to find~~ *Advances in Consumer Research*

quantifiable connections among variables and to quantitatively test hypotheses through statistical methods. The design will allow the researcher to gather numerical data at a specific point of time using a large sample, and this will be generalisable to the sample population. The first instrument is an online survey that will enable the effective gathering of data that is geographically spread and consistent delivery of questions to the respondents.

3.2 Data Collection Methods

The data is gathered by use of a structured online survey questionnaire, which is a question leaflet that has close-ended questions and which is measured on Likert scales. The survey will be used to capture the perception of respondents regarding the implementation of DEI, the degree to which their institutions are inclusive, and the achievement of the students. Demographic information is also collected in the questionnaire in order to make subgroup comparisons. The online format is also accessible and it also reduces the burden of administration and enables the recording of data automatically, which minimises errors. The survey is sent to the participants through a secure online survey link, and the answers are collected anonymously to promote good faith and minimize the possibility of biased responses (Harper, 2025). The data collection procedure is consistent among all respondents and it favours reliability and replicability.

3.3 Sampling Strategy

Simple random sampling technique is used to sample the participants among the target population that comprises educators, school staff and education practitioners in Southeast Asia. Out of this population, 296 people are surveyed. This sample size will be adequate to perform the inferential statistical test and also to establish significant differences among groups. Random sampling means that every eligible person in the sample has an equal probability of being recruited and sampling bias is minimised, which increases the generalisability of the results. The methodology favours the positivist premise of the research through the emphasis on objectivity and representativeness. The participants will be given information regarding the aim of the research, and they will be free to participate.

3.4 Data Analysis

The data are analysed by the use of SPSS, through descriptive and inferential statistical analysis. The responses of participants are summarised with the help of descriptive statistics (means, frequencies and standard deviations) and provide general trends in the implementation of DEI and the results of educational outcomes. The ANOVA (Analysis of Variance) is applied to test the hypotheses of the study to determine whether there is a significant difference between the groups of results in regard to the extent of DEI initiatives. ANOVA is suitable in the study because it can be used to compare the mean differences in several categories and establish statistically significant patterns. The findings of the analysis are discussed against the research goals, and using them, the study will be able to estimate the effect caused by DEI programs and evaluate the confounding effect of contextual variables. All the survey questions are

addressed through 5 Likert scale: Strongly disagree, Disagree Neutral, Agree , Strongly Agree.

4. Results and Discussion

Presentation of Findings

The quantitative analysis examines how four independent variables—Inclusive Teaching Practices (IV1), DEI Policies and Leadership Support (IV2), Resource Accessibility (IV3), and Teacher Professional Development (IV4)—influence Student Educational Outcomes (DV). A multiple regression model is run using SPSS.

Table 1: Model summary

Model Summary				
Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.923 ^a	.851	.849	1.71504

a. Predictors: (Constant), IV4, IV1, IV2, IV3

Table 2: ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4844.706	4	1211.177	411.776	.000 ^b
	Residual	847.109	288	2.941		
	Total	5691.816	292			

a. Dependent Variable: DV

b. Predictors: (Constant), IV4, IV1, IV2, IV3

Table 3: Coefficient Analysis

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.067	.413		.163	.871
	IV1	-.009	.033	-.009	-.285	.776
	IV2	.113	.054	.108	2.106	.036
	IV3	.258	.063	.247	4.094	.000
	IV4	.628	.055	.605	11.483	.000

a. Dependent Variable: DV (Source: SPSS)

Model Summary Findings

According to the model summary, the predictive power is very high with an R value of .923 and R² of .851. It implies that the four DEI-related independent variables explain 85.1% of the variance in the educational outcomes among students. Adjusted R² (.849) further supports the fact that even the sample size and number of predictors cannot make the model weak. The standard error of estimate (1.71504) is relatively low which means that the predictions of the model are relatively accurate.

ANOVA Findings

The ANOVA table indicates that the regression model has been found to be statistically significant with the F-value of 411.776 and p-value of 0.000. This proves that the model in its entirety is a significant predictor of student outcomes and that the overall interaction of the independent variables is not insignificant. The regression sum of squares (4844.706) compares much more with the residual sum of squares (847.109), which indicates that the predictors explain a majority of the variation in the dependent variable.

Coefficients Findings

The coefficients table reveals how each independent variable contributes individually to predicting educational outcomes:

- **IV1 (Inclusive Teaching Practices):** B = -.009, p = .776 — Not significant
- **IV2 (DEI Policies and Leadership Support):** B = .113, p = .036 — Significant positive effect.
- **IV3 (Resource Accessibility):** B = .258, p = .000 — Strong significant positive effect.
- **IV4 (Teacher Professional Development):** B = .628, p = .000 — Very strong significant positive effect

Teacher professional development seems to be the most predictive one (= .605), then there is resource accessibility (= .247). There is a smaller, although significant influence of leadership and policy support (= .108). This model does not make a significant contribution to inclusive practices in teaching.

Analysis and Interpretation of Results

Overall Model Interpretation

Such a large R² (85.1) indicates that all the DEI initiatives are critical in determining the student results in educational achievement in Southeast Asia. This great outcome shows that the variables selected are consistent with the real process of influencing educational advancement of equity in the region. The large ANOVA value supports the fact that the correlation between DEI efforts and results does not happen by chance.

Interpretation of Each Variable in Relation to Research Objectives

1. Inclusive Teaching Practices (IV1)

Student outcomes are not significantly predicted by this variable (p = .776). This could point out the fact that although inclusive teaching practices are significant

philosophically, they are not always followed in practice, or a teacher might not have sufficient training or resources to implement them successfully. It can also indicate that practices of inclusion alone without institutional or structural backing are not adequate to make a significant change.

This observation implies that inclusive approaches need to be better institutionally supported and entail more effective training frameworks in a bid to become tangible in achieving actual better results.

2. DEI Policies and Leadership Support (IV2)

There is a substantial yet small effect of leadership support (p = .036). It means that the policies and the leadership commitments are important, their impact, however, is indirect, but it depends on the functioning of the policies and their operationalisation. The policies can dictate the tone, but unless they are supported by both resources and teacher training, the effect will be minimal.

This is in line with literature that stated that policy commitment is not a variable that transforms outcomes unless it has specific implementation mechanisms.

3. Resource Accessibility (IV3)

Access to resources is another critical predictor and has a strong coefficient (B = .258). It implies that the availability of learning materials, digital tools, infrastructure and academic support services to the students has a significant impact on education.

The positive impact implies that resource equity is one of the key success mechanisms of DEI in Southeast Asia. Schools possessing higher resources will be in a better position to support diverse learners and minimize the obstacles to learning.

4. Teacher Professional Development (IV4)

The strongest predictor is professional development, whose standardized beta (.605) is the highest and its effect size (B = .628) is large. This demonstrates that with training in inclusive pedagogy, differentiated instruction and DEI models, student outcomes have a high improvement.

This observation supports the idea that the ability of teachers is the key to successful DEI. Training provides educators with strategies that are applied straight in classroom practices and ultimately better student performance.

RESULTS INTERPRETATION

The findings of the statistical analysis are rather persuasive and pertain to the ultimate goal of this study to determine the impact of Diversity, Equity and Inclusion (DEI) activities on the educational performance in Southeast Asia. The large explanatory power of the model indicates that variables of DEI jointly explain a significant amount of student outcomes, which proves the idea that DEI is not just a policy desire, but a quantifiable influence on academic results and equity. The high impact of three independent variables, namely DEI leadership support, access to resources and teacher professional development directly address the aim of the study that will determine which attributes of the DEI implementation impact

learning the most. The results indicate that capacity-related and structural issues, i.e. resources and training opportunities, are most affected, thus fulfilling the goal of the research aimed at explaining contextual factors that determine DEI effectiveness. In the meantime, the insignificant finding regarding the inclusive teaching practices also makes a significant point: certain DEI elements might need to be reinforced by the institution to a greater extent to translate them into tangible results. On the whole, the findings confirm the study design and offer practical evidence to inform policymakers and educators on the need to prioritize DEI-related approaches that have the most significant effect on improving student achievement.

5. CONCLUSION

The aim of the study was to evaluate how Diversity, Equity and Inclusion (DEI) interventions influence the educational outcomes of students in southeast Asia and the results are overwhelming that DEI measures impact a great deal in determining the academic success of learners. The regression analysis found that three variables, which include leadership support of DEI, availability of resources and teacher professional development, significantly predict the student outcomes, and professional development is found to be the most significant predictor. These findings validate the hypothesis that the key capabilities to enhancing learning experiences are institutional capacity and fair distribution of resources. Conversely, inclusive teaching practices did not have a significant effect, which is an indication that the practices are not yet being enforced with consistency and level of efficacy that can bring meaningful outcomes on a scale to be measured.

The consequences of such results underline the fact that education systems should enhance the structural aspects of DEI. The policymakers ought to focus on the investment in teacher training programmes, equitable distribution of resources and leadership responsibility towards the implementation of DEI. Schools must aim at developing skills and confidence of teachers to implement the inclusive approaches in the classroom and aligning the policies with the support mechanisms. Generally, the study suggests a more comprehensive and resource-intensive strategy towards the concept of DEI, so that the policies can be transformed into tangible changes in the learning of students and equity in education in the area..

REFERENCES

1. Bersted, K.A., Lockhart, K.M., Yarboi, J., Wilkerson, M.K., Voigt, B.L., Leonard, S.R. and Silvestri, J.M., 2023. A path toward equity and inclusion: Establishing a DEI committee in a department of pediatrics. *Journal of Clinical Psychology in Medical Settings*, 30(2), pp.342-355.
2. Boatright, D., London, M., Soriano, A.J., Westervelt, M., Sanchez, S., Gonzalo, J.D., McDade, W. and Fancher, T.L., 2023. Strategies and best practices to improve diversity, equity, and inclusion among US graduate medical education programs. *JAMA network open*, 6(2), pp.e2255110-e2255110.
3. Brancaccio-Taras, L., Awong-Taylor, J., Linden, M., Marley, K., Reiness, C.G. and Uzman, J.A., 2022. The PULSE diversity equity and inclusion (DEI) rubric: a tool to help assess departmental DEI efforts. *Journal of microbiology & biology education*, 23(3), pp.e00057-22.
4. Chukwudi, O.A. and Eusebius, A.C.H.U.G.O., 2023. Diversity, equity, and inclusion (DEI): Exploring the effectiveness of human resource strategies and practices in fostering diversity, equity, and inclusion in the workplace and understanding the benefits of a diverse workforce in Nigeria. *Journal for Studies in Management and Planning*, 9(9), pp.1-22.
5. Chung, A.S., Cardell, A., Desai, S., Porter, E., Ghei, R., Akinlosotu, J. and Ogedegbe, C., 2023. Educational outcomes of diversity curricula in graduate medical education. *Journal of Graduate Medical Education*, 15(2), pp.152-170.
6. Colosimo, A.B., Barone, J.L. and Flick, L., 2022. Better together: Using course outcome data and learning communities to foster institutional change. *New Directions for Community Colleges*, 2022(199), pp.173-187.
7. Conway, D.M., Saidman-Krauss, B. and Schreiber, R., 2021. Inclusivity in Admissions and Retention of Diverse Students: Leadership Determines DEI Success. *Rutgers Race & L. Rev.*, 23, p.1.
8. Corsino, L. and Fuller, A.T., 2021. Educating for diversity, equity, and inclusion: A review of commonly used educational approaches. *Journal of Clinical and Translational Science*, 5(1), p.e169.
9. Diaz, J., Gusto, C., Narine, L.K., Jayaratne, K.S.U. and Silvert, C., 2023. Toward diversity, equity, and inclusion outreach and engagement in Extension education: Expert consensus on barriers and strategies. *The Journal of Extension*, 61(1), p.21.
10. Gibbs, C., Achebe, N., Johnson, B., Nwaiche, C. and Ortiz, D.V., 2023. Constructing college-level diversity, equity, and inclusion (DEI) minors—moving from performative to transformative DEI. *The Radical Teacher*, (127), pp.41-50.
11. Harper, S., 2025. Leveraging research and demanding proof in response to legislative attacks on DEI in US higher education. *AERA Open*, 11, p.23328584251355514.
12. Iyer, A., 2022. Understanding advantaged groups' opposition to diversity, equity, and inclusion (DEI) policies: The role of perceived threat. *Social and Personality Psychology Compass*, 16(5), p.e12666.
13. Jimerson, S.R., Arora, P., Blake, J.J., Canivez, G.L., Espelage, D.L., Gonzalez, J.E., Graves, S.L., Huang, F.L., January, S.A.A., Renshaw, T.L. and Song, S.Y., 2021. Advancing diversity, equity, and inclusion in school psychology: Be the change. *School Psychology Review*, 50(1), pp.1-7.
14. Lafferty, D.J., McKenney, E.A., Hubbard, T., Trujillo, S. and Beasley, D.E., 2024. A path forward: Creating an academic culture of justice, equity,

- diversity, and inclusion. *The Bulletin of the Ecological Society of America*, 105(1), p.e2117.
15. Mogilski, J., Jussim, L., Wilson, A. and Love, B., 2025. Defining diversity, equity, and inclusion (DEI) by the scientific (de) merits of its programming. *Theory and Society*, pp.1-14.
 16. Ng, E., Fitzsimmons, T., Kulkarni, M., Ozturk, M.B., April, K., Banerjee, R. and Muhr, S.L., 2025. The anti-DEI agenda: navigating the impact of Trump's second term on diversity, equity and inclusion. *Equality, Diversity and Inclusion: An International Journal*, 44(2), pp.137-150.
 17. Powell, C., Yemane, L., Brooks, M., Johnson, C., Alvarez, A.A., Bandstra, B., Caceres, W., Dierickx, Q., Thomas, R. and Blankenburg, R., 2021. Outcomes from a novel graduate medical education leadership program in advancing diversity, equity, and inclusion. *Journal of graduate medical education*, 13(6), pp.774-784.
 18. Raja, M.P. and Abirami, A.M., 2022. Strategic approaches for DEI implementation in engineering education. *Journal of Engineering Education Transformations*, 36(2), pp.560-565.
 19. Taylor, M.M., Fernandez, C.S., Dave, G., Brandert, K., Larkin, S., Mollenkopf, K. and Corbie, G., 2023. Implementing measurable goals for diversity, equity, and inclusion in Clinical and Translational Science Awards leadership. *Equity in Education & Society*, 2(2), pp.198-205
- ..