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ETHICS IN EDUCATIONAL ASSESSMENT: EMERGING ISSUES, CONTROVERSIES, AND BEST PRACTICES

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ABSTRACT

Ethical issues in educational assessment have become increasingly significant as schools and educational authorities seek fairness, accountability, and credibility in evaluation processes. This paper discusses the moral dimensions that guide assessment practices and how unethical conduct can weaken the quality and trustworthiness of educational results. Key issues such as bias, validity, reliability, authenticity, confidentiality, privacy, and the rights of test-takers were discussed. Each issue is explored in relation to its practical implications for teachers, learners, and policymakers. The discussion extends to emerging concerns, such as test preparation and coaching, technology-based assessment, inclusion and diversity, social and emotional learning, as well as high-stakes and standardised testing. The paper draws on recent literature and professional codes to explain how these matters influence the fairness and credibility of assessment practices. It argues that ethical awareness and integrity are essential for educators and evaluators to uphold justice and objectivity in measuring learners' performance. It was suggested that ethical guidelines and best practices that can support fairness, transparency, and accountability in educational assessment be provided. When applied with commitment and honesty, these principles can enhance trust in educational outcomes and contribute to a more just and responsible assessment culture.

KEYWORDS: educational assessment, ethics, fairness, validity, accountability, inclusion, best practices

INTRODUCTION

Educational assessment is the process of collecting and analysing data to evaluate students' learning outcomes and their progress towards specific educational goals. It involves a methodical and continuous approach to gathering and analysing empirical data on students' knowledge, skills, attitudes, aptitude, and beliefs (Allen, 2004). This process aims to enhance student learning by refining educational programs and improving teaching practices based on the lessons gained from the assessment data (Popham, 2018).

Assessment information can be acquired by analysing students' work to measure their success in meeting educational objectives. From the data collected and evidence gathered, one can draw conclusions about learning (Kuh et al., 2014). While the term "assessment" is often used synonymously with "test," it encompasses more than just tests (Joshua, 2012). Assessment can be directed towards an individual learner, a group of learners in a class, an entire course or academic programme, the institution, or even the educational system as a whole.

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The term 'assessment' was adopted within the field of education following the conclusion of the Second World War (Nelson & Dawson, 2014). Specifically, the history of educational assessment dates back to the ancient civilisations of China, Greece, and Rome, where written exams were used to select government officials and evaluate students' knowledge in different subjects (Black & Wiliam, 1998; Min & Xiuwen, 2001). In the 19th century, educational assessment became more widespread with the development of standardised tests. Standardised tests were first used in the United States to measure students' achievement in basic subjects such as reading, writing, and arithmetic (Giordano, 2005). These tests were seen as a way to improve education and ensure that all students received a similar level of instruction (Olson & Bakken, 2013). In the 20th century, educational assessment expanded beyond standardised tests to include more qualitative and formative assessments, such as classroom observations, portfolios, and student self-assessment. With the growth of technology, new assessment methods such as computerised adaptive testing and online assessments have emerged (Bassey et al., 2020; Owan, 2020; Owan et al., 2019).

Today, educational assessment is a crucial aspect of education because it helps educators to identify students' strengths and weaknesses, adjust instruction to meet students' needs and evaluate the effectiveness of educational programmes. Assessment also plays a significant role in accountability systems. It measures school and teacher effectiveness (Bassey et al., 2019; Owan et al., 2023c) and informs local, state, and national policy decisions. Assessment is a continuous process that establishes measurable learning outcomes, provides opportunities to achieve them, analyses evidence to evaluate student learning, and uses this information to improve it (Suskie, 2004). It is essential to determine students' educational accomplishments (Bassey & Owan, 2020). The involvement of ethics is crucial in assessing students because, without a valid assessment, any guidance or counselling given to the students can be ineffective and harmful, potentially resulting in damaging consequences due to decisions made on incorrect data.

However, ethical considerations are crucial to ensure that assessments are conducted fairly and without bias, protect students' privacy and confidentiality, and promote trust and confidence in the educational system among students, parents, and educators. Ethical assessment practices also help educators identify areas for improvement in teaching and learning, leading to better student educational outcomes. Ethical violations are more likely to occur when teachers or schools are responsible for monitoring assessment practices and are vested in their students' test performance. This is because they may be less strict in adhering to ethical principles when preparing, administering, and scoring tests. Nevertheless, teachers are aware that assessment can significantly impact students' lives. Therefore, it is crucial to consider the ethical implications of assessment practices and procedures. This article discussed some ethical issues that teachers would likely be victims of during the assessment planning, preparation, administration, scoring, interpretation and results utilisation phases.

This work is necessary due to some identified issues in the existing literature. For instance, ethical guidelines for high-stakes testing preparation have been proposed by various authors (e.g., Ali et al., 2020; DeMatthews & Serafini, 2021; Landers & Behrend, 2023; Peterson, 2005), and studies have been conducted on teachers' attitudes towards standardised test preparation strategies (e.g., Abrams et al., 2003; Urdan & Paris, 1994). However, there is no consistent definition or agreement on ethical standards related to testing. Furthermore, the existing literature briefly discusses ethical principles for assessment (e.g., Airasian, 2005; Green et al., 2007; Payne, 2003; Taylor & Nolen, 2005), but there is a lack of clear identification of underlying ethical assumptions to assist educators in making daily judgments. This article addresses the gaps in the literature by providing an overview of ethical issues in educational assessment. The article also discusses current trends and controversies in ethical issues in educational assessment.

Furthermore, the article provides ethical guidelines and best practices in educational assessment, including professional standards and codes of ethics, assessment design and administration principles, guidelines for interpreting and communicating assessment results, and strategies for addressing bias and promoting equity in assessment.

ETHICAL ISSUES IN EDUCATIONAL ASSESSMENT

1. Bias in assessment

Bias in assessment refers to systematic errors or inaccuracies in assessment outcomes that can occur due to various factors such as test content, format, or administration. Bias can result in unfair and inaccurate evaluations of student learning, leading to negative consequences such as lower academic performance, lack of opportunities, and reduced access to resources. Assessment procedures or tests can be considered biased if they underestimate a student's ability or achievement, and overestimation is not typically viewed as biased. Underestimation occurs when there is a significant difference between a student's true score and their obtained score on the test, but it is challenging to determine a student's true score (Owan et al., 2023d).

Various types of bias can impact educational assessments, including cultural, linguistic, gender, and socioeconomic bias. Cultural bias occurs when a test assumes knowledge about a particular culture, while linguistic bias occurs when a test is not presented in the student's primary language. Gender bias can arise from questions favouring one gender over the other, while socioeconomic bias results from tests developed or administered in a way that privileges certain backgrounds. Other examples of bias include grading practices that favour certain students or factors unrelated to performance, and these can lead to inaccurate and unfair assessments of students' abilities and progress (Green et al., 2007).

Removing bias from tests can be accomplished by reviewing each item individually and eliminating biased ones. However, this approach can be challenging since experts may mistakenly identify some items as biased, leading to conflicts with empirical analyses considering the difficulty level of items across subgroups. It is important to address bias in educational assessments to ensure that the test items and formats are fair for all students, avoiding cultural and linguistic assumptions, gender stereotypes, and socioeconomic preferences. Reviewing and revising tests regularly is essential to prevent potential biases. By eliminating bias in assessments, every student can have an equal opportunity to display their abilities and knowledge.

2. Misunderstanding the rights of test-takers

Educational assessments provide fair and accurate evaluations of students' knowledge, skills, and abilities. However, if test-takers rights are not respected, the assessment results may be invalid, unreliable, or unfair. One of the test-takers fundamental rights is the right to be informed about the purpose and nature of the assessment. Test-takers should understand what is being assessed, how the assessment will be used, and how the results will be reported. Without this information, test-takers may not be able to prepare adequately or may feel that the assessment is unfair or unjust.

Another right of test-takers is the right to confidentiality. Test-takers should be assured that their personal information and assessment results will be kept confidential and will only be used for the purposes for which they were intended. If assessors fail to protect test-takers privacy and confidentiality, it can result in ethical violations and potential legal consequences. Test-takers may also have the right to know who will access their results and how they will be used. Test-takers also have the right to accommodations and adjustments, if necessary, to ensure that the assessment is fair and accessible to everyone. This includes accommodations for students with disabilities or those who speak English as a second language. Assessors who fail to provide appropriate accommodations may violate test-takers rights and may not obtain accurate and reliable assessment results.

Another ethical issue related to test-taker rights is discrimination. Test-takers have the right to be assessed fairly and without discrimination based on race, gender, religion, or other factors. If assessors fail to provide a fair and unbiased assessment, it can lead to unfair treatment and potential legal consequences.

Test-takers also have the right to access their assessment results and to have them explained clearly and understandably. Assessors who fail to provide test-takers with their results or do not provide adequate explanations may violate test-takers rights. Lastly, test-takers have the right to challenge assessment results if they feel that the assessment was unfair or believe their rights were violated during the assessment process.

3. **Validity**

Validity refers to the extent to which an assessment tool measures what it is intended to measure. Therefore, it is a fundamental requirement for any assessment to be considered fair and reliable. However, it is not the test itself that is valid, but the decision made based on its results. Teachers may violate validity as an ethical issue in several ways, such as using irrelevant or inappropriate assessment tasks, allowing cheating or plagiarism, not providing clear instructions, and using biased assessment tasks. If assessments are not relevant or appropriate, they may not provide a valid measure of student learning, which can lead to unfair treatment of students. Cheating or plagiarism can also compromise the validity of the assessment results, leading to inflated grades or scores and a false sense of student achievement. Clear instructions must be provided to students to ensure that they can demonstrate their knowledge or skills accurately. Using biased assessment tasks can also lead to unfair treatment and discrimination, resulting in invalid results that do not accurately reflect the abilities of all students. Teachers must ensure that assessments are valid, reliable, fair, and equitable to promote ethical assessment practices. Also, the interpretation of test scores is crucial. The constructor and the test user are responsible for ensuring the test is valid for specific purposes and for individuals being assessed.

4. **Reliability**

Reliability refers to the degree to which an assessment tool produces consistent and dependable results over time, regardless of the person administering the assessment or the context in which it is administered. Educational assessors violate reliability when they score assessments inconsistently or fail to follow established procedures for administering assessments, resulting in unfair advantages or disadvantages for students. Inconsistency in scoring can arise due to differences in grading rubrics or personal biases. Proper training is necessary to administer assessments consistently and reliably. The testing environment also plays a critical role in ensuring the reliability of assessments, and assessors who do not provide a consistent testing environment can affect the accuracy of results. Assessors must also avoid personal biases, which can lead to unfair assessments and violate reliability. An unreliable assessment can lead to inaccurate results that can negatively affect students. For example, an unreliable assessment may produce different scores for the same student on different occasions, even if the student's knowledge or skills have not changed. This can lead to inconsistent placement in educational programs, such as being placed in a higher or lower level of instruction than they should be.

5. **Authenticity**

The concept of authenticity in assessment refers to the extent to which an assessment task mirrors real-life tasks and situations that students may encounter in their future careers or daily lives. Authentic assessment is beneficial in helping students develop valuable skills and knowledge that are practical in the real world. In contrast, inauthentic assessment occurs when teachers assess students on tasks or skills that do not reflect real-world tasks or skills. However, educational assessors can violate authenticity in various ways. First, designing assessments not aligned with real-world situations or tasks can lead to inaccurate and irrelevant results. Second, plagiarism and cheating by assessors undermine the authenticity of the assessment process and produce assessments that do not accurately measure students' knowledge and abilities.

Third, assessors who excessively emphasise memorisation skills prevent students from demonstrating their problem-solving and critical-thinking abilities. Fourth, unrealistic assessment demands (such as requiring students to produce complex sentences beyond their level of proficiency) can lead to inaccurate results. Fifth, assessors who do not consider cultural differences when designing assessments can produce culturally insensitive and inaccurate assessments. Furthermore, teachers may use assessments that only assess surface-level

knowledge or do not allow students to demonstrate their in-depth understanding of a topic. Therefore, educators and assessors must communicate the purpose and nature of authentic assessments to students and provide appropriate feedback and support to help them improve their skills and knowledge.

6. **Test conditions omission**

Not informing candidates about test conditions is unethical because it can negatively affect their performance on the test and create an unfair advantage for some candidates over others. Not informing candidates about test conditions can prevent them from adequately preparing for the test and erode their trust and confidence in the assessment process. Many assessors violate this ethical principle by providing incomplete or inaccurate information about test conditions, changing test conditions without informing students, failing to provide students with opportunities to practice under test conditions, and allowing some students an unfair advantage. Violations of this ethical principle can have negative consequences for students, including lower test scores, increased stress and anxiety, and a lack of confidence in the fairness of the assessment. To ensure that students are informed about test conditions and given an equal opportunity to perform to the best of their abilities, teachers should provide clear and accurate information about test conditions in advance, provide practice opportunities, and ensure that all students are held to the same standards and conditions during the assessment.

7. **Confidentiality and privacy**

Confidentiality and privacy are important ethical considerations in educational assessments that aim to protect students' personal information and test results. Confidentiality refers to the responsibility of assessors to maintain the confidentiality of student information and use it only for the assessment. Privacy refers to the right of students to have their test results kept confidential and protected from unauthorised disclosure. Teachers may violate confidentiality and privacy in several ways, such as inadvertently or intentionally disclosing personal information about students without the necessary consent or authorisation, allowing unauthorised individuals to access test materials or answer keys, sharing test results without obtaining the required permission or consent, and using test results for purposes other than assessment without obtaining the necessary authorisation. Violating confidentiality and privacy in educational assessment can lead to a loss of trust and confidence in the assessment process among students and their families. It can also have negative consequences for students, such as stigmatisation, loss of privacy, and harm to their academic or professional prospects.

To ensure the ethical use of confidentiality and privacy in educational assessment, assessors must obtain the required consent and authorisation from students and their families, protect student information and test materials, and use test results only for assessment purposes. Teachers should also be familiar with the relevant laws and policies governing the use and disclosure of student information and seek guidance and support from their school or district as needed.

8. **Informed consent**

The ethical issue of informed consent in educational assessment refers to the responsibility of teachers to obtain the voluntary and informed consent of students and their families before administering an assessment. Informed consent ensures that students and their families are fully aware of the purpose, nature, and potential consequences of the assessment and have the right to refuse participation if they choose to do so. Teachers can violate the ethical issue of informed consent in several ways, including administering assessments without informing students and their families, coercing students to participate, failing to provide alternatives for students who refuse to participate, and using assessment results for purposes other than assessment.

When teachers violate the ethical issue of informed consent, it can result in negative consequences for students and their families, such as a loss of trust in the assessment process and potential harm to the student's academic or professional prospects. To ensure that informed consent is upheld in educational assessment, assessors must obtain voluntary and informed consent, provide alternatives for those who refuse participation, and use assessment results only for assessment. Teachers should also be familiar with the relevant laws and policies regarding informed consent and seek guidance

and support from their school or district when necessary. By upholding the ethical issue of informed consent in educational assessment, teachers can maintain trust and fairness in the assessment process and promote positive student outcomes.

9. **Fairness and equity**

Fairness and equity are ethical issues in educational assessments that pertain to the responsibility of assessors to ensure that all students are given an equal opportunity to demonstrate their knowledge and skills on an assessment, regardless of their background or circumstances. Teachers can breach ethical standards of fairness and equity in educational assessment. For example, teachers may fail to provide appropriate accommodations to students with disabilities, which can lead to poorer performance in the assessment. Teachers may also allow personal prejudices to impact their grading, resulting in lenient marking for certain groups and harsher marking for others. Teachers may also not provide equal opportunities for students to prepare for the assessment, which can result in uneven access to study materials or inadequate instruction. Using assessments to perpetuate existing inequalities is another concern. Teachers may use assessments to justify tracking students into lower-level courses or rely solely on assessments for high-stakes decisions such as graduation or college admissions. Such actions can have negative outcomes for students and families, leading to a distrust of the assessment process and reinforcing existing inequalities. To ensure fairness and equity in educational assessments, assessors should provide appropriate accommodations and support, eliminate biases in grading, provide equal opportunities for students, and use assessments to promote equity. Teachers should be familiar with laws and policies related to assessment equity and seek assistance from the school or district when needed.

10. **Practicality**

Practicality is a crucial ethical issue in educational assessments that involves ensuring the feasibility of administering an assessment in terms of time, cost, and resources. Teachers must consider practicality when selecting assessment tools to ensure they are efficient and provide accurate and meaningful results. However, in some cases, teachers may violate practicality, resulting in negative consequences for students and the educational system. Examples of violating practicality as an ethical issue in educational assessments include administering assessments that are too long or complex for the given time frame, requiring resources that are not available or affordable, or using assessments that are unsuitable for the intended purpose. This can lead to inaccurate results, unfairness and inequity in the assessment process, and undue stress and anxiety for students. To uphold practicality as an ethical issue, teachers should ensure that assessments are feasible and efficient while providing accurate and meaningful results. They should select appropriate assessment tools and consider the age and developmental level of the students when determining a reasonable timeframe for completion. Teachers should ensure access and equity by providing necessary resources and avoiding unnecessarily demanding assessments.

11. **Labelling**

Labelling in educational assessment refers to assigning a label or classification to a student based on their performance on an assessment. This label may take various forms, such as a grade, a category (e.g., "proficient" or "below proficient"), or a diagnosis (e.g., "learning disabled"). Labelling can have negative consequences such as stigmatisation, discrimination, and a fixed mindset. For example, labelling can lead to stigmatisation, stereotyping, or discrimination against students perceived as "low-performing" or "at-risk." It can also create a fixed mindset in students, where they believe that their abilities are predetermined and unchangeable. To address this ethical issue, teachers and administrators should consider the potential consequences of labelling and strive to use fair, valid, and reliable assessments while providing constructive and supportive feedback. They should also use descriptive, objective, and respectful language, emphasising the potential for growth and development in all students. By avoiding stigmatising labels and focusing on growth and improvement, educators can promote a positive and inclusive learning environment for all students, regardless of their background or level of achievement.

12. **Dehumanisation**

Dehumanisation in educational assessment refers to reducing students to mere test scores or numbers, ignoring their unique talents and potential. This can limit understanding of their abilities and ignore non-cognitive skills like creativity and problem-solving. It can create a culture of competition and harm students' emotional and mental well-being. To address this issue, educators should use assessments that capture a broad range of student abilities and provide personalised feedback that focuses on growth and improvement. Collaboration and mutual support among students should be encouraged, and an inclusive, respectful, and supportive learning environment should be created for all students, regardless of their background or level of achievement. By valuing students as whole persons with unique strengths and weaknesses, educators can ensure that educational assessments are used as one tool among many for understanding and promoting student growth and success.

CURRENT TRENDS AND CONTROVERSIES IN ETHICAL ISSUES IN EDUCATIONAL ASSESSMENT

The current trends and controversies in ethical issues in educational assessment are discussed in this section. By understanding these trends and controversies, we can better inform our assessment practices and promote ethical and equitable outcomes for all students.

Test preparation and coaching

Test preparation and coaching have become a growing trend in educational assessment, particularly in high-stakes exams such as college entrance and professional licensing exams. While some argue that such preparation can enhance test-takers scores and provide them with a competitive edge (Knoch et al., 2020), others argue that it undermines the validity and reliability of the test and reinforces social inequalities (Tsang & Isaacs, 2022). Test preparation and coaching proponents argue it can improve students' test-taking skills, reduce anxiety, and increase confidence. For instance, it has been argued that a well-designed test preparation program can provide a student with a better understanding of test content and format, as well as strategies for pacing, focusing, and reducing test anxiety (Yusefzadeh et al., 2019). Test preparation companies also claim that their programs can increase scores by 100-200 points on the SAT and 3-4 points on the ACT (The Princeton Review, 2021).

However, critics argue that test preparation and coaching reinforce social inequalities and provide an unfair advantage to students from affluent families who can afford to pay for such services. Research has shown that students from lower-income backgrounds are less likely to have access to test preparation resources and, therefore, may be disadvantaged (Hout, 2012). Furthermore, some have argued that test preparation and coaching can create a "test-taking culture" that prioritises test scores over learning and may encourage unethical behaviour such as cheating (Hollandsworth, 2018). The controversy surrounding test preparation and coaching has led to calls for greater transparency and fairness in the testing process.

Technology and assessment

Technology has transformed the field of education in many ways, including the way assessments are conducted. Technology-enhanced assessments have been lauded for their efficiency, cost-effectiveness, and capacity to provide immediate feedback to students. However, these assessments have also raised concerns about their validity and reliability. There is an ongoing debate about the use of technology in assessments, with critics arguing that such assessments may not accurately measure student learning, particularly in areas that require higher-order thinking skills such as creativity and critical thinking (Mayadas et al., 2009; Sweeney et al., 2017; Taras, 2005). One concern is that technology-enhanced assessments may not accurately measure student learning. For example, multiple-choice questions and automated grading systems may not capture the full range of student abilities or understanding.

Critics argue that these assessments do not fully assess critical thinking, creativity, or other higher-order thinking skills, which are important for success in many fields. Additionally, using artificial intelligence (AI) and machine learning in assessments has raised concerns about bias and equity, particularly for students from underrepresented groups.

Furthermore, the use of automated grading systems and multiple-choice questions, as well as the incorporation of artificial intelligence and machine learning, have raised concerns about the potential for bias and equity issues, particularly for students from underrepresented groups (Gibson & Fonseca, 2022; Jung et al., 2019; Panadero, 2017).

Another concern is the potential for cheating and fraud in technology-enhanced assessments. Online exams and remote proctoring software have made cheating easier for students, undermining the integrity of assessments (Bassey & Owan, 2020; Owan, 2020). Critics argue that cheating and fraud can invalidate assessment results and damage the credibility of educational institutions (Dalby & Swan, 2019; Dann & O'Neill, 2020). Furthermore, concerns have been raised about the impact of technology on test anxiety and student well-being. High-stakes testing and the pressure to perform well on assessments can lead to stress, anxiety, and other negative outcomes for students. Critics argue that technology-enhanced assessments may exacerbate these negative effects, particularly for students who are less familiar with technology or have limited access to digital devices (Panadero, 2017; Taras, 2005).

Despite these concerns, proponents of technology-enhanced assessments argue that they offer many benefits, including increased accessibility, flexibility, and cost-effectiveness. Technology-enhanced assessments can be designed to accommodate students with disabilities or other special needs. They can be administered remotely, eliminating students needing to travel to testing centres (Dalby & Swan, 2019; Mayadas et al., 2009; Sweeney et al., 2017). Additionally, technology-enhanced assessments can be adapted to different learning styles, improving the accuracy and validity of assessment results.

Beyond these conventional forms, artificial intelligence (AI) has rapidly transformed educational assessment by enabling adaptive testing, automated essay scoring, and data-driven feedback systems. These innovations promise enhanced efficiency, scalability, and objectivity, allowing educators to analyse vast amounts of learner data in real time. AI tools can identify performance gaps, personalise learning experiences, and reduce administrative burdens for teachers (Owan et al., 2023). However, their adoption also raises complex ethical questions about fairness, accountability, and human supervision. The automated nature of these systems often gives an illusion of neutrality, when in fact, they can perpetuate social and linguistic biases and hallucinations embedded in training datasets.

A major ethical challenge lies in the opacity of AI-driven assessments. Most commercial algorithms operate as proprietary “black boxes,” offering limited transparency about how scores are generated or what data variables influence results (Owan et al., 2025b). This lack of explainability can erode trust among students and educators, particularly when assessment outcomes significantly affect progression or certification. Transparent communication about algorithmic design, coupled with human moderation of AI outputs, is therefore critical to upholding integrity and accountability in assessment (Parmar & Murari, 2025). Furthermore, ethical AI assessment demands continuous auditing to detect bias, periodic recalibration to maintain fairness across diverse populations, and adherence to governance principles that safeguard learners’ rights. Institutions must ensure that AI complements, rather than replaces, the professional judgement of educators. When used responsibly, AI can enrich assessment practice, but without deliberate ethical safeguards, it risks undermining inclusivity and trust within educational systems (Kayyali, 2025).

Algorithmic bias remains one of the most pressing ethical dilemmas in AI-driven educational assessment. Bias can emerge from unrepresentative training data, flawed model design, or cultural and linguistic assumptions embedded in the algorithm’s architecture. These factors can produce discriminatory outcomes, particularly for students from marginalised, linguistic-minority, or low-income backgrounds (Gustilo, 2024). For instance, automated essay-scoring tools have been found to privilege standardised grammar patterns and penalise creative or culturally distinct expressions of knowledge (Ramesh & Sanampudi, 2022). Addressing bias in AI assessment requires a multidimensional approach. First, developers and educators must prioritise inclusivity in data collection to ensure diverse linguistic, cultural, and

socio-economic representation (Owan et al., 2025a). Second, fairness-testing frameworks and algorithmic impact assessments should be institutionalised to evaluate potential disparities before deployment. Ethical governance also requires that affected students be granted opportunities to question, appeal, or seek redress for suspected algorithmic bias. More broadly, the pursuit of fairness in AI-enabled assessment intersects with issues of social justice and equity in education. Institutions must cultivate an ethics-of-care approach that foregrounds the dignity and agency of learners. This involves combining technical interventions, such as debiasing algorithms, with pedagogical strategies that challenge systemic inequities reflected in digital systems.

Inclusion and diversity

Inclusion and diversity are increasingly important trends in educational assessment. The goal of inclusion and diversity in education aims to create an environment in which all students, regardless of their abilities, race, ethnicity, language, gender, or other characteristics, have equal access to learning opportunities and are supported in achieving their full potential. Assessment is critical in ensuring all students have equal learning opportunities. However, assessment can also be controversial regarding issues of inclusion and diversity. Critical educational assessment issues related to inclusion and diversity include assessing students with disabilities, English language learners, and culturally diverse students. Students with disabilities are often excluded from traditional assessments, as they may not be able to perform tasks in the same way as their peers. Assessment accommodations such as extended time or alternative formats can help ensure that students with disabilities have an equal opportunity to demonstrate their knowledge and skills. However, there are controversies surrounding using accommodations, particularly in high-stakes assessments such as college admissions tests. Thus, in recent years, there has been an effort to create more inclusive assessments that can better accommodate students with disabilities. For example, Universal Design for Learning (UDL) is an approach to curriculum design that aims to provide all students with equal learning opportunities.

UDL emphasises the importance of providing multiple means of representation, action, and expression in assessments to accommodate diverse learners. Studies have shown that UDL assessments can improve the performance of students with disabilities (Gargiulo & Metcalf, 2022; Kieran & Anderson, 2019; Lyner-Cleophas, 2019).

ELLs are another group that may be excluded from traditional assessments. ELLs may struggle with language barriers and cultural differences that can impact their assessment performance. Recent research suggests that assessments should be designed to consider students' language and cultural backgrounds. Assessments should be translated into the students' primary language whenever possible, and accommodations should be made to account for cultural differences. It has been shown that language accommodations in assessments, such as translations and culturally relevant materials, can improve the performance of ELLs (Umansky & Porter, 2020; Yang, 2020).

Assessments can also be biased against culturally diverse students. For example, cultural stereotypes may lead to test questions biased against certain groups. Students from diverse cultural and linguistic backgrounds may face challenges in standardised assessments that do not reflect their cultural and linguistic experiences. Thus, there has been a push for more culturally responsive assessments that consider students' diverse backgrounds and experiences in recent years. Culturally responsive assessments use culturally relevant materials and questions that better reflect the experiences of diverse students. Studies have shown that culturally responsive assessments can improve the performance of culturally diverse students (Blitz et al., 2020; Civitillo et al., 2019; Kieran & Anderson, 2019).

Accountability and high-stakes testing

Accountability and high-stakes testing are current trends and controversies in educational assessment. High-stakes testing refers to assessments that have significant consequences for students, teachers, and schools. Accountability is the process of measuring performance against standards and making individuals or institutions responsible for their actions. However, these trends and practices have consequences and implications that have been widely debated.

One of the consequences of high-stakes testing is the pressure it places on teachers and students to perform well on the tests. This pressure can lead to unethical practices such as teaching to the test, narrowing the curriculum, and cheating. It has been documented that teaching to the test is a common practice in high-stakes testing, and it can result in test scores that do not accurately reflect students' knowledge and skills (Jennings & Bearak, 2014; Koretz, 2020). High-stakes testing has also been criticised for potentially exacerbating inequality by disadvantaging students from low-income backgrounds or those with disabilities. For instance, it has been found that the achievement gap between students from high- and low-income families was wider in states with high-stakes testing than in states with low-stakes testing (Acosta et al., 2020; Heissel et al., 2021).

Using assessment results in policy decisions is another critical issue in high-stakes testing. These decisions include school funding, teacher evaluations, and even school closures. Critics argue that these decisions can be overly simplistic and do not consider the complex factors contributing to student achievement. Studies have found that teacher evaluations based on high-stakes testing can be inaccurate and unfair, leading to morale loss and increased teacher turnover (Mintz & Kelly, 2021; Robinson, 2019).

Another consequence is ethical dilemmas in high-stakes testing. Ethical dilemmas in high-stakes testing include issues related to testing security and fairness. For example, students from affluent backgrounds may have access to test preparation materials or may receive accommodations not available to all students, giving them an unfair advantage. In addition, the security of test questions and answers can be compromised, leading to questions about the validity of test scores. Studies have shown that test accommodations are often misused in high-stakes testing, leading to inaccurate results and unfair advantages for some students (Suhr & Johnson, 2022; Weis et al., 2021).

Standardised testing

Standardised testing is a current trend and controversy in educational assessment. It refers to a testing method where all test-takers answer the same set of questions under similar conditions. The results are then compared to a predetermined set of standards or criteria. While some educators believe that standardised testing is an essential tool to assess students' academic progress and provide insight into schools' effectiveness, others criticise the emphasis on test scores as a poor reflection of the learning process and advocate for alternative assessment forms. One significant issue related to standardised testing is the emphasis on test scores as the sole indicator of student learning and school effectiveness. Critics argue that test scores do not capture the knowledge and skills students acquire throughout their education. For instance, some recent studies found that standardised tests provide only limited information about the broader goals of education, such as creativity, critical thinking, and problem-solving (Ekpenyong et al., 2022, 2023; Owan et al., 2022).

Furthermore, standardised testing is also criticised for exacerbating existing inequities in education. Low-income students, students with disabilities, and English language learners tend to perform poorly on standardised tests, leading to unequal outcomes and opportunities. Some studies found that the achievement gap between high and low-income students has increased over the past two decades, partly due to the growing importance of standardised testing (Matheny et al., 2021; Reardon et al., 2019). Another issue related to standardised testing is its pressure on teachers and students. Test scores are often used to evaluate teachers' and schools' performance. This leads to high-stakes testing environments where teachers feel pressured to teach to the test, and students are forced to spend more time preparing for tests rather than engaging in meaningful learning activities. Some studies found that high-stakes testing leads to a narrow curriculum, reduces instructional time, and negatively impacts student motivation and engagement (Polesel et al., 2014).

Social Emotional Learning (SEL)

SEL has been gaining traction in education as a way to promote students' academic achievement, personal growth, and well-being (Durlak et al., 2011). SEL involves the development of skills related to emotional intelligence, self-awareness, self-management, social awareness, and relationship management.

SEL aims to help students understand and regulate their emotions, make responsible decisions, and build positive relationships with others. While many educators and researchers support SEL, there is also some controversy around its implementation and assessment. Some researchers argue that SEL skills are subjective and cannot be measured through traditional standardised tests (Durlak et al., 2011). Instead, they suggest using alternative assessments, such as observations, self-report surveys, or teacher ratings (Jones & Bouffard, 2012). However, others argue that these assessments are subjective and can be influenced by biases, such as gender or cultural stereotypes.

In recent literature, several studies have examined the effectiveness of SEL programs and their assessment. For example, a Durlak et al. (2011) meta-analysis found that SEL programs positively impacted academic achievement, social skills, and emotional well-being. Similarly, a study by Jones and Bouffard (2012) found that a school-based SEL program improved students' academic performance and reduced disciplinary problems. However, there have also been critiques of SEL programs and their assessment. For example, studies have found that some SEL programs may unintentionally reinforce gender stereotypes and perpetuate inequities (Gregory et al., 2017; McCall et al., 2022). Additionally, some researchers have raised concerns about the potential for using SEL assessments inappropriately, such as tracking students or evaluating teachers (McKown, 2019; Rodriguez, 2022).

Adequacy of testing

The effectiveness of testing has become a contentious topic in the field of educational assessment. Educators and policymakers are currently debating whether existing testing practices adequately measure student learning and provide guidance for instructional decision-making. One primary issue with current testing methods is their narrow focus on cognitive abilities, which may not accurately represent the full scope of student learning. Furthermore, assessments often fail to account for affective and psychomotor skills, making them less inclusive and potentially disadvantaging certain groups of students. Some critics argue that educational assessments are not adequate measures of student learning, as they often focus on rote memorisation and do not account for other important aspects of student learning, such as critical thinking and creativity (e.g., Ekpenyong et al., 2022, 2023; Owan et al., 2022). Consequently, recent research has explored alternative assessment approaches (Bourke, 2023; Kilmen & Kösterelioğlu, 2020), such as performance-based evaluations (Horne et al., 2019; Lachance, 2019), peer assessments (Double et al., 2020; Li et al., 2020; Panadero et al., 2023) and technology-enhanced assessments (Wools et al., 2019), as potential solutions to these concerns.

However, supporters argue that assessments are improving and provide a necessary tool for evaluating student progress and improving teaching and learning. Supporters of cognitive-based assessments argue that these assessments provide an objective and reliable measure of a student's academic abilities. Stiggins et al. (2009) noted that cognitive assessments are "the most prevalent and familiar form of assessment in schools". They are valued for their ability to provide a standardised and measurable evaluation of knowledge and understanding. It has also been argued that cognitive-based assessments are important for predicting future academic success. In a study by Smith and colleagues (2013), cognitive assessments significantly predicted academic achievement, future college enrollment and completion. Furthermore, cognitive-based assessments are often required for college admission and job applications, making them a valuable tool for students in preparing for their academic and professional futures. As O'Connor et al. (2014) noted, cognitive assessments are "necessary for evaluating students' readiness for college and career" and critical to educational evaluations.

Cheating and Academic Integrity

Technological innovation has fundamentally redefined what constitutes cheating and academic dishonesty. The rise of AI-assisted writing tools, code generators, and content paraphrasers has blurred traditional boundaries between legitimate assistance and misconduct. Students can now generate essays, solve mathematical problems, or even simulate exam participation using AI technologies (Ofem et al., 2025). These developments pose serious ethical questions about authorship, originality,

and fairness in academic assessment (Owan et al., 2023c, 2023d).

In response, educators and institutions are re-evaluating assessment design to reduce opportunities for AI-facilitated cheating. Approaches include developing authentic assessments that require personal reflection, contextual problem-solving, or oral defences that are difficult to replicate artificially (Owan et al., 2023a). At the same time, digital plagiarism-detection tools and remote proctoring technologies have become increasingly sophisticated, though they, too, raise privacy and fairness concerns (Evangelista, 2025; Owan et al., 2020). Beyond detection and deterrence, promoting a culture of academic honesty remains the most sustainable strategy. Students should be educated about the ethical implications of AI use and encouraged to view integrity as a shared professional value rather than a compliance requirement. Building ethical awareness and digital responsibility will help learners navigate the blurred lines between human creativity and machine assistance (Lancaster & Cotarlan, 2021).

Data Privacy and Ethical Use of Information

Ethical concerns in educational assessment extend beyond test design and grading accuracy to include how information about learners is collected, stored, and used. Assessment (whether traditional or digital) involves handling sensitive data such as academic performance records, behavioural observations, and personal identifiers. The ethical use of such information is central to maintaining fairness, confidentiality, and trust in educational systems. Issues of privacy, consent, and data security therefore form a critical dimension of assessment ethics (Selwyn, 2023). Digital assessment platforms collect large volumes of sensitive data, ranging from demographic details to keystroke dynamics and behavioural analytics. Such data can inform us about learning progress but also exposes students to privacy risks and potential misuse. Ethical assessment practice requires explicit informed consent, clear data-retention policies, and compliance with data-protection laws (Owan et al., 2023a).

However, ethical risks also arise in non-digital contexts. For example, the manual handling of paper-based tests, the public display of scores, or the sharing of assessment data across departments can all compromise learner privacy if not properly managed. Educators must ensure that assessment records are accessed only by authorised persons and used strictly for educational improvement rather than for punitive or discriminatory purposes. The ethical management of learner data also includes securing digital infrastructures against unauthorised access and preventing data from being used for non-educational or commercial purposes. Transparency about who owns and controls student data remains a critical issue, particularly when third-party vendors are involved (Lie et al., 2022).

Moreover, the rise of data analytics and artificial intelligence in assessment amplifies these ethical considerations. Predictive models used to identify at-risk students or detect academic misconduct can inadvertently reproduce social or cultural biases present in the data (Ngulube, 2025). As a result, educators and policymakers must ensure that algorithmic decisions remain transparent, auditable, and subject to human supervision and processing. Ethical assessment practice must therefore balance the benefits of data-driven insight with the protection of learner autonomy and dignity.

Institutions must therefore establish strong governance frameworks that define responsibilities for data collection, storage, and disposal. Regular ethical audits, anonymisation protocols, and privacy-by-design principles should be incorporated into every stage of the assessment lifecycle. These measures should be complemented by professional development for educators on ethical data handling and confidentiality. Protecting student data is not only a legal obligation but also an ethical imperative that upholds trust and integrity in educational practice. Ultimately, an ethically grounded assessment system treats data stewardship as a shared responsibility; one that reinforces fairness, respect, and accountability across all levels of education.

ETHICAL GUIDELINES AND BEST PRACTICES IN EDUCATIONAL ASSESSMENT

Professional standards and codes of ethics ensure that educational assessments are fair, reliable, and valid. The National Council on Measurement in Education (NCME),

the American Educational Research Association (AERA), and the National Council for Accreditation of Teacher Education (NCATE) have developed standards that cover test design, administration, and interpretation of results, as well as fairness, validity, and reliability in assessment. Many assessment practitioners are guided by codes of ethics, such as those developed by the Joint Committee on Standards for Educational Evaluation (JCSEE), which guide ethical behaviour. Practitioners must keep up with the latest research and guidelines to ensure that their assessments meet these standards. Educational assessment professionals must adhere to ethical principles to ensure fair, valid, reliable, and unbiased assessments. The following are some of the key ethical principles and guidelines for educational assessment professionals:

1. Respect for the rights and dignity of students: Assessment professionals must respect the rights and dignity of students by ensuring that assessments are administered in a way that is fair and non-discriminatory. They should also protect the privacy and confidentiality of student information.
2. Professional competence and continuous improvement: Assessment professionals should enhance their knowledge and skills in assessment, testing, and measurement. They should also seek out opportunities for professional development and training.
3. Integrity, transparency, and accountability: Assessment professionals should be honest and transparent in all aspects of their work, including the design, administration, and interpretation of assessments. They should avoid conflicts of interest or bias that may influence their work. Transparency requires that assessors clearly communicate assessment purposes, procedures, and scoring criteria to all stakeholders, while accountability demands that institutions monitor and evaluate assessment practices to ensure consistency, fairness, and adherence to ethical standards.
4. Use of multiple measures: Assessment professionals should use multiple measures to assess student learning and achievement. This helps to ensure that assessments are fair and unbiased and provide a comprehensive picture of student performance Accessibility and inclusivity: Assessment professionals should be accessible and strive to create assessments that are inclusive and culturally responsive to all students, regardless of their abilities, disabilities, or cultural backgrounds. They should also provide accommodations as needed to ensure that all students have an equal opportunity to demonstrate their knowledge and skills. They should be aware of and sensitive to students' cultural and linguistic backgrounds and ensure that assessments are appropriate for all students.
9. Fairness and safety: Assessment professionals should ensure that assessments are fair by minimising the effects of extraneous variables, such as test anxiety or fatigue. They should also be aware of potential assessment biases and work to eliminate them. Assessment professionals should also ensure that assessments are safe and do not put students at risk of harm. They should also follow all relevant safety protocols when administering assessments.
10. Professional boundaries and collaboration: Assessment professionals should maintain appropriate professional boundaries with students and avoid any behaviour that could be interpreted as inappropriate or exploitative. Assessment professionals should also collaborate with other professionals, such as teachers, counsellors, and administrators, to ensure that assessments benefit students and support their learning and development.
11. Clearly define learning objectives: Before designing assessments, educational professionals should define the learning objectives they want students to achieve. Assessments should be aligned with these objectives, ensuring they accurately measure what students should be learning.
12. Encourage student self-assessment and agency: Assessors should encourage students to assess their own learning and progress. This can include self-reflection, self-evaluation, and self-assessment activities that help students identify strengths and weaknesses. Promoting student agency in assessment empowers learners to take ownership of their educational journeys and fosters intrinsic motivation and lifelong learning.
13. Use assessment data to inform instruction: Teachers should use assessment data to inform instructional decisions.

Assessment data can be used to identify areas where students are struggling, determine appropriate interventions, and adjust instruction to meet the needs of individual students.

14. Community and stakeholder engagement: Ethical assessment practice extends beyond the classroom to involve parents, guardians, policymakers, and community representatives in understanding and supporting assessment goals. Meaningful community engagement enhances transparency, builds public trust, and ensures that assessment practices reflect the shared educational values of the society they serve.

CONCLUSION

This paper focuses on the ethical principles in educational assessment and emphasises the importance of adhering to them to ensure high-quality assessment practice. The article highlights that best assessment practices have implications for assessment professionals and policymakers. Assessment professionals are crucial in designing, administering, and interpreting assessments, while policymakers set policies and guidelines that govern assessment practices. Adhering to best practices in assessment is essential for assessment professionals to ensure that their assessments are valid and reliable and provide valuable feedback on student learning. However, this may require additional resources, training, and support. Policymakers should consider the implications of assessment policies on students, teachers, and assessment professionals and ensure that policies are aligned with best assessment practices. This includes providing adequate resources, training, and support for assessment professionals and ensuring that assessments are accessible, fair, and unbiased. Policymakers should also consider the potential unintended consequences of assessment policies, such as teaching to the test or narrowing the curriculum, and work to balance accountability with effective assessment practices. Future research and practice in ethical issues in educational assessment should address bias and discrimination, promote fairness and equity, ensure validity and reliability, and integrate technology ethically. Collaborative efforts between educators, policymakers, and assessment experts can help improve ethical standards and student outcomes.

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