

Inclusive Assessment Methods for University Students with Special Educational Needs

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ABSTRACT:

Inclusive education has gained much prominence in higher education where there is greater focus on the need to offer fair learning and assessment to students with special educational needs (SEN). Nonetheless, conventional types of assessment do not often involve various needs of learners, and that is why assessment is not fair, and academic involvement is diminished. This paper examines the drawbacks of traditional assessment and analysis practices and examines the inclusive approaches to assessment that would increase the accessibility, flexibility and equity in educational institutions. To investigate and determine the most important challenges, a mixed-method research method was employed, which included surveys, interviews, studying of documents, and case studies to investigate the existing practices.

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Depending on the results, an inclusive assessment model is suggested, incorporating the adaptive assessment strategies, technology-based tools, alignment of the policy, and feedback mechanisms. The findings indicate that inclusive assessment contributes significantly to the performance, engagement, satisfaction and comprehension of the concepts in students. The comparative and graphical analysis provide additional support that inclusive methods are more effective as compared to traditional measures in various assessment parameters. Regardless of these advantages, issues like insufficient training of the faculty, inadequate infrastructure and institutional factors are major hurdles to the implementation process. The research draws the conclusion that inclusive assessment is a key to the development of the just and learner-centered education environment. Through adaptable evaluation plans and taking advantage of technological innovations, higher learning institutions can make sure that no student is left behind in the quest to present his/her knowledge in an effective manner. The suggested framework offers a viable and scalable model to using in improving inclusivity of assessment systems in the higher education.

Keywords: Inclusive assessment, special educational needs (SEN), higher education, adaptive learning, assistive technology, universal design for learning (UDL), student engagement.

I. Introduction

The idea of inclusive education has become a basic value of contemporary higher education systems and it stresses on the necessity to offer equal learning opportunities to students with special educational needs (SEN). Inclusiveness in Learning Universities all over the world are becoming more and more aware of the fact that diversity in learning capabilities, physical capacity and cognitive wellness demand a change of teaching and assessment techniques of traditional one-size-fits-all, to much more flexible and accommodating methods. The studies show that the models of inclusive education have been increasingly implemented in various areas but their effective use, specifically in the area of assessment has been inconsistent (Mendoza & Heymann, 2022). This disparity shows necessity to rethink and re-design assessment systems, making them more fair, accessible and meaningful in

evaluating student outcomes in learning. Assessment is a very important aspect of the academic life of university students who are able to not only gauge their level of knowledge but also use it as a means to direct the learning process, give feedback and determine their future direction of education. The conventional ways of evaluation, however, like timed written exams, standardized tests, and a grading system that is uniform can be detrimental to students with SEN. Such techniques do not usually take into consideration differences in the learning styles, processing rate, sensory weaknesses or difficulties in communication. Research on the topic of individualized education has shown that the inflexible nature of assessment has been a barrier to the potential of students with unique needs to showcase their actual potential (Hott et al., 2021). This could result in inequities in academic assessment because assessments are not

necessarily accurate in terms of student competencies.

Special educational needs are a wide and diverse spectrum of students who may have learning disability, visual or hearing impairment, autism spectrum disorders, attention deficit disorders, as well as physical impairments. All these conditions involve different challenges which can have an influence on how the students access, process and demonstrate knowledge. As an example, dyslexic student will be unable to perform good written tests regardless of his/her good conceptual knowledge whereas a visually impaired student will be inhibited by difficulty in accessing the standard test resources. The growing acknowledgment of these issues has guided policymakers and institutions towards supportive educational practices that are inclusive, i.e. accessibility and participation by all learners (Ministry of Education [MOE], 2024). Nevertheless, conversion of such policies to effective assessment strategies is yet a complicated challenge. Inclusive assessment is based on the three principles of equity, accessibility and universal design of learning (UDL). Instead of having to offer reactive accommodation to individual students, inclusive assessment is a proactive approach that incorporates design strategies that ensure that assessments are made available to all learners at the start. The practice is in line with the research results underscoring the need to have structured support systems and customized interventions to students with disabilities in higher education (Nadeem, 2020). The methods of inclusive assessment have many approaches that are flexible like oral examination and project-based assessment as well as portfolios, presentation and use of assistive technologies. The techniques facilitate students to showcase their knowledge according to their areas of strengths hence enhancing fairness and inclusiveness.

Although the need of inclusive assessment has been acknowledged, it is facing numerous challenges that curb its adoption in universities. Among the key obstacles is the lack of awareness and training of the faculty members in terms of inclusive practice and particular needs of student-athletes with disabilities. Lots of teachers might not be knowledgeable about

the assistive technologies or other types of assessment techniques and be unwilling or inconsistent with their usage. Also there are institutional limitations in the form of inflexible curricula, huge classes and poor resources which will further complicate the implementation process. It is also hypothesized that to predict effective strategies and resolving gaps in implementation in inclusive education, systematic methods of the thematic analysis and conceptual modelling are necessary (Naeem et al., 2023). The technological advancements can offer great prospects to solve these issues and promote inclusive assessment practices. Personalized and accessible assessments can be provided with the help of digital tools, i.e., learning management systems, adaptive testing platforms, screen readers, and speech-to-text software. As an example, the digital technologies have already been reported to considerably enhance the access to higher education among students with visual impairments, as the technologies allow providing flexible and adaptive learning conditions (Pacheco et al., 2018). These tools enable the students to personalize the assessment formats, content in other forms and perform tasks at their own pace. Moreover, with technology-based tests, information about students can be collected in real-time with analytics, allowing the teacher to learn more about their students' needs and modify their teaching methods in response to them.

The study will seek to examine and come up with efficient inclusive assessment strategies to university students with special educational needs. The research aims to determine the constraints of traditional methods of assessment, reviews the current inclusive approaches and provides an overarching instrument that appeals to the pedagogical principles and technological inventions. The study will seek to incorporate theoretical and practical knowledge to achieve a more inclusive and fairer assessment systems in post-secondary education.

The paper further highlights the role of the congruence between inclusive assessment practice and institutional policies and national educational structure. Both governments and educational institutions are promoting inclusive education

policies that require equal access and participation of students with disabilities, increasing throughout the world (Mendoza & Heymann, 2022; MOE, 2024). These initiatives, however, will be successful, mostly dependent on the effectiveness of the institutions in enforcing inclusive practices on the operational level. Hence, the current study also offers suggestions about how to enhance the institutional support systems, faculty training programs and use the technological infrastructure to promote inclusive assessment. To sum up, inclusive assessment is an essential part of delivering equitable higher education as to ensure that every student, irrespective of the capabilities, can have a chance to showcase his/her knowledge and skills. Universities can facilitate a more accommodating and inclusionary learning experience by combating the shortcomings of traditional assessment tools, and by maximizing on the opportunities that innovative assessment techniques provide. This research paper fits in the current discussion about inclusive education by offering an organized and flexible framework of inclusive assessment and eventually improve learning outcomes, involvement and academic performance of a student with special educational needs.

II. Literature Review

Inclusive education is a concept that has received considerable focus in the past few decades, especially in higher education where the trend is that of diversity amongst the learners. Inclusive education means that every student, irrespective of their abilities or disabilities should get the same learning opportunities and academic achievements. But to be inclusive, it is not just adaptive teaching techniques that are needed but also equal and flexible methods of assessment. This review of the literature analyzes the current studies on inclusive education, assessment methods, use of technology and issues related to implementation among university students with special educational needs (SEN).

Global frameworks and national policies that are geared towards providing accessibility and equity support inclusive education. Research indicates that although inclusive policies exist, they do not always

work in practice because of their systemic, institutional and pedagogical challenges (Rante et al., 2020). The results of Rante et al. (2020) demonstrate that the initiatives of inclusive education often do not work as expected because the infrastructure is insufficient, teachers are not prepared to work in that environment, and the policies are not implemented properly. Likewise, studies indicate that colleges and universities have challenges in implementing the policies of inclusion into practical classroom and evaluation experiences (Syed Jaafar et al., 2019). The views of the faculty are also vital in successful inclusion education practices. According to Valle-Florrez et al., (2021) educators tend to be generally open to using the practices in an inclusive way, but they do not have sufficient training and resources to use them. The significance of professional development programs on inclusive pedagogy and assessment is emphasized by this positive attitude-practical competence gap.

The concept of Individualized Education Programmes (IEPs) as the tools of assisting students with SEN is commonly accepted as the key to the effective work in this field; Rashid and Wong (2023) in their systematic literature review of the challenges of the IEPs implementation, identified teachers training, inadequate collaboration of different stakeholders, and the absence of effective monitoring as the barriers to the efficient work of the IEPs. Even though IEPs have been more popular in the field of school education, their principles are becoming more applicable in the field of higher education, with individual approaches to assessment needed. The transition programs are also important in equipping students with disabilities to take higher education. Zainal and Hashim (2019) also add that a well-designed transition program would assist students in acquiring skills in both academics and social skills to survive in the university. Nonetheless, this does not always come with well-established frameworks of transition culminating in provision of gaps in the provision of support services, which impacts on student performance and retention. This underscores the importance of continuity between the interventions at school level and higher

education practice especially in designing the assessments.

The conventional assessment systems, which include written tests and standardized tests are frequently criticized as not being inclusive. Such practices fail to sufficiently address the needs of students with SEN and therefore unfair evaluations are achieved. Studies show that strict-assessment systems do not reflect the actual ability of the students especially the disabled (Learning Disability) or sensory impaired students (Yusof et al., 2019). In addition, the institutional issues include class sizes, shortage of resources and inflexible curricula, which only worsen the situation. Zabeli et al. (2021) emphasise that lack of a structured support system of inclusive assessment in higher education institutions is a common occurrence, which leads to uneven practices across the departments. This discrepancy brings about differences in the assessment and support of students with SEN. Another factor that has a great impact on assessment practices is the attitudes and preparedness of the teacher. The results of Sharma et al. (2008) established that, training program has a positive influence on the attitude of teachers towards inclusive education which also influence their readiness to use inclusive assessment strategy. Lack of proper training can make the educators to use the conventional method that fails to meet the needs of the various learners.

With the incorporation of technology, there is an avenue to inclusive assessment in higher education. Digital tools and assistive technology makes evaluation flexible and accessible to students and gives them the opportunity to present their knowledge in a variety of formats. The studies indicate that the learning environment with the use of technology can enhance the accessibility and engagement among students with disabilities (Yusof et al., 2019). New assessment modes like project-based learning, portfolios and multimedia presentations are becoming more and more popular to supplement the traditional assessment approaches. The approaches correspond with the ideas of inclusive education as they provide various ways of expression and interaction. Moreover, an online platform will enable adaptive tests which can

be tailored according to the needs of individual learners hence enhancing equity and inclusivity. Nevertheless, there are no challenges related to the adoption of technology. The institutes will have to invest in infrastructure and, they will have to train their teachers and make sure that digital tools can be used by everyone. Devoid of these, the possible advantages of technology-based assessment might not be actualised.

Inclusive assessment cannot be comprehended without sound research designs that will be able to reflect on the experiences of various stakeholders. Thematic analysis is one of the many ways that qualitative methods have been employed to learn about the issues of inclusive education. Williams and Moser (2019) lay stress on the fact that systematic coding and thematic exploration are the keys to a qualitative research, as it helps researchers identify patterns and construct meaningful insights. Such approaches are pivotal towards coming up with conceptual frameworks guiding inclusive assessments. Through qualitative data analysis of students, educators and policymakers, the researchers will be able to detect issues of concern and opportunities, make informed decisions on the design of effective assessment models. The systematic and organized research methods increase validity and generalizability of research in the context of actual education.

Even though a lot of research has been conducted on the topic of inclusive education, there are still some gaps, especially in regard to the assessment of higher education. Among the major gaps is the fact that fewer areas have been explored on inclusive assessment practices as opposed to instructional practices. Although research has emphasized the need to employ inclusive teaching methods, none has focused on how assessment systems can be used to support diverse needs of learners. Also, standardized structures on how the inclusive assessment should be conducted in the universities are lacking (pimple et al., 2025). The lack of uniformity of the practices in institutions and the lack of strict guidelines is also a factor that leads to discrepancies in design and delivery of the assessment. Empirical studies that analyse effectiveness of inclusive assessment methods in

enhancing student outcomes are also in need of more studies. The other gap is the fact that the existing models have low integration of policy, pedagogy and technology. Although these aspects are covered by individual studies but there is a need to have a complete set of structures which integrate them into a consistent strategy. These gaps need to be filled to promote the inclusive education and practice equitable assessment.

III. Methodology

This section presents the research design, data gathering processes, selection of participants, and data analysis processes used to research on inclusive assessment techniques with students with special educational needs (SEN) in universities. The research adopts a systematic and mixed-methodology to have the comprehensive picture on theoretical and practical components of inclusive assessment in higher learning.

- **Research Design and Approach**

The research design is a mixed-method study design which utilizes qualitative and quantitative methods of research to come up with a comprehensive view of inclusive assessment practices. The reason that made it use this method is the fact that it not only captures the trends in numbers, but also detailed views of the stakeholders. Quantitative data are useful in finding patterns that are associated with the performance of students and their performance in the assessment whereas qualitative data assist in getting a glimpse of what students and teachers go through and their experiences and challenges. The investigative research design employed is descriptive and exploratory, to explore the current practices in assessment and establish gaps in inclusivity. Design-based research is also a part of the study as it focuses on the creation of a conceptual framework of an inclusive assessment that would be applicable in the context of the real world university. The methodology is consistent with previous research that stresses on systematic investigation and model creation in the qualitative research.

Multiple data collection techniques are employed to ensure reliability and validity of findings:

Survey Questionnaires

To gather quantitative data about the existing assessment practices, accessibility problems and satisfaction rates, structured questionnaires are provided to the students with SEN, as well as the faculty members. The survey will consist of Likert scale and multiple choice questions to assess the perceptions of inclusiveness, fairness and effectiveness of assessment techniques.

Semi-Structured Interviews

Gathered data will be through in-depth interviews with selected students, faculty members, and administrative staff to obtain qualitative information on challenges in and best practices in inclusive assessment. Through these interviews, the participants will have a chance to talk about their experiences and recommendations in finer detail.

Document Analysis

Policies within the institutions, the curriculum documents and the assessment policies are examined and determine the level in which the inclusive practices are institutionalized within the university systems. This assists in discovering policy and implementation gaps.

Case Study Analysis

The chosen universities practicing inclusive education are researched to gain insights on the effective models and approaches. These case studies give working examples of the ways inclusive assessment can be successfully put into practice.

Students with learning disabilities (e.g., special educational needs including: learning disabilities, visual/hearing impairments, physical disabilities)

- Faculty in the teaching and assessment.
- Policy implementers, academic administrators and support staff.

The survey will use a sample size of about 100-150 respondents to be able to bring out the statistical relevance and 10-15 respondents will be chosen to take part in interviews to give detailed qualitative data. The inclusion criteria are such that there is diversity in regards to the academic disciplines, types of disabilities and institutional backgrounds.

The analysis of the obtained data is done through quantitative and qualitative analysis:

1. Quantitative Analysis

The analysis of the survey results is conducted with the help of the statistical methods like descriptive statistics (mean, percentage, standard deviation) and comparative analysis. The bar graphs and line graphs are used as graphical representations to present trends in assessment practice and performance of the students.

2. Qualitative Analysis

Interpretations Interpretation of open-ended survey responses and interview data is done using thematic analysis. This includes coding the data, finding common themes, and how the patterns are identified with respect to inclusive assessment practices. The methodology is based on

systematic steps that are suggested in qualitative researches.

3. Comparative Analysis

The traditional and inclusive assessment techniques are compared to consider their effectiveness in accessibility, engagement of students and learning outcome. This aids in discovery of strengths and weaknesses of various methods.

• Development of the Proposed Framework

Conceptual inclusive assessment framework is developed based on the results of data analysis. The framework incorporates the important elements as Adaptive assessment strategies, Technology-enabled tools, Policy alignment and institutional support and Continuous feedback mechanisms.

The framework is flexible and scalable as it will enable universities to modify it as needed to their specific contexts and resources.

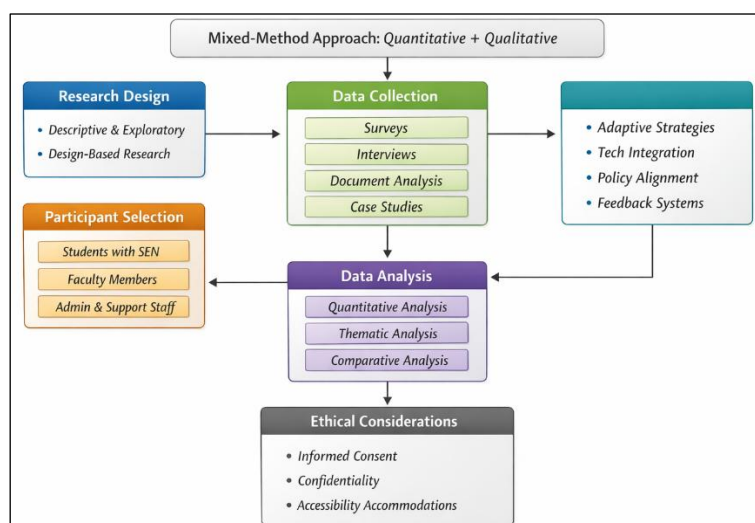


Figure 1. Conceptual inclusive assessment framework

The diagram (Figure 1) shows an organized format on how to create inclusive assessment techniques through the mixed methodology of conducting research by combining both qualitative and quantitative research. It starts with the research design where specific focus is laid on the descriptive and exploratory analysis, data collection is done using surveys and interviews, document analysis, and case studies. It will involve selection of the participants using the students with special needs,

faculty and administrative staff in an effort to capture various points of view. Gathered data is then explained through quantitative, thematic as well as comparative analysis to make insightful conclusions. The results of this study can be used to build a comprehensive system of assessment encompassing adaptive plans, the use of technology, alignment of policies and feedback. Lastly, to make the research comprehensive, systematic and consistent with the principles of inclusive education,

the workflow guarantees ethical implications like informed consent, confidentiality and accessibility.

The research is conducted with ethical values adhered to. All participants provide informed consent, where they know the purpose, and extent of the study. Anonymity and confidentiality is upheld by not revealing personal information. Also, the research has made sure that the participants know it is voluntary and that they have the option of dropping out anytime. When working with students with SEN, special care is taken to make sure that it is easy and comfortable to obtain the needed data. As an example, it has alternative formats (audio, large text or digital formats) which cater to various needs. Although the study seeks to present an in-depth information, there are some limitations. The size of the sample might not be a complete illustration of all institutions of higher learning and the results might not be applicable in other contexts of culture and institution. Also, there might be bias due to the use of self-reported data. Regardless of these shortcomings, the research offers useful information about good practice of inclusive assessment and helps to create effective frameworks. This approach will offer a systematic grounding of an analysis of inclusive assessment practices and establish a pragmatic framework that is able to improve equity and access in the higher education.

IV. Proposed Inclusive Assessment Framework

It is necessary to develop a comprehensive assessment system that would counter the

shortcomings of the conventional evaluation system as it would allow providing equal learning opportunities to university students with special educational needs (SEN). Through experiences gained in the literature review and analysis of methods, this section comprises a detailed, flexible, and technological-focused model that will increase access, equity, and efficacy levels in assessment practices.

- **Framework Overview and Design Principles**

The framework proposed is based on the concepts of equity, accessibility and flexibility and inclusivity so that all the students have equal opportunities to show their knowledge and skills. It embraces the principle of Universal Design of Learning (UDL), the focus on which is on the inclusion of multiple means of representation, expression and participation. The framework encourages proactive design measures, as opposed to reactive accommodations, which incorporate the element of inclusivity in the process of assessment early on.

Some of the design principles are:

Flexibility: This is to enable different assessment styles to accommodate various learners.

Accessibility: ensuring access in assistive technologies.

Equity: upholding academic integrity and being inclusive of the diverse group.

Flexibility: Ability to make a constant improvement depending on the feedback and the data.

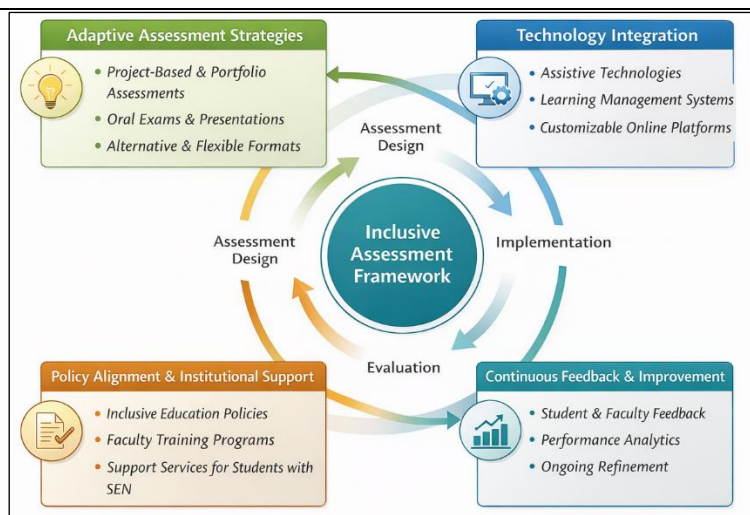


Figure 2. Proposed Model for Inclusive Assessment

The Proposed Inclusive Assessment Framework (see Figure 2) is a process that is both continuous and cyclical with the core focus on inclusive and equitable evaluation. Fundamentally, the framework incorporates four main elements: adaptive assessment strategies, integration of technology, alignment of the policies with institutional support and continuous feedback and improvement. These elements are intertwined via stages of assessment design, implementation, evaluation and refinement so that the assessment practices can be flexible and responsive to various needs of the learners. The cyclic essence brings out the fact that the process of inclusive assessment cannot be a single undertaking but an evolving process based on feedback, performance analysis and continuous improvement to make it more accessible, fair and student-outcomes.

• Core Components of the Framework

The four components that have been proposed to be used to facilitate inclusive assessment practices are interconnected and come together to support the overall objectives of inclusive assessment practices:

a. Adaptive Assessment Strategies

This aspect aims at application diversification of assessment techniques to suit the varying learning styles/capacity. Conventional testings will be accompanied by other methods like Project-based assessment, Oral tests and presentations, Portfolio and

Reflection journals, Take home and open-book testings. Such strategies can help students express themselves in a manner that is most in line with their talents, and hence less performance inhibiting.

b. Technology Integration

Technology is of significance as it helps facilitate inclusive assessment. Digital tools and assistive technologies included in the framework include, Screen readers and text-to-speech programs, Speech-to-text and Learning management systems (LMS) with adaptive options, Online assessment system with customizable options. Such devices increase the accessibility of assessment to enable students with visual, auditory or motor impairments to undertake the assessment effectively.

c. Policy Alignment and Institutional Support

Inclusive assessment needs a good institutional support to ensure good implementation. This aspect focuses on Congruency with national and institutional policies of inclusive education, Formulation of standardized policies of inclusive assessment, Faculty education program about inclusive practices, Provisions of special service facilities to students with SEN. Institutional commitment would be to provide

consistency and sustainability in terms of adopting inclusive assessment practices.

d. Continuous Feedback and Improvement Mechanism

The structure has a feedback-based method of making sure that it is continuously refined. These are in the form of Regular student and faculty feedback, Performance analytics to detect learning weaknesses, repeatedly improving assessment strategies, tracking and reviewing inclusiveness results. This is a dynamic process which enables the framework to be updated and for it to respond to the changing educational needs.

• **Workflow of the Proposed Framework**

The working process of the framework is a cyclic and iterative process:

1. **Assessment Design:** Design inclusive assessment plans on the basis of course objectives and diversity of learners.
2. **Implementation:** Perform assessments with adaptive tools and technology approach.
3. **Assessment:** Assess student learning, both qualitative and quantitative.
4. **Feedback Collection:** Get responses on whether it is effective and accessible by students and educators.
5. **Refinement:** Tweak assessments on the basis of the feedback and analytical feedback.

This is an ongoing cycle and the assessment system is therefore responsive, personalized and effective. The proposed inclusive assessment framework has a number of benefits with its implementation. Increased Accessibility where all students can engage without challenges, Improved Learning Results: Flexible testing allows students to learn more and engage better, Equity in Evaluation: This reduces bias of the traditional method of assessment, Increased Student Motivation: The framework can be applied across fields and institutions whereas the framework has great benefits, its successful execution depends on proper

planning and resource distribution. To facilitate inclusive practices, institutions need to invest in technological infrastructure, train their faculty, and have clear policies in place to promote the same. Moreover, stakeholders should collaborate with other stakeholders such as educators, administrators and students to make sure its adoption is successful. Issues like opposition to change, resource scarcity, ignorance are some of the challenges that could be experienced during implementation. Nevertheless, they can be resolved by engaging in ongoing professional learning, awareness sessions and pilot testing inclusive assessment strategies.

The proposed assessments framework offers a holistic approach to accommodating the multiple needs of university students with SEN through adaptive strategies, technology, as well as alignment of policies and ongoing feedback that will ensure that the assessments are fair, accessible, and effective in assessing student learning. This paradigm can be used as a stepping stone towards changing traditional methods of assessment into comprehensive, student-focused methods of assessing students that can help them succeed in their studies.

V. Results and Discussion

This part will include the discussion of the results of the data analysis and comparison of effectiveness of inclusive assessment methods with traditional assessment methods. These findings are explained with the help of quantitative and qualitative data received in surveys, interviews and with the help of case studies and it offers a complete review of the suggested inclusive assessment framework.

• **Comparative Analysis of Assessment Methods**

The comparison shows that there is a great disparity in accessibility, student engagement and performance outcomes of the traditional and inclusive assessment practices. The conventional assessment techniques like written tests and standardized tests, were discovered not to be very efficient in meeting the various needs of the students with special educational need (SEN). On the contrary, more adaptable and inclusive methods

of assessment, including project-based assessment, oral presentation, and portfolio assessment, were found to be more adaptive and inclusive. According to the results of the survey, most of the students with SEN have claimed that their performance improved and their anxiety diminishes when measured by using flexible means. The faculty

members also noted that alternative assessment format enabled students to express their knowledge and skills in a better way. These results correspond to the prior studies with the focus on the drawbacks of inflexible evaluation system and the advantages of adaptive method.

Table 1 compares traditional and inclusive assessment approaches across key parameters.

Parameter	Traditional Assessment	Inclusive Assessment
Accessibility	Limited	High (adaptive formats available)
Flexibility	Fixed format	Multiple formats (oral, project, portfolio)
Student Engagement	Low to Moderate	High
Performance Accuracy	Often underestimated	More accurate reflection of abilities
Use of Technology	Minimal	Extensive (assistive tools, LMS)
Stress Levels	High	Reduced

According to Table 1, it is obvious that inclusive assessment methods are better than the traditional ones in all the parameters, especially accessibility and engagement.



Figure 3. Overall Performance

The comparison of the two methods is holistically presented in the chart at Figure 3. The increased zone of inclusive assessment means high performance on all parameters, which proves its success in establishing balanced and inclusive learning environment.

- **Impact on Student Performance and Learning Outcomes**

The use of inclusive assessment techniques demonstrated the positive effect on the student performance. Quantitative evaluation showed that the main performance indicators like the test scores, the level of assignment completion and the general

level of academic success improved. Students who were assessed in an inclusive setting had good conceptual knowledge and more knowledge retention. These findings are further supported by qualitative feedback, as students were more confident and motivated. Numerous respondents pointed out that non-fixed assessment formats helped them to concentrate on the learning process as opposed to studying to pass exams. This is a move towards learning oriented assessment as opposed to performance based assessment, which goes towards enhanced cognitive and academic achievements.

Table 2: Student Performance Improvement

Metric	Traditional (%)	Inclusive (%)	Improvement (%)
Average Test Scores	68	82	+14
Assignment Completion Rate	72	90	+18
Concept Understanding	65	85	+20
Student Satisfaction	60	88	+28

Table 2 demonstrated that Inclusive assessment has great benefits on academic performance and learning outcomes as students are able to show their knowledge in the most effective way.

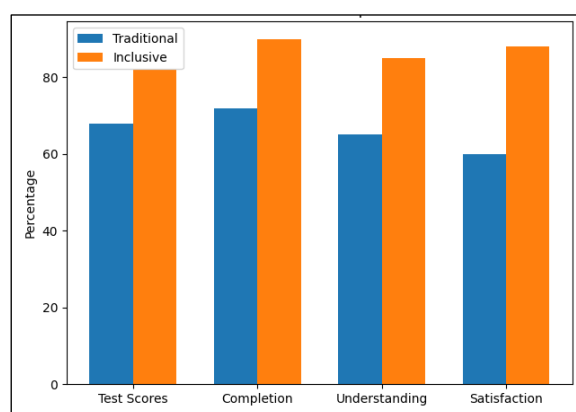


Figure 4. Performance Improvement

Figure 2 gives a comparison of the performance of students in traditional and inclusive assessment method. It demonstrates that inclusive assessment leads to increased scores on all measures- test scores, assignment completion, conceptual understanding and satisfaction which show better academic performance.

- **Student Engagement and Participation**

Inclusive assessment practices were observed to have a huge impact on engaging and participation of students. Different assessment formats were used, which stimulated taking of learning activities, which

contributed towards a more interactive and collaborative learning environment. There was an increased involvement in discussions, group-projects, and presentations because students had a choice of assessment method which best met their abilities. Also, incorporation of technology was very important in enhancing engagement. Online platforms, assistive technologies, and other digital tools helped students to more effectively access learning materials, and complete assessments. This not only enhanced the participation, but lowered barriers that were related to traditional assessments.

Table 3: Engagement Levels Across Assessment Types

Engagement Indicator	Traditional Method	Inclusive Method
Participation in Activities	Moderate	High
Interaction Frequency	Low	High
Collaboration	Limited	Strong
Motivation Level	Moderate	Very High

Table 3 indicates that Inclusive assessment leads to a more interactive learning experience, thus enhancing the involvement of the students and collaboration.

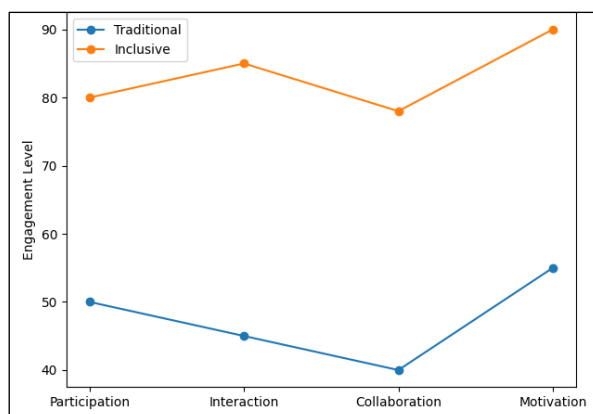


Figure 5. Student Engagement Comparison

The level of student engagement has been represented in Figure 4. It reveals an obvious upward trend of inclusive assessment which has a greater participation, interaction/collaboration and motivational activity in comparison with traditional means, where student involvement is increased.

- **Effectiveness of Technology Integration**

The research points out how important technology is towards supporting inclusive assessment. Accessibility in students with visual, auditory, and motor disabilities was found to be improved to a

great degree by the use of tools like screen readers, speech-to-text software and adaptive learning system. The learning management systems (LMS) facilitated the delivery of the assessment in a flexible way with students being able to undertake tasks at their pace. Moreover, assessments, which were enabled through technology, offered real-time feedback and performance analytics to enable educators to determine areas of learning needs and adjust their teaching methods based on it. The success of these tools however, is subject to good implementation, availability of infrastructure and training of the users.

Table 4: Role of Technology in Inclusive Assessment

Technology Tool	Purpose	Impact Level
Screen Readers	Assist visually impaired students	High
Speech-to-Text Software	Support writing difficulties	High
LMS Platforms	Flexible assessment delivery	Very High
Online Assessment Tools	Customizable evaluation	High

Technology, as indicated in Table 4 is a significant aspect of inclusive assessment because it facilitates access, as well as personalizing assessment.

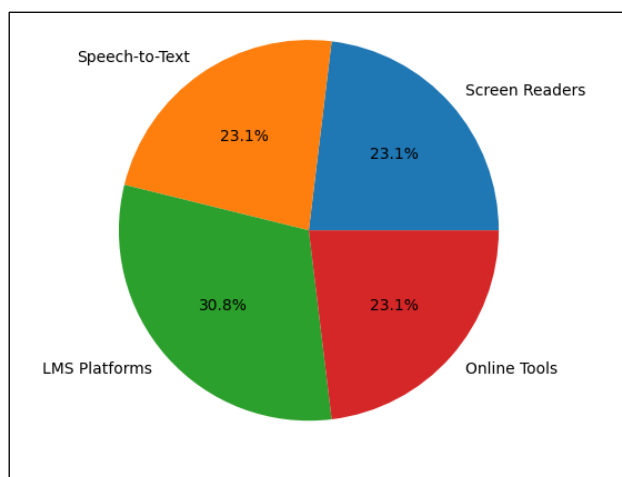


Figure 6. Role of Technology in Inclusive Assessment

- **Challenges and Implementation Barriers**

Although positive results were achieved, there are a number of issues that were found during the implementation of inclusive assessment practices. The lack of care in terms of awareness and training in faculty members is one of the main obstacles. A number of educators expressed that they had challenges in formulating and scoring alternative assessment formats; they did not have enough experience and materials to work. The constraints in the institution, like the strict curriculum and massive classes are also a huge challenge. These aspects restrict the nimbleness needed to realistically put into practice inclusive evaluation techniques. Moreover, not all institutions have access to assistive technologies and digital infrastructure, which presents discrepancies in their access and use. The other problem is the need to be consistent and not biased in assessment. Although the goals of inclusive assessment are flexibility, the fact that all students are assessed by the same standards, is an issue. This indicates that there is a need to have clear guidelines and standard evaluation criteria.

The findings are solid arguments towards the shift in the practice of inclusive assessment in higher education. The statistics suggest that the practices that involve the following: Improve academic performance and conceptual understanding, Enhance student engagement and participation, Reduce stress and improve confidence and Provide equitable opportunities to diverse learners.

Nonetheless, to successfully implement the same, some issues like training of faculty, development of infrastructure and standardization of policies have to be addressed. Inclusive assessment is also enhanced with the use of technology, which increases its ability to be scaled up and applied in various institutions.

6. Conclusion and Future Work

This paper has discussed the relevance and usefulness of inclusive assessment practices with university students having special educational needs (SEN), the shortcomings of the conventional assessment system, and the necessity to introduce more flexible, easy-going, and balanced assessment practices. The results are a clear indication that traditional methods of assessment do not tend to accommodate the needs of different learners, which leads to untrue evaluation of the abilities of students and decreased involvement. Inclusive assessment practices, on the contrary, assisted by adaptive strategies, integration of technologies, and policy alignment, offer a better representation of learning outcomes among students in a more inclusive and comprehensive way. The suggested framework on the inclusive assessment can provide a reliable and effective answer to these issues. Through the inclusion of major aspects like adaptive methods of assessment, assistive technologies, institutional support and feedback systems, the framework makes certain that the design of assessments is based on inclusive design at the start and not on reactive accommodations. The dynamic and fluid

nature of the learning landscape is further improved by the cyclical process of design, implementation, evaluation and refinement to increase the flexibility and resiliency of the framework to the changing educational landscape. The graphical analysis and results support the assessments effectiveness of the inclusive practices. Students showed major progress in their performance and interaction; they were also more satisfied and better understanding of concepts. The variety of assessment forms helped the students to show what they have knowledge based on their advantages, and technology made it available and individual. The results of these studies support the notion that inclusive assessment is beneficial to students with SEN, but without negatively affecting the learning experience of all students. Although these are positive results, the research has found a number of difficulties of implementing inclusive assessment. The major obstacles are the insufficient training of the faculty, the inadequate technological facilities, institutional inflexibility, and resisting change. These challenges can only be dealt with through a collective effort of both educators, administrators and policymakers. They should invest in professional development, have well laid down guidelines and to facilitate inclusive practices, institutions should have accessible technologies.

This study may be extended in future by carrying out a large-scale empirical tests of the proposed framework in various disciplines and Universities. Inter-regional and cross-educational studies can be used to gain a better understanding of the contextual issues and the best practices. Also, there is a possibility to further integrate the newest technologies like artificial intelligence, learning analytics and adaptive assessment systems to make the process even more personalized and efficient. The other direction that one should look towards in the future is standard guidelines and assessment rubrics which should be used to achieve consistency and equity among institutions. The studies may be devoted to the long-term effect of inclusive assessment on student retention and employability as well as overall well-being. Moreover, policy-practice gap can be narrowed through investigating the views of faculty and the effectiveness of faculty training. In summary, inclusive assessment is an important measure towards equitable and high quality higher education. Through adopting new strategies and solving the current problems, universities can establish conducive learning communities where all students, irrespective of their capabilities will have a chance to excel and flourish.

References:

- Hott, B. L., Jones, B. A., Randolph, K. M., Kuntz, E., McKenna, J. W., & Brigham, F. J. (2021). Lessons learned from a descriptive review of rural individualized education programs. *The Journal of Special Education*, 55(3), 163–173.
- Mendoza, M., & Heymann, J. (2022). Implementation of inclusive education: A systematic review of studies of inclusive education interventions in low- and lower-middle-income countries. *International Journal of Disability, Development and Education*, 71(3), 299–316.
- Ministry of Education (MOE). (2024). Including students with disabilities (students of determination) into the education system.
- Nadeem, F. (2020). Investigation of provision of services to students of determination in the federal higher education institutes in the UAE (Doctoral dissertation, The British University in Dubai). The British University in Dubai Repository.
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*, 22, 1–18.
- Pacheco, E., Lips, M., & Yoong, P. (2018). Transition 2.0: Digital technologies, higher education, and vision impairment. *The Internet and Higher Education*, 38, 1–10.

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- Rante, S. V. N., Helaluddin, Wijaya, H., Tulak, H., & Umrati. (2020). Far from expectation: A systematic literature review of inclusive education in Indonesia. *Universal Journal of Educational Research*, 8(11B), 6340–6350.
- Rashid, A. A., & Wong, K. L. (2023). Challenges of implementing the individualized education plan (IEP) for special needs children with learning disabilities: Systematic literature review. *International Journal of Learning, Teaching and Educational Research*, 22(1), 15–34.
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes about inclusive education. *Disability & Society*, 23(7), 773–785.
- Syed Jaafar, S. M. R., Maarof, R., Hisam, M. J., & Husin, N. N. F. A. (2019, November 30–December 1). Inclusion setting for disabilities in higher education: A systematic review of issues and challenges in disabilities research. In *Proceedings of the International Conference on Student and Disable Student Development 2019 (ICoSD 2019)* (pp. 184–190). Johor Bahru, Malaysia.
- Valle-Flórez, R. E., de Caso Fuertes, A. M., Baelo, R., & García-Martín, S. (2021). Faculty of education professors' perception about the inclusion of university students with disabilities. *International Journal of Environmental Research and Public Health*, 18(21), 11667.
- Pimple, J., Nandeshwar, A., Hedau, A., Tatewar, S., & Padgelwar, A. (2025). Digital Storytelling and Audio Summaries: A Hybrid Approach to Inclusive Education. *International Journal of Recent Advances in Engineering and Technology*, 14(3s), 67–72. <https://doi.org/10.65521/intjournalrecadvengtech.v14i3s.1660>
- Yusof, Y., Chan, C. C., Hillaluddin, A. H., Ahmad Ramli, F. Z., & Mat Saad, Z. (2019). Improving inclusion of students with disabilities in Malaysian higher education. *Disability & Society*, 35(7), 1145–1170.
- Zabeli, N., Gashi, F., & Dreshaj, A. (2021). Towards the inclusion of students with special needs in higher education in Kosovo. *Cogent Education*, 8(1), 1–19.
- Zainal, M., & Hashim, H. (2019). The implementation of transition programme for students with learning disabilities in Malaysia. *Creative Education*, 10, 1802–1812.