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Inclusive Education Practices and the Education 2030 Agenda in Public Secondary Schools in Mezam Division, North-West Cameroon

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Abstract: This study assessed inclusive education practices in public secondary schools in Mezam Division, North-West Cameroon, in relation to the attainment of the Education 2030 Agenda. The research focused on two specific indicators: the provision of inclusive infrastructure and inclusive staff development and training practices. Employing a concurrent nested mixed-method research design, data were gathered from a sample of 351 participants, including 335 teachers through questionnaires and 16 administrators using interview guides. Quantitative data were analyzed using descriptive statistics (means and standard deviations) and inferential statistics, including Spearman Rank correlation and multiple regression analysis (ANOVA) to test the hypotheses, while qualitative data from interviews were processed through thematic analysis. Quantitative overall findings for inclusive infrastructure revealed a slightly positive trend (Mean=2.75), where ramps (Mean=3.43) and flexible layouts (Mean=3.36) were primary strengths, but adaptive playgrounds (Mean=1.73) were a major deficiency. Qualitatively, administrators exhibited a "knowing-doing gap," where moral commitment was hindered by structural and financial barriers. On this basis, research hypothesis one was accepted, as infrastructure significantly influences the attainment of the Education 2030 Agenda ($p=0.004$). Regarding staff development, the overall results also highlighted a slightly positive trend (Mean=2.89), yet 81.8% reported a lack of school-organized training (Mean=2.09). The staff development hypothesis was also accepted, showing a highly significant implication for the attainment of Education 2030 Agenda ($p=0.000$). It was generally recommended that educational authorities provide more inclusive infrastructures and ensure teachers receive adequate, continuous training and seminars in specialized pedagogy to transform the Education 2030 Agenda into a reality

Keywords: Inclusive Education, Education 2030 Agenda, Public Secondary Schools, Cameroon.

Introduction

Inclusive education aims to ensure that all children and young people experience an education that enhances their learning and social relationships and prepares them for a quality adult life in the community. An inclusive approach enables all students to access and fully participate in teaching and learning experiences, together and on an equal basis with their similarly aged peers. Individuals with disabilities encounter multiple challenges in the course of their studies; and the persistent exclusion of learners with disabilities is argued to have long-term effects on the social placement of

those excluded especially from the secondary education sector (United Nations Educational, Scientific Organization (UNESCO), 2019). School communities need to develop habits of inclusion to ensure students with disabilities are not routinely excluded because they are perceived as "different" or "other". Perhaps the most critical factor in developing habits of inclusion is the role of the Principal (leader); they are central to facilitating systemic change and leading school staff to adopt attitudes and practices consistent with full implementation of an inclusive school vision. United Nations Educational, Scientific and Cultural Organization (2004) has long been active in the movement for education for all (EFA). At the World Conference on Education for All in Jomtien, Thailand, in 1990, the participants agreed upon the goals of basic education for all children and adults to be achieved by the year 2000. The Jomtien Conference was not a single event but the start of a powerful movement. UNESCO, UNICEF, the World Bank, the UN Development Programme (UNDP) convened the World Education Forum to evaluate the situation and strengthen the commitment to Education for All. Ten years later more than 1,100 participants from 164 countries gathered in Dakar, Senegal, for the World Education Forum. The purpose of the meeting was to review the assessment of the progress made during the Jomtien Decade and to renew the commitment to achieving the Education for All goals and targets (Berit & Miriam, 2001).

The coming of Education Agenda 2030 which is goal 4 of the UN Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure that all people can enjoy peace and prosperity. Also known as Agenda 2030, the SDGs were agreed upon in 2015 by the UN General Assembly (Resolution 70/1). They were adopted by all UN Member States, and 2030 was set as the deadline for achieving them. SDG 4 builds on the targets set by previous goals, including MDG 2 in pursuit of universal primary education by 2015, and the Dakar Framework for Action on Education for All (EFA), which among other aims, focused on eliminating gender disparity at all levels of education by 2015. The Education 2030 Framework for Action requires 'foundational skills of literacy and numeracy as well as analytical, problem-solving and other high-level cognitive, interpersonal and social skills' to be delivered by 'well qualified, trained, adequately remunerated and motivated teachers' in 'safe, healthy, gender-responsive, inclusive and adequately resourced environments. In this light, the secondary education sector must put in place inclusive practices that fall in line with Agenda 2030. And it is on this basis that the research has decided to embark on a study "Inclusive education practices in the secondary education sector: Implication for education 2030 Agenda in secondary schools in Mezam Division.

Cameroon as a member nation of the UN and has adopted the sustainable development agenda of the UN in addition to other UN conventions like UNCPRD, UN Policy Guidelines on inclusion among others. The nation has also gone further to enact local laws like Law No. 2019/024 of 24 December, 2019 and Law No. 98/004 of 14 April 1998 Section 4, 6 and 7. (Section 4) which states that "the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration into society bearing in mind prevailing, socio-cultural, political and moral factors'', (Section 6) which states that "the state shall guarantee the right of every child to education'' and finally (Section 7) which stresses that the "state shall guarantee equal opportunities for education to all, without discrimination as to gender, political, philosophical or religious, opinion, or social, cultural, linguistic or geographical origin''. In 2024, the Cameroon government adopted the National Policy on Inclusive Education (NPIE); representing a landmark framework aimed at promoting equitable, quality education for all, with a special focus on persons with special needs (including PWDs, other vulnerable populations, and marginalized groups). The policy aligns with SDG 4, the African Union's Agenda 2063, Cameroon's Constitution (1996), Law No. 98/004 (1998) on the orientation of education, and the National Development Strategy 2020-2030 (NDS30). The NPIE shifts from a charity or medical model to a rights-based, social model of inclusion, which emphasizes systemic change to accommodate diversity rather than forcing learners to adapt to existing rigid systems (NPIE, 2024).

The implication is that the Cameroon educational system, particularly the secondary sector, which ic the transitional level of education; ought to engage in inclusive practices aimed at fostering the ideas of inclusive education not only within the school system, but within the framework of the

national policy and internationally ratified frameworks like the Education 2030 Agenda. However, this appears seemingly not to be the case as a series of issues have been observed regarding inclusive education practices in secondary schools in Mezam Division. Key stakeholders continue to complaint that the state of secondary schools infrastructures particularly in public secondary schools. They note that Staff development and training on inclusive practices is grossly inadequate for a system aiming to attain the objectives of international educational commitments like education 2030 Agenda (Nyugap, 2018). All these are contrary to the social model of disability, inclusive lens model, and human inclusive theory of change, among others, all advocate for the creation of an enabling environment for inclusive practices at all levels of education.

Contextual underpinning

Contextually, though the term inclusion had assumed primary importance in the educational world both in the west and in Africa, Cameroon was still to join the train. The word started looming in the educational discourse in Cameroon through the Cameroon Baptist Convention Health Board (CBCHB) program, SEEPD (Socio-Economic Empowerment of Persons with Disabilities). The CBCHB had been running programs in special education following especially the medical model with a number of special schools here and there such as; The Integrated School for the Blind in Kumbo and The School for the Deaf in Mbingo.

It should be recalled that Cameroon is a signatory to all the international conventions and policies discussed above. This means, in essence, that such policies need to be applied in the country. However, in addition to this, there are still national policies geared towards ensuring access to education for all including learners with challenges. Law No. 83/013 of 21 July 1983 and its decree of application, Law No. 90/156 of 26 November 1990, provide general dispositions and practical modalities for the protection of persons with disabilities. Though not explicitly stated, these laws all reflect inclusive practices that are cherished the world over. For example, Articles 5, 6, 9, and 30 of this law state that "Families should provide their children with disabilities access to regular schools. In addition, an age waver should be granted persons with disabilities to be admitted into various educational institutions on the request of CWD and their guardians and the state should bear part of the charge by admitting them to educational institutions" SEEPD (2011). Article 9 of this law emphasizes that building plans should comprise necessary facilities that could ease access to public buildings by persons with impairments. Regarding practical modalities, Law No 90/156 of 26th November 1990 Chapters I and II focus specifically on education. Articles 7 and 35 state that pupils/students with disabilities should be allowed to repeat a class two times when failure is a result of their handicap. While fixing quotas of educational assistance in-kind and monetary assistance, Article 6 insists that such aid could cover complete or partial school fee requirements. While giving subventions to schools engaged in the education of CWDs, Article 4 states that qualified personnel could be posted to these schools by the state, in which case, adolescents admitted to mainstream schools would be able to benefit from pedagogic support and follow-up by teachers. This emphasizes the need for training more teachers to equip them with inclusive teaching strategies for an inclusive setup.

Law No 2010/002 of 13 April while re-emphasizing dispositions in the laws discussed previously, insists on the welfare of CWD and psychological support which according to Section 17 "shall aim at strengthening the psychological capacity, developing self-esteem, strengthening relationships with the living environment in order to reconcile CWD and others". This, in effect, is the essence of IE which in practical terms could be observed in the provision of leisure activities like sports and physical education programs in schools and university systems as stipulated by Section 37 of this law. LAW N°98/004 OF 14 APRIL 1998 section 4, 6 and 7. (Section 4) which states that "the general purpose of education shall be to train children for their intellectual, physical, civic and moral development and their smooth integration in to the society bearing in mind prevailing, socio-cultural, political and moral factors", (Section 6) which states that "the state shall guarantee the right of every child to education" and finally (Section 7) which comes in now to stress on the fact that the "state shall guarantee equal opportunities for education to all, without discrimination as to gender, political, philosophical or religious, opinion, social, cultural, linguistic or geographical

origin''. Recently, Law No. 2019/024 of 24 December 2019 to institute the general Code of Regional and Local Authorities, which Article 3 of this Law gives powers Devolved by the State upon Regions in the area of Secondary Education shall exercise in accordance with the regulations in force

Theoretical underpinning

This study is anchored in three complementary theoretical theories that together explain how inclusive education can be effectively advanced in alignment with the Education 2030 Agenda. The Transformational Leadership Theory (Bass, 1985;) highlights the critical role of school principals in leading schools in an era of inclusive education advocacy and practice. Through idealized leadership, inspirational motivation, intellectual stimulation, and individualized consideration, leaders can inspire and empower teachers to embrace and sustain inclusive practices, fostering the organizational commitment and professional support necessary for meaningful change. This has been justified by different empirical findings notably Óskarsdóttir, Donnelly and Florian, (2020). The Human Inclusive (HI) Theory of Change, postulated by Humanity & Inclusion (HI), offers a practical analytical framework for translating the goals of inclusion into action. It focuses on ensuring equitable access to services that meet needs, improve living conditions, and uphold the dignity and rights of vulnerable persons in society, especially PWDs. The theory explicitly reflects the strategic orientations of Agenda 2030 which commits to "leaving no one behind" in development and humanitarian responses (Humanity & Inclusion, 2016). The Inclusive Lens Model (UN, 2009) conceptualizes inclusive education as a broad reform process that accepts and supports diversity among all learners. It calls for a fundamental shift away from seeing individual learners as the problem to seeing the school system as the problem - leading to the transformation of the school systems, structures, and practices to capture the needs of every child no matter his/her disability, ethnicity, gender, language, or socio-economic status for effective teaching-learning process

The implications of these theories to the study is that inclusive education in public secondary schools in Mezam Division of the North West Region can only succeed if school principals are able to actively champion transformation, when practices are deliberately aligned with the international agenda of "leave no one behind," and when secondary schools are able to adopt a systemic inclusive lens that sees and values diversity as a resource rather than a barrier. The frameworks therefore provide both the analytical lens and the practical orientation for assessing current inclusive education practices, identifying gaps in relation to the Education 2030 Agenda, and formulating targeted recommendations for leadership development, policy alignment, and school reforms within the Mezam Dvision.

OBJECTIVES OF THE STUDY

General objective

- To assess the implications of inclusive education practices for the attainment of the Education 2030 Agenda in Public Secondary Schools in Mezam Division.

Specific Objectives

- To assess the implication of the provision of inclusive education infrastructures for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Division.
- To examine the implication of staff development/training in inclusive education practices for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Division.

Research Hypotheses

The study tested the following null hypotheses **(Ho)**

- There is no significant implication of inclusive education infrastructural provision for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Division.

- There is no significant implication of staff development/training in inclusive education practices for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Division.

RESEARCH METHOD

The research was both a quantitative and qualitative study that was anchored in concurrent nested mixed-method research designs. The study was carried out in public functional secondary schools in Mezam Division of the North West Region of Cameroon, a total of 9 functional secondary schools were used, including: GTHS Nkwen, GBHS Bamenda, GBHS Atiela, GBHS Bamendankwe, GTHS Bamendankwe, GBHS Downtown, GBHS Bayelle, CCAST Bambili. A total population of 120 administrative staff and 719 teachers making a total of 839. From this population, a sample of 16 administrators and 335 teachers, totaling 351 participants, was selected for the study. The sample was selected through stratified sampling, simple random sampling, and purposive sampling techniques. The instruments for data collection were a questionnaire for teachers and interview guide for administrators. The questionnaire comprised 5 sections, with Part One collecting demographic information from teachers such as gender and highest academic level. And BCDE dealt with research objective which under followed by research questions and the response option for the 30 items was a four Liket scale option answers given to respondents were (SA strong agreed, A agreed, D disagreed, and SD strongly disagreed), which was to measure inclusive infrastructures, inclusive motivational strategies and inclusive staff development and training.

The questionnaire and interview guide underwent content and face validities by education and social science research experts, and was pilot tested on three (3) principals and five (5) teachers making a total of 8 participants who were part of the target population but not part of the sampled population. The reliability of the questionnaire was measured using the estimate of internal consistency (Cronbach's Alpha Method). The questionnaire was seen to be reliable with a general reliability coefficient of 0.80. The researchers, with the aid of a research assistant, took one month to administer the instruments to the sampled population. Interviews were conducted with the 16 administrators in the selected schools. Ethical consideration was ensured through requests for authorization for data collection from the authorities of the University of Bamenda, the Divisional Delegation of Secondary Education Mezam, the Regional Delegation of Secondary Education, and finally the Principals of the various schools, and informed consent of the respondents who agreed to voluntarily participate in the exercise.

When data collection was done, the returned questionnaires were then coded and the responses collated into the statistical software (SPSS version 21) to form the data for the research. The data were then analyzed using descriptive (means and standard deviations) and inferential (Spearman's rank correlation and regression analyses) statistics to answer the research questions and test the hypotheses respectively. In analyzing the data, the cut-off mean-score was 2.5. Mean scores greater than 2.5 but less than 3.49 were judged as "Agree" while mean scores equal to or greater than 3.50 were considered as "Strongly Agree". Mean scores less than 2.5 but greater than 1.50 were judged as "Disagree" while mean scores equal to or less than 1.49 signified "Strongly Disagree". As concerns the testing of hypotheses; in a case where the calculated p-value was strictly less than 0.05 ($p < 0.05$) at 5% level of significance ($\infty = 0.05$), the NULL hypothesis was REJECTED. On the contrary, where the p-value was strictly greater than 0.05 ($p > 0.05$) at 5% level of significance ($\infty = 0.05$), the NULL hypothesis was UPHELD.

FINDINGS

Of the 351 participants from the selected functional secondary schools sampled for the study, interviews were conducted with 16 administrators and questionnaires were administered to 335 teachers. The return rates of the PUS-Q according to inclusive infrastructure are presented on table

Table 1: Provision of Inclusive Education Infrastructures for the Attainment of the Education 2030 Agenda

Items on inclusive education infrastructure	SA	A	D	SD	SA/A	SD/D	Statistics	
							Mean	Std Dev
1. The school is well constructed with ramps in order to ease accessibility for students with disabilities	167	105	36	0	272	36	3.43	.69
2. There are accessible toilets for all learners including those in wheelchairs in school	84	84	112	28	168	140	2.73	.96
3. There are barrier-free pathways for easy mobility for all students	84	28	112	84	112	196	2.36	1.15
4. There are adapted playgrounds for all students with disabilities	28	0	140	140	28	280	1.73	.86
5. There is adaptable furniture like adjustable desks and chairs in school	84	28	112	84	112	196	2.36	1.15
6. Classrooms are properly designed for multiple learning styles (to capture the needs of visually impaired, auditory learners and kinesthetic learners in school)	112	84	84	28	196	112	2.91	1.00
7. There are adequate accessible learning materials in our school (Braille materials, digital textbooks) for students with disabilities/special needs in school	140	112	28	28	252	56	3.18	.94
8. There are sensory-friendly spaces in schools like quiet classrooms in order to capture the needs of students with hearing impairment in school	112	84	84	28	196	112	2.91	1.00
9. The layout of classrooms is flexible enough for all learners with disabilities	168	84	56	0	252	56	3.36	.77
10. There are accessible school buses for all learners with disabilities in other to ease transportation of students	84	56	112	56	140	168	2.55	1.08
Overall	**106**	**67**	**88**	**48**	**173**	**135**	**2.75**	**0.96**

Source: Field Work 2025

This section of the study discusses Inclusive Education Infrastructures for the attainment of the Education 2030 Agenda. Regarding the item; "The school is well constructed with ramps," there was overwhelming agreement. 167 respondents strongly agreed and 105 agreed, while only 36 disagreed and none strongly disagreed. This represents 88.3% agreement (272 respondents) versus 11.7% disagreement (36 respondents). The high mean of 3.43 and low standard deviation of 0.69 confirms a strong consensus that ramps are a significant strength.

Opinions on "accessible toilets for all learners" were divided. 84 respondents strongly agreed and 84 agreed, but 112 disagreed and 28 strongly disagreed. This resulted in a slight majority agreement

of 54.5% (168 respondents) against 45.5% disagreement (140 respondents). The mean of 2.73 is positive, but the relatively high standard deviation of 0.96 indicates a significant split in perception.

The item on "barrier-free pathways for easy mobility" indicated a clear weakness. A minority of 36.4% agreed (112 respondents: 84 SA, 28 A), while a clear majority of 63.6% disagreed (196 respondents: 112 D, 84 SD). The low mean of 2.36 and the high standard deviation of 1.15 indicate this is a major area of dissatisfaction.

"Adaptive playgrounds" were identified as a critical deficiency. Only 9.1% agreed (28 respondents), with no respondents selecting "Agree." In stark contrast, an overwhelming 90.9% disagreed (280 respondents: 140 D, 140 SD). This is reflected in the survey's lowest mean score (1.73), which indicates a strong consensus that this feature is lacking.

The results for "adaptable furniture" were similar to those for barrier-free pathways. Only 36.4% agreed (112 respondents), while 63.6% disagreed (196 respondents). The low mean of 2.36 and high standard deviation of 1.15 confirms this is another significant perceived weakness.

"Classroom design for multiple learning styles" was viewed positively by a majority. 112 respondents strongly agreed and 84 agreed, totaling 63.6% agreement (196 respondents). However, 36.4% (112 respondents) disagreed. The positive mean of 2.91 is tempered by a high standard deviation of 1.00, indicating that while it's seen as a strength, a substantial minority does not share this view.

The availability of "accessible learning materials" (e.g., braille, digital texts) is a clear strength. 140 respondents strongly agreed and 112 agreed, making a large 81.8% majority (252 respondents). Only 18.2% disagreed (56 respondents). This is supported by a high mean of 3.18.

The item on "sensory friendly spaces" received the exact same response pattern as classroom design. A 63.6% majority agreed (196 respondents: 112 SA, 84 A), while 36.4% disagreed (112 respondents: 84 D, 28 SD). The mean of 2.91 and standard deviation of 1.00 show it is a majority-supported strength, but one with notable dissent.

"Flexible classroom layout" was another high-performing item. 168 respondents strongly agreed and 84 agreed, with zero strongly disagreeing. This represents a strong 81.8% agreement (252 respondents) against 18.2% disagreement (56 respondents). The high mean of 3.36 and low standard deviation of 0.77 shows a strong consensus.

"Accessible school buses" emerged as a divisive issue and a slight weakness. A minority of 45.5% agreed (140 respondents), while a majority of 54.5% disagreed (168 respondents). The mean of 2.55 is very close to the 2.5 midpoint, and the highest-in-survey standard deviation of 1.08 confirms a strong polarization of opinion on this topic.

In summary, the two areas with the highest mean scores and the lowest standard deviations are ramps (Mean=3.43, SD=0.69) and flexible classroom layout, (Mean=3.36, SD=0.77). This indicates that almost everyone agrees that these are the school's main advantages. Accessible learning materials (Mean=3.18) are also a clear strength, though the higher SD (0.94) suggests slightly more variation in this positive opinion.

Areas of Strong consensus and weakness: Adaptive Playgrounds (Mean=1.73, SD=0.86) has the lowest mean score, indicating overwhelming agreement that this is a major deficiency. Barrier-Free Pathways (Mean=2.36) and Adaptable Furniture (Mean=2.36) are also clear weaknesses, with identical scores, showing a majority of respondents disagreeing with their adequacy.

Areas of divisive opinion: Accessible School Buses (Mean=2.55, SD=1.08) is the most divisive issue. The mean is almost exactly at the midpoint (2.5), and the very high standard deviation confirms a lack of consensus, with respondents split nearly evenly.

Accessible Toilets (Mean=2.73, SD=0.96) leans positive but also shows a significant split in opinion. Classroom Design (Mean=2.91, SD=1.00) and Sensory-Friendly Spaces (Mean=2.91,

SD=1.00) show identical results, indicating a clear majority (63.6%) agree, but the high SD of 1.00 indicates that a substantial minority (36.4%) disagrees.

The overall findings for objective one therefore revealed a slightly positive trend (Mean=2.75), where ramps (Mean=3.43) and flexible layouts (Mean=3.36) were primary strengths, but adaptive playgrounds (Mean=1.73) were a major deficiency.

Testing of hypothesis 1

- **Ho1:** There is no significant implication of inclusive infrastructural provision for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Dvision.

Table 2: Collinearity Statistics

	Collinearity Statistics	
	Tolerance	**VIF**
Inclusive Education Infrastructure	.375	2.667
Inclusive Staff Development and Training	.302	3.315

The Variance Inflation Factor (VIF) is a measure used to assess the severity of multicollinearity in a multiple regression analysis. VIF values close to 1 indicate little or no multicollinearity, while values above 5 or 10 (depending on the threshold used) suggest a potential problem with multicollinearity, and high VIF values can lead to unstable and unreliable regression coefficients. A closer look at the VIF values reveals the following.

Table 3: Correlations

		Inclusive Education Infrastructure	Staff Development	Education 2030 Agenda
Inclusive Education Infrastructure	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	1579		
Inclusive Staff Development and Training	Pearson Correlation	.451**	1	
	Sig. (2-tailed)	.000		
	N	1579	1579	
Education 2030 Agenda	Pearson Correlation	.412**	.400**	1
	Sig. (2-tailed)	.000	.000	
	N	1579	1579	1579

Table 3 presents the correlation matrix of the variables under study. The correlation matrix is used to predict the relationship between a variable and other variables in the matrix. Our results indicate that the correlations between the variables are low enough to yield reliable results. From the table, the highest relationship is 0.669, which is the relationship between teacher motivational strategies and Inclusive education infrastructure. Conventionally, correlations between -0.5 and 0.5 are considered low; therefore, we can rely on our results since the correlations are low enough and considered significant to provide significant estimates, thereby minimizing the danger of multicollinearity in this study.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.874[a]	.763	.760	.444	.763	244.183	4	303	.000

a. Predictors:, Inclusive Education Infrastructure, Inclusive Staff Development)

As shown in Table 4, The independent variables (Health and Wellbeing, Staff Development, Inclusive Education Infrastructure, Teacher Motivational Strategies) that were studied explain

55.6% of the dependent variable (education 2030 agenda) as represented by the adjusted R2. This means that other factors not studied in this research contribute 76.0% of the dependent variable. Consequently, further research should be conducted to investigate the other factors (76.0%) that influence the education 2030 agenda.

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	192.421	4	48.105	244.183	.000[b]
	Residual	59.693	303	.197		
	Total	252.114	307			

a. Dependent Variable: Education 2030 Agenda
b. Predictors: (Constant) Inclusive Education Infrastructure, Inclusive Staff Development and Teacher

Table 5 above illustrates the results of the analysis of variance (ANOVA) comparing the inclusive education practices and education 2030 agenda are related. Using 1574 observations and 4 degrees of freedoms for inclusive education practices and the F-statistic values for the education 2030 agenda reveal significant values at the 5% level.

Table 6: Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.314	.168		1.863	.063	-.018	.645
	Inclusive Education Infrastructure	.133	.047	.131	2.866	.004	.042	.225
	Staff Development	.632	.044	.734	14.426	.000	.546	.718

a. Dependent Variable: Education 2030 Agenda

From table 6 above, there is a constant of 0.314 which is positive, indicating that when all the coefficients of inclusive education practices are completely absent, Education 2030 Agenda equals that value. Using the t statistic, the p value is 0.063 indicating an insignificant relationship at a confidence interval of 95%.

From table 6, inclusive education infrastructure has a positive relationship with the education 2030 agenda. From the model, its beta coefficient is 0.133. With the help of the t statistic, there is a significant relationship as shown by a p-value of 0.004 which is less than the alpha level of 0.05 at the 95% confidence interval. Therefore, inclusive education infrastructure has a positive and significant influence on education 2030 agenda. This validates the hypothesis that “There is a significant implication of providing inclusive infrastructures in Government Secondary Schools on the attainment of the education 2030 Agenda.”

Thematic analysis of Interview Results in Relation to research question one

The "Knowing-Doing Gap": Policy Awareness and Strategic Implementation

A comprehensive analysis of the interview data would likely reveal a profound and persistent discrepancy between the ideological acceptance of inclusive education and its practical, systemic implementation in the secondary schools of Mezam Division. The central finding suggests that while principals are morally and ethically committed to the idea of providing education for all students, they are consistently and overwhelmingly hindered by structural, financial, and pedagogical barriers. This creates a significant "knowing-doing gap," where the ambitious goals of the Education 2030 agenda remain largely aspirational, disconnected from the daily realities of school management.

Vague Awareness of the Education 2030 Agenda

This gap appears to begin with a vague awareness of the specific policy frameworks themselves. Principals may equate the "Education 2030" agenda with a general, common-sense goal of "not sending any child away," rather than understanding it as a specific set of targets for systemic change.

Ad-Hoc Strategies vs. Systemic Planning

As a result, their strategies for creating an inclusive environment are often reactive and accommodative, rather than proactive and universal. Instead of implementing school-wide frameworks like Universal Design for Learning, principals are more likely to cite *ad-hoc* accommodations, such as placing a student with a physical disability at the front of the room. This approach represents basic integration, which involves fitting the student into the existing, unchanged system rather than true inclusion, which would require adapting the system itself.

Table 7: Staff Development and Training on Inclusive Education Practices

Items on staff Development on inclusive education	SA	A	D	SD	SA/A	SD/D	Statistics	
							Mean	Std Dev
1. The school has organised many training programs for teachers on inclusive education	56	0	168	84	56	252	2.09	1.00
2. Teachers have a good attitude towards children with disabilities in your school	140	84	84	0	224	84	3.18	.83
3. Teachers have the knowledge of operating the various equipment put at their disposal to teach students with disabilities	112	28	140	28	140	168	2.73	1.05
4. Teachers in this school have attended several workshops, and seminars on inclusive education	112	84	84	28	196	112	2.91	1.00
5. Teachers are trained to handle students with diverse needs for inclusive education	168	28	84	28	196	112	3.09	1.09
6. Teachers follow the inclusive education policies in teaching students with disabilities	140	56	84	28	196	112	3.00	1.05
7. Various teaching and learning materials like braille, digital textbooks are provided to teachers in order to facilitate the teaching and learning process	140	56	84	28	196	112	3.00	1.05
8. Individualized support measures are given to teachers to maximize academic and social development of students with disabilities in school	140	84	84	0	224	84	3.18	.83
9. Teachers are trained to handle students on cultural competences in other to effectively address the needs of students from diverse background, cultures and identities	140	56	84	28	196	112	3.00	1.05
10. Professional development opportunities are given to teachers in	112	56	84	56	168	140	2.73	1.14

other to enhance their pedagogic skills in inclusive education								
Overall	**126**	**53**	**98**	**31**	**179**	**129**	**2.89**	**1.01**

Source: Field Work (2025)

This component of the study discusses training on inclusive education practices through staff development. For the statement, "The school has organized many training programs for teachers," 56 respondents strongly agreed, 0 agreed, 168 disagreed, and 84 strongly disagreed. This represents a significant disagreement, with only 18.2% (56 respondents) agreed, while a large majority of 81.8% (252 respondents) disagreed. This is reflected in the low mean of 2.09 and a standard deviation of 1.00, indicating a strong consensus on this negative perception.

Regarding "Teachers have a good attitude towards children with disabilities," 140 respondents strongly agreed, 84 agreed, 84 disagreed, and 0 strongly disagreed. This shows a substantial positive agreement, with 72.7% (224 respondents) agreeing and 27.3% (84 respondents) disagreeing. The high mean (3.18) and low standard deviation (0.83) indicate a strong, persistent conviction in teachers' positive attitudes.

On the item "Teachers have the knowledge of operating the various equipment," 112 respondents strongly agreed, 28 agreed, 140 disagreed, and 28 strongly disagreed. Opinion was negatively split, with a minority of 45.5% (140 respondents) agreeing, while a majority of 54.5% (168 respondents) disagreed. The mean of 2.73 is just above the midpoint, but the high standard deviation of 1.05 shows this is a divisive issue with no clear consensus.

For "Teachers in this school have attained several workshops," 112 respondents strongly agreed, 84 agreed, 84 disagreed, and 28 strongly disagreed. A clear majority of 63.6% (196 respondents) agreed, while 36.4% (112 respondents) disagreed. The mean score is 2.91; the standard deviation is 1.00, indicating that while most agree, a significant minority holds the opposite view.

Regarding "Teachers are trained to handle students with diverse needs," 168 respondents strongly agreed, 28 agreed, 84 disagreed, and 28 strongly disagreed. This also showed a 63.6% majority agreement (196 respondents) versus 36.4% disagreement (112 respondents). The mean is higher at 3.09, but the very high standard deviation of 1.09 suggests significant polarization, with strong opinions on both ends.

For the statement "Teachers follow the inclusive education policies," 140 respondents strongly agreed, 56 agreed, 84 disagreed, and 28 strongly disagreed. This item also shows a 63.6% agreement (196 respondents) and 36.4% disagreement (112 respondents). The mean is exactly 3.00, with a standard deviation of 1.05, again pointing to a positive majority but with substantial dissent.

The item "Various teaching and learning materials...are provided to teachers" had 140 strongly agree, 56 agree, 84 disagree, and 28 strongly disagree. The results are identical to the previous item: 63.6% (196 respondents) agreed, and 36.4% (112 respondents) disagreed, with a mean of 3.00 and a standard deviation of 1.05.

On "Individualized support measures are given," 140 respondents strongly agreed, 84 agreed, 84 disagreed, and 0 strongly disagreed. This is a clear area of strength, with 72.7% (224 respondents) in agreement, compared to 27.3% (84 respondents) in disagreement. The high mean of 3.18 and low standard deviation of 0.83 mirror the results for "teacher attitude," showing strong, consistent approval.

For "Teachers are trained to handle students on cultural competencies," 140 respondents strongly agreed, 56 agreed, 84 disagreed, and 28 strongly disagreed. This is another item with a 63.6% (196 respondents) agreement and 36.4% (112 respondents) disagreement. The mean of 3.00 and standard deviation of 1.05 are identical to Items 6 and 7, indicating a consistent pattern of majority agreement.

Lastly, "Professional development opportunities are given to teachers" had 112 strongly agree, 56 agree, 84 disagree, and 56 strongly disagree. This item is closely split, with a slight majority agreement of 54.5% (168 respondents) versus 45.5% (140 respondents) disagreement. The mean of 2.73 and a very high standard deviation of 1.14 shows this is a highly divisive topic.

In summary, the overall analysis of 308 respondents in all 10 items highlights a slightly positive trend (Mean=2.89) with regards to staff development practices on inclusive education, despite 81.8% of respondents reporting a lack of school-organized training in the first item (Mean=2.09). There was a strong consistent agreement that teachers have a good attitude (Mean=3.18) and provide individualized support (Mean=3.18). However, there was an overwhelming consensus that the school has *not* organized many training programs (81.8% disagree, Mean=2.09). This suggests a perception that teachers are inclusive and supportive despite a lack of formal, school-organized training. Opinions are sharply divided on whether teachers have knowledge of equipment (54.5% disagree) and whether they are given professional development opportunities (54.5% agree). A cluster of items, including policy adherence, availability of materials, and cultural competency training, shows a clear positive majority (63.6% agree) but with a significant dissenting minority in all cases.

Test of Hypothesis 2

- **Ho2:** There is no significant implication of staff development/training in inclusive education practices for the attainment of the Education 2030 Agenda in public secondary schools in Mezam Division.

Table 8: Collinearity Statistics

	Collinearity Statistics	
	Tolerance	**VIF**
Inclusive Education Infrastructure	.375	2.667
Inclusive Staff Development	.302	3.315

The Variance Inflation Factor (VIF) is a measure used to assess the severity of multicollinearity in a multiple regression analysis. VIF values close to 1 indicate little to no multicollinearity, while values above 5 or 10 (depending on the threshold used) suggest a potential problem with multicollinearity. High VIF values can lead to unstable and unreliable regression coefficients. A closer look at the VIF values is warranted.

Table 9: Correlations

		Inclusive Education Infrastructure	Staff Development	Education 2030 Agenda
Inclusive Education Infrastructure	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	1579		
Inclusive Staff Development and Training	Pearson Correlation	.451**	1	
	Sig. (2-tailed)	.000		
	N	1579	1579	
Education 2030 Agenda	Pearson Correlation	.412**	.400**	1
	Sig. (2-tailed)	.000	.000	
	N	1579	1579	1579

Table 9 presents the correlation matrix of the variables under study. The correlation matrix is used to predict relationships between variables in the matrix. Our results indicate that the correlations between the variables are low and weak enough to provide reliable results. From the table the highest correlation is 0.669, representing the relationship between teacher motivational strategies and Inclusive education infrastructure. Conventionally, correlations between -0.5 and 0.5 are considered low; therefore, we can rely on our results. Since the correlations are low enough and

considered significant to provide significant estimates, the danger of multicollinearity is low in this study.

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.874[a]	.763	.760	.444	.763	244.183	4	303	.000

a. Predictors: (Constant), Inclusive Education Infrastructure, and Inclusive Staff Development and Training.

From Table 23, the independent variables (Health and Wellbeing, Staff Development, Inclusive Education Infrastructure, Teacher Motivational Strategies)that were studied explain 55.6% of the dependent variable (Education 2030 Agenda) as represented by the adjusted R2. Therefore, this means that other factors not studied in this research contribute 44.4% of the dependent variable. Therefore, further research should be conducted to investigate the other factors (76.0%) that influence the Education 2030 Agenda.

Table 11: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	192.421	4	48.105	244.183	.000[b]
	Residual	59.693	303	.197		
	Total	252.114	307			

a. Dependent Variable: Education 2030 Agenda

b. Predictors: (Constant), Inclusive Education Infrastructure and Inclusive Staff Development and Training.

Table 11 illustrates the results of the analysis of variance (ANOVA) comparing the inclusive education practices and education 2030 agenda. Using 1574 observations and 4 degrees of freedom for inclusive education practices and education 2030 agenda, the F-statistic values reveal significant values at 5% level. The results show a significant relationship between inclusive education practices and the Education 2030 Agenda.

Table 12: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.314	.168		1.863	.063	-.018	.645
	Inclusive Infrastructure	.133	.047	.131	2.866	.004	.042	.225
	Staff Development	.632	.044	.734	14.426	.000	.546	.718

a. Dependent Variable: Education 2030 Agenda

From table 12 above, there is a constant of 0.314 which is positive and indicates that when all the coefficients of inclusive education practices are completely absent, the Education 2030 Agenda will be equal to that value. Using the t statistic, the p-value is 0.063, indicating an insignificant relationship at a confidence interval of 95%.

From table 25, staff development has a positive relationship with the education 2030 agenda. From the model, the beta coefficient for staff development is 0.632. With the help of the t statistic, there is a significant relationship, as shown by a p-value of 0.000, which is less than the alpha of 0.05 (or 5%) at the 95% confidence interval. Therefore, staff development has a positive and significant influence on the Education 2030 Agenda. This validates the hypothesis that "There is a significant implication of staff development/training in inclusive education practices in Government Secondary Schools on the attainment of the education 2030 Agenda."

Thematic Analysis of Interview Results Relation to Research Question 2

Socio-Cultural Environment: Enablers and Hurdles

While principals struggle with these systemic failures, they would likely report more confidence in managing the "softer," socio-cultural side of inclusion.

Fostering a Culture of Empathy

Many would point to their efforts in fostering a school-wide **culture of respect, empathy, and anti-bullying** through moral instruction at assemblies and by enforcing discipline. This **cultural goodwill** is a significant and necessary foundation for inclusion.

Parent-Community Engagement: A Double-Edged Sword

However, this positive aspect is often counterbalanced by external societal challenges. Principals may describe parent and community engagement as a "double-edged sword." While the PTA is a source of general funds, principals must battle community stigma, where parents, out of shame, may hide a child's disability, making it impossible for the school to offer support.

Accountability and Adaptation: The Missing Feedback Loop

Finally, the research would almost certainly indicate a complete absence of an effective feedback loop for monitoring or evaluation.

Informal and Summative Monitoring

When asked how they measure the "effectiveness" of inclusion, principals would likely point to general, summative data, such as "overall pass rates." Their monitoring systems are not disaggregated to track the specific progress or well-being of diverse learners. Without specific data, principals cannot know if their *ad-hoc* interventions are working, nor can they use data to advocate for more resources or targeted teacher training, ensuring that inclusion stagnates at the level of good intentions.

Education 2030 Agenda

The Education 2030 Agenda represents a global commitment to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by the year 2030, encapsulated primarily within Sustainable Development Goal 4 (SDG 4). Adopted by the United Nations in 2015, it's a transformative vision that goes beyond mere access to education, emphasizing quality learning outcomes, equity across all levels, and opportunities for everyone from early childhood to adulthood. For places like Bamenda, this means prioritizing universal primary and secondary education, fostering early childhood development, ensuring equal access to vocational and tertiary education, promoting relevant skills for decent work, and eliminating all forms of discrimination in education, including for persons with disabilities. The agenda also highlights the critical need for qualified teachers and effective, safe, and inclusive learning environments.

Table 13: Education 2030 Agenda

Items on Education 2030 Agenda	SA	A	D	SD	SA/A	SD/D	Statistics	
							Mean	Std

								Dev
1. The school ensures that there is accessible quality education for all learners regardless of their disabilities or background	140	84	56	28	224	84	3.09	1.00
2. There is a good inclusive learning environment which fosters inclusive teaching-learning process for students with disabilities	140	56	84	28	196	112	3.00	1.05
3. The school provides equitable educational opportunities for marginalized groups in our society	168	28	84	28	196	112	3.09	1.09
4. The school offers lifelong opportunities for students with disabilities	84	28	84	112	112	196	2.27	1.21
5. The school ensures that teachers are well trained to handle students with diverse learning needs in school	140	84	84	0	224	84	3.18	.83
6. Relevant curricula are implemented based on the diverse learning needs of students with disabilities in schools	140	56	84	28	196	112	3.00	1.05
7. The school ensures that inclusive educational policies are well implemented to meet the Education 2030 Agenda	168	56	84	0	224	84	3.27	.86
8. Schools ensure that teachers' professional development on inclusive practices is provided	140	84	84	0	224	84	3.18	.83
9. The school establishes an accountability system to ensure that the school system meets inclusive education goals	140	84	56	28	224	84	3.09	1.00
10. The school encourages community engagement on inclusive education that promotes school-community partnership	140	84	84	0	224	84	3.18	.83
Overall	**140**	**64**	**78**	**25**	**204**	**104**	**3.04**	**0.98**

Source: Field Work (2025)

For the statement, "The school ensures that there is accessible quality education for all learners," 140 respondents strongly agreed, 84 agreed, 56 disagreed, and 28 strongly disagreed. This represents a strong majority of 72.7% (224 respondents) who agreed compared to 27.3% (84 respondents) who disagreed. The mean score of 3.09 is positive, but the standard deviation of 1.00 indicates a notable amount of variation in this opinion.

Regarding "a good inclusive learning environment," 140 respondents strongly agreed and 56 agreed. However, 84 disagreed and 28 strongly disagreed. This resulted in a 63.6% majority (196 respondents) who agreed versus a 36.4% disagreement (112 respondents). The mean is exactly 3.00, but the high standard deviation of 1.05 highlights that a significant minority holds an opposing view.

For "equitable educational opportunities for marginalized groups," 168 strongly agreed and 28 agreed, giving a 63.6% majority agreement (196 respondents). Conversely, 84 disagreed and 28 strongly disagreed (36.4% or 112 respondents). Although the mean is positive at 3.09, the very high standard deviation of 1.09 suggests this is a polarized issue, with strong opinions on both sides.

The statement "Lifelong opportunities are offered by the school for students with disabilities" is a clear area of weakness. Only 84 respondents strongly agreed and 28 agreed (totalling 36.4%, 112 respondents). A large majority of 63.6% (196 respondents) disagreed (84 D, 112 SD). This is reflected in the low mean of 2.27 (the only one below 2.5) and the highest-in-survey standard deviation of 1.21, indicating strong, varied disagreement.

On "teachers are well trained to handle students with different diverse learning needs," 140 strongly agreed, 84 agreed, 84 disagreed, and 0 strongly disagreed. This shows a strong 72.7% majority agreement (224 respondents) versus 27.3% disagreement (84 respondents). The high mean of 3.18 and low standard deviation of 0.83 indicate a strong, consistent positive perception.

Regarding "Relevant curricular are implemented based on the diverse learning needs," 140 respondents strongly agreed and 56 agreed (63.6% total, 196 respondents). 84 disagreed and 28 strongly disagreed (36.4% total, 112 respondents). The results (Mean=3.00, SD=1.05) are identical to the "inclusive learning environment" item, showing a positive majority but with significant dissent.

For "inclusive educational policies are well implemented," 168 strongly agreed, 56 agreed, 84 disagreed, and 0 strongly disagreed. This is a strong positive, with 72.7% agreement (224 respondents) and 27.3% disagreement (84 respondents). This item has the highest mean (3.27) and a low standard deviation (0.86), showing strong, consistent approval.

For the item on "teacher's professional development," 140 strongly agreed, 84 agreed, 84 disagreed, and 0 strongly disagreed. This results 140 strongly agree, 84 agree, 84 disagree, and 0 strongly disagree. This results in a 72.7% agreement (224 respondents) versus 27.3% disagreement (84 respondents). The statistics (Mean=3.18, SD=0.83) are identical to the "teachers well trained" item, showing consistent agreement on teacher support.

For "establishes accountability system," 140 strongly agreed, 84 agreed, 56 disagreed, and 28 strongly disagreed. This also resulted in 72.7% agreement (224 respondents) and 27.3% disagreement (84 respondents). The mean is a positive 3.09, but the standard deviation of 1.00 indicates more varied opinions than other items with the same agreement percentage.

Finally, "encourages community engagements" had 140 strongly agree, 84 agree, 84 disagree, and 0 strongly disagree. This is another strong positive, with 72.7% (224 respondents) agreeing and 27.3% (84 respondents) disagreeing. The statistics (Mean=3.18, SD=0.83) are identical to items 5 and 8, indicating strong, consistent approval for teacher development and community partnership.

The analysis of 308 respondents in all 10 items shows a generally positive perception of the school's inclusive practices (Mean = 3.04, Std = 0.98), with one major exception. There was a strong, consistent agreement (72.7% approval) on key areas like policy implementation (Mean=3.27), teacher training (Mean=3.18), professional development (Mean=3.18), and community engagement (Mean=3.18). However, this was sharply contrasted by a strong negative perception of lifelong opportunities, which a 63.6% majority *disagreed* with, making it the clear-cut weakest area (Mean=2.27, Std=1.21). Other areas like "equitable opportunities" and "relevant curricular" show a majority agreement (63.6%) but are highly polarized, as indicated by high standard deviations (1.09 and 1.05 respectively), suggesting significant disagreement from a substantial minority.

Table 14: Summary statistics

Research Question	Hypothesis	Overall Results	Decision
Q1	H1	0.133 (0.004)	Accept the Research Hypothesis
Q2	H2	0.632 (0.000)	Accept the Research Hypothesis

DISCUSSION OF FINDINGS

Inclusive education infrastructures for the attainment of Education 2030 Agenda

The study sought to assess the provision of inclusive infrastructures in secondary schools and its implications for the attainment of the education 2030 Agenda. The descriptive element used to

assess this included: the school is well constructed with ramps in order to ease accessibility for students with disabilities, there are accessible toilets for all learners including those on wheelchairs , there are barrier free pathways for easy mobility for all students, there are adaptive playgrounds for all students with disabilities, there is adaptable furniture like adjustable desk and chairs in school, classrooms are properly designed for multiple learning styles (to capture the needs of visually impaired, auditory learners and kinaesthetic learners in school), there are adequate accessible learning materials in the school (brail materials, digital textbooks) for students with disabilities/special needs in school, there are sensory friendly spaces in schools like quiet classrooms in order to capture the needs of students with hearing impairment in school, the layout of classrooms is flexible enough for all learners with disabilities and there are accessible school buses for all learners with disabilities in other to ease transportation of students. Each of these elements contributes to the attainment of the Education 2030 Agenda.

Developing inclusive education infrastructure holistically is essential to achieving the Education 2030 Agenda, especially SDG 4, which calls for inclusive and equitable quality education. This includes all aspects of the learning ecology, not simply physical access. The physical and technical infrastructure of a school, together with the support networks for teachers and students, has a direct influence on every student's capacity to engage and achieve, according to the results of several studies. Rather than attempting to meet varied requirements after the fact, the objective of "leaving no one behind" is inherently linked to designing places that are built for diversity from the beginning. A study by Lipsky and Gartner (1998) examined data from 1,000 US school districts that implemented inclusive education initiatives. Their analysis identified seven approaches that guaranteed the successful implementation of inclusive education. These include finance, staff and student support, partnership, refocused evaluation, visionary leadership, effective parental participation, and the use of successful program models and instructional strategies. In their 2002 comprehensive case study conducted at the school level, Avramidis et al. discovered many strategies that promote inclusive education. Most importantly, each student's fundamental needs must be determined. Other factors include the availability of human, material, and financial resources; reorganizing school cultures, policies, and procedures; lowering obstacles to learning and involvement for all students; organizational adjustments and instructional adaptation; and the requirement for continuous professional development. This is further supported by Capper & Frattura. The nation's comprehensive education offerings are made possible in large part by its resources. Unfortunately, many educational institutions in developing nations still struggle with resource constraints. For this reason, it is important to step up efforts to guarantee resource allocation. Physical accessibility is the most fundamental yet sometimes disregarded factor, according to a significant discovery. Many schools, especially those in low-income nations, lack the basic facilities needed to serve pupils with physical impairments. Lack of elevators, accessible lavatories, and wheelchair ramps effectively presents a physical barrier to education, causing many students to never enrol or drop out. A secure and accessible physical environment is the first step towards true inclusion, as the Education 2030 Agenda's need for "child, disability, and gender sensitive" educational facilities makes clear. At the University of Venda, Tugli, Zungu, Goon, and Anyanwu (2013) assessed how disabled students perceived assistance and access. Participating students brought attention to issues with the university's physical access, student assistance resources, and amenities. Twenty-eight students agreed that the physical environment was a major obstacle to their education, and over half of them believed that the environment was dangerous and exposed them to danger. According to Hemmingson and Borell's (2016) study, 34 children with physical impairments, ages 10 to 19, had limited mobility as a result of infrastructural obstacles in Swedish schools.

A study conducted in Ethiopia on inclusion by Zelelew, (2016), showed that lack of resources is a major challenge to access to education in higher education for learners with impairments. One of the typical barriers to inclusive education in tertiary education is the inaccessibility of the physical environment such as the unavailability of ramps and unmodified toilets; unless the physical environment is accessible to students with disabilities, it is hard to ensure their successful inclusion

in higher education. Unless the physical environment is accessible to students with disabilities, it is hard to ensure their successful inclusion in higher education. Beyond financial constraints, findings also point to the negative impact of attitudinal barriers. Even in schools with a high degree of physical accessibility, social stigma and prejudice against students with disabilities can create an exclusionary environment. This demonstrates that infrastructure is only one part of the puzzle. To achieve the Education 2030 Agenda's vision, it is crucial to complement infrastructural improvements with community-wide efforts to foster a culture of respect and acceptance, ensuring that all students feel valued and included.

Mwangi and Orodho (2014) conducted research in Nyeri County, Kenya, which revealed that the physical resources and educational materials were either insufficient or in poor condition. a large number of pupils with physical impairments encounter obstacles at school. As a result, they lack confidence, feel different from their peers and out of place at times. Another study conducted in Bungoma County by Buhehe and Ochieng (2013) found that the integration of inclusive education lacked support structures, instructors lacked knowledge and skills for managing the existing resources, and there were insufficient teaching / learning materials. According to Wanjohi (2019), a lack of suitable resources to satisfy the educational requirements of learners with disabilities in mainstream schools causes parents to be concerned about whether their children's needs are being met effectively.

An Analysis of the Case of Physically Impaired Students at Lycee Bilingue Etoug Ebe, Yaounde," was aimed at finding out if school infrastructure in the Lycée Bilingue Etoug Ebe are suitable for inclusive education of the students with physical disabilities. A proportional systematic random sample approach was employed in conjunction with a descriptive research design to choose 318 participants for the study. A closed-ended questionnaire of 24 items in four sections was employed, which was created by the researcher. Portion 2 of the questionnaire assessed the enrolment of pupils with physical impairments, whereas the first portion gathered demographic data. The classroom size and the availability of special seats for students with physical disabilities were among the aspects of the school's infrastructure that were measured in section 3. Access too many important school locations was given particular attention in the last segment, which assessed the overall school environment. These sections gathered data in order to test various hypotheses and provide answers to various research issues. Black students with impairments had trouble getting an education during apartheid. There weren't many special schools at the time, and those that did exist had limited admissions due to segregation requirements.

The fact that infrastructure include professional and human support networks in addition to actual buildings is another important discovery. Even with the best physical and technical resources, a school's infrastructure will be underutilized if its instructors lack the abilities and know-how to adopt inclusive methods. According to studies, two significant obstacles are a lack of specialized support workers and a lack of professional development on inclusive pedagogy. Therefore, funding teacher training and assistance to increase their ability to engage with diverse students is crucial to the success of the Education 2030 Agenda. The research study combined an interpretivist approach with an exploratory qualitative technique. Participants included the principal, teachers, and learners from a secondary school that has an inclusive approach. Purposive sampling was used to identify participants. The study included 12 participants, with data obtained through a focus group discussion and individual interviews. The focus group comprised of six non-disabled students that took part in the study. Data were examined using theme analysis. The findings indicate that students with special needs should be educated in this mainstream secondary school. Teachers and non-disabled students' welcome students with special needs in the classroom and at school. However, there are other impediments to instructors' full engagement when aiding students with special needs, including access, awareness, and a lack of training.

Inclusive Staff Development and Training for the attainment of Education 2030 Agenda

The study evaluated the various staff development and training practices used by schools in fostering inclusive education. Teachers and school administrators must receive training to

effectively implement the school's vision, which requires additional knowledge and abilities (OECD, 2008). According to UNESCO (2003), professional development equips the school and increases staff confidence in implementing inclusive practices, driven by conviction and the desire to change course. Instructors require certain circumstances in order to adopt inclusive education methods, since the quality of instructors and their instruction have the most impact and influence on educational results.Contracts or service agreements must explicitly outline the duties and responsibilities of all persons engaged to offer such assistance (Watkins, 2007; Loreman, 2009).

Developing a common vocabulary and knowledge of what inclusive education actually entails is a fundamental component of good training. The phrase is too frequently misinterpreted or limited to the idea of merely integrating students with disabilities into regular education classes. Good staff development makes it clear that inclusion means giving all students, especially those from different socioeconomic, linguistic, and cultural backgrounds, and equal chances. The ethical and intellectual foundations of inclusion should be included in training sessions, assisting educators in confronting their own prejudices and presumptions. Fostering a collective attitude that sees student diversity as an asset to be embraced rather than a problem to be fixed requires this conceptual clarity. The implementation of inclusive education is significantly influenced by the attitudes of teachers towards it. The implementation of an inclusive policy may be facilitated or restricted by teachers.

Effective training must include useful, research-based teaching techniques in addition to theory. Instructors want a toolkit of methods they can use right away in the classroom. Training in differentiated education, which entails adjusting the method, material, and final products to meet the requirements of each unique student, is part of this. Learning how to develop easily available teaching resources, employ adaptable grouping techniques, and employ a variety of evaluation techniques that reliably gauge students' development is also beneficial to educators. By giving teachers these practical skills, staff development gives them the confidence to feel capable and ready, which is a strong motivator in and of itself. Professional development has a favourable impact on teachers' and school administrators' knowledge and practices, which in turn affects students' outcomes. The knowledge and practices of teachers are the direct results of professional development initiatives. Staff development also includes collaborative techniques. An inclusive classroom cannot be a standalone operation. Co-teaching general education and special education teachers is one example of a strong collaboration paradigm that should be the main emphasis of training. These meetings ought to address co-planning methods, communication skills, and ways to capitalise on each professional's distinct area of competence. The stress and loneliness that can come with working in diverse classrooms are lessened by this cooperative approach, which also enhances the quality of education and builds a network of support for educators. It makes the notion that inclusive education is a shared duty more accepted. Although many educators believe that all kids should have access to education in regular schools, some are not confident in their capacity to satisfy the requirements of all students, particularly those with diverse needs. Since they have traditionally only considered themselves to be qualified and hence capable of teaching students without disabilities, the instructors found the necessary adjustments to planning, practices, and evaluations to be daunting (Fergusson, 2003). Forlin (2001) examined 571 typical Australian school teachers and discovered that their perceived professional competence is the biggest stressor when it comes to pupils with moderate to severe impairments.

Social-emotional learning (SEL) training ought to be a top priority for staff development. In addition to providing academic access, inclusive education aims to provide each student a sense of community, safety, and belonging. Teachers who get SEL training are better able to assist students' emotional control, foster healthy relationships, and provide a respectful and empathetic classroom environment. These abilities are essential for controlling the dynamics of the classroom, stopping bullying, and making sure that children with various social needs feel appreciated and encouraged.A teacher who has received SEL training is better able to foster an atmosphere in which every student feels they belong. A study by Burstein et al. (2004) reporting on the effectiveness of a change model to help schools become inclusive that was instituted in two Southern California school districts over three years, noted that both general and special education feel inadequately prepared to assist

students with disabilities in general classrooms. In support of this view, Fisher, Frey and Thousand (2003) analysed the skills and capabilities special education teachers in inclusive schools require in addition to the information and the skills they needed in exclusionary settings. These include collective teaming and teaching, instructional modifications, personal support, assistive technology, and positive behaviour support. In schools where there is effective inclusion, teachers' ownership of issues and their engagement is deep-rooted, critical consideration improves efficiency and empowers them to engage in action which results in improved practice (Ainscow et al., 2004).

The role of school leadership in staff development is paramount. Training programs must also be designed for administrators, as they are responsible for creating the school-wide conditions that support inclusion. Leaders need to be trained on how to allocate resources, manage teacher schedules to facilitate co-planning, and model inclusive values. A leader who is knowledgeable and committed to inclusion can be a powerful catalyst for change, whereas one who is uninformed can unintentionally create barriers. Training for leaders ensures that the entire school system is aligned in its commitment to the Education 2030 Agenda. During the past two decades, the inclusion movements have made significant progress in supporting the rights of children to have their special educational needs identified and met through education legislation, and the rights of individuals with disabilities to equal opportunities, minimizing unjustified discrimination, and developing support facilities and services (Disability Rights Task Force Final Report, 2004; Ministry of Education, 2004).Despite the apparent benefits of inclusion, and regardless of the teachers' commitment and positive attitudes; and notwithstanding their knowledge and skills necessary to meet the educational needs of diverse students with disabilities, teachers were concerned about the academic, social, and behavioral adjustment of students with disabilities. A main characteristic of inclusive education is teachers' willingness to accept students with special needs. Their attitudes and knowledge about inclusive education are important, as these indicate such willingness. The purpose of this study was to examine teachers' attitudes and their perceived knowledge towards inclusive education in Punjab. The respondents (n=50) were mainstream and special education teachers in public primary and secondary schools. They were given a set of questionnaires which sought their responses regarding their attitudes and knowledge towards inclusive education. The data were analyzed using descriptive statistics such as mean and standard deviation. The statistical tool used for the analysis was Factor analysis. The main finding shows that, in general, teachers have positive attitudes towards inclusive education.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the findings are clear: inclusive education infrastructure is not a luxury, but a necessary component of achieving the Education 2030 Agenda. It is a broad notion that includes physical accessibility, sensory-friendly design, assistive technology, and human support systems. Nations can create educational systems that truly live up to the promise of providing quality, equitable, and inclusive education for all by taking a holistic approach guided by principles such as Universal Design for Learning and by addressing persistent funding and attitudinal challenges. Fostering a motivated teaching force is fundamental to the successful implementation of inclusive education and the fulfillment of the Education 2030 Agenda.

All school employees should continue their professional growth, which is the second and perhaps most important guideline. Research consistently shows that teachers are the key players in inclusive classrooms, yet many of them feel unprepared and unsupported. A change from one-time workshops to continuous training that combines theory and practice is encouraged by the recommendations. Teachers should leave this course with abilities in crisis response, collaborative teaching, and differentiated learning. The course should also concentrate on transforming attitudes and cultivating an accepting and empathetic culture, assisting educators in viewing inclusion as a fundamental professional value rather than an extra responsibility. The significance of developing technical and physical infrastructures that are both accessible and functional is also emphasized in the recommendations.

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