
Artificial Intelligence in Special Education: A Disability-Rights Framework for Accessibility, Personalised Learning and Accountability

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Artificial intelligence is increasingly used in special education through adaptive learning systems, intelligent tutoring, automated assessment, speech-to-text applications, assistive communication technologies, learning analytics and generative content tools. These systems may improve accessibility, facilitate personalised instruction and reduce aspects of teachers' administrative workload. They may also produce disability-specific harms, including algorithmic bias, inaccurate classification, privacy intrusions, behavioural surveillance, inaccessible interfaces and excessive reliance on automated recommendations. This paper examines AI in special education through a disability-rights lens. It employs a doctrinal and interdisciplinary methodology, synthesising international disability law, Indian legislative and policy instruments, emerging AI regulatory standards and contemporary educational research. It argues that technical accessibility, although necessary, is insufficient on its own: AI systems must also uphold equality, dignity, reasonable accommodation, privacy, meaningful participation and inclusive education. The paper proposes a ten-point disability-rights assessment test for educational institutions. It concludes that AI can support inclusive education only when it assists, rather than replaces, the judgment of teachers and specialists; is tested with students with diverse disabilities; and is governed by clear and enforceable rules. The value of AI lies not in how quickly it classifies a learner, but in whether it removes barriers, improves access and enables meaningful participation in education.

Keywords: artificial intelligence; special education; disability rights; inclusive education; accessibility; assistive technology; education

1. Introduction

Artificial intelligence (AI) is altering the organisation and delivery of education. In special education, this change extends beyond administrative software to systems that shape instruction, assessment, communication and educational decision-making. Special education is not merely a different way of teaching the same syllabus; it is a legal and educational response to barriers that prevent students with disabilities from learning and participating on an equal basis. Its legitimate purpose is to provide individually appropriate instruction and support while enabling students to develop their abilities, exercise autonomy and participate in school life.

Assistive technologies have long contributed to this objective. Screen readers, augmentative communication devices, captioning and alternative input tools respond to identifiable barriers. AI-enabled systems represent a further shift: they do not merely transmit or convert information; they classify, infer, predict, recommend and generate.

That shift matters. Once an educational technology begins to identify a child as 'at risk', interpret attention, recommend an intervention or influence the level of instruction offered, it becomes part of the institution's decision-making infrastructure. The system may shape expectations about the learner and alter the opportunities made available to them. A platform can therefore be accessible at the interface level and still be discriminatory in operation. A screen-reader-compatible assessment, for example, may remain unfair if its scoring model treats slower responses as evidence of lower ability. A speech-recognition system may technically accept voice input yet repeatedly fail to understand atypical speech. An engagement detector may interpret disability-related movement, eye contact or facial expression as disengagement.

Recent literature identifies meaningful opportunities. AI may support personalised instruction, accessible communication, differentiated teaching material, teacher preparation and the development of Individualised Education Programmes (IEPs). At the same time, the evidence base remains uneven and is concentrated in particular disability categories and technologies. Reviews have repeatedly warned against treating efficiency as a substitute for educational effectiveness or against designing systems around the convenience of institutions rather than the agency of disabled learners and their families (Harkins-Brown et al., 2025; Hopcan et al., 2022; Rice & Dunn, 2023; Zhang et al., 2024). The central tension, therefore, is not between technology and its rejection. It is between two possible models of innovation. In the first, disability is treated as deviation from an assumed statistical norm, and AI is used to identify, manage and correct that deviation. In the second, disability is understood through a human-rights model: barriers arise from the interaction between individual characteristics and inaccessible environments, rules, technologies and attitudes. Under this model, AI is legitimate only when it helps remove barriers, supports reasonable accommodation and expands participation without displacing the learner's rights or the educator's responsibility.

This paper adopts the second approach. It treats AI in special education as rights-sensitive educational infrastructure. The analysis is guided by the Convention on the Rights of Persons with Disabilities (CRPD), particularly its guarantees of equality, accessibility, privacy, participation and inclusive education, and by the corresponding obligations under Indian law. The paper also considers emerging regulatory approaches, including the European Union Artificial Intelligence Act, because educational AI increasingly crosses borders through commercial platforms and cloud-based services. The argument advanced is that AI should supplement, not replace, professional judgment and that procurement and deployment decisions should be assessed through disability-specific legal and institutional safeguards.

2. Research Problem, Objectives and Methodology

2.1 Research problem and question

The research problem is the tension between the capacity of AI to individualise and widen access to education and its capacity to reproduce discrimination through data, design and automated decision-making. Special education involves information that is highly contextual and often sensitive: disability status, clinical and educational assessments, communication patterns, behaviour, family circumstances, accommodations and long-term learning goals. Systems trained on incomplete or historically exclusionary data may convert these features into labels, predictions and rankings that appear objective while obscuring value judgments embedded in their design.

The principal research question is: how can AI be integrated into special education in a manner that promotes accessibility and personalised support without compromising equality, dignity, privacy, human oversight and the right to inclusive education? A related question is whether existing legal duties are sufficiently operational to guide schools when they procure AI systems that are neither conventional assistive devices nor formal decision-makers, but nevertheless influence educational choices.

2.2 Objectives

1. To identify the principal applications of AI in special education and distinguish supportive uses from uses that materially influence educational decisions.
2. To examine the potential contribution of AI to accessibility, personalised learning, communication, teacher support and inclusive participation.
3. To analyse disability-specific risks, including ableist data, inaccurate classification, privacy intrusion, surveillance, inaccessible design and automation bias.
4. To evaluate AI deployment against the CRPD, Indian disability law, data-protection principles and emerging AI regulation.

5. To propose an operational assessment framework for the responsible procurement, use and continuing review of AI systems in educational institutions.

2.3 Methodology and limitations

This paper employs a doctrinal and interdisciplinary methodology, encompassing an analysis of international legal instruments, Indian statutes and policy frameworks, emerging AI regulations, institutional guidance, and contemporary peer-reviewed literature regarding AI and students with disabilities. Adopting a qualitative and analytical approach, this study does not attempt to evaluate specific commercial products or assert universal empirical validation for every technology discussed. Rather, it delineates the normative principles that should govern systems across varying risk profiles. The scope of this research is constrained by the rapid evolution of educational AI, the opacity inherent in proprietary systems, and the uneven distribution of existing research across disability cohorts, linguistic contexts, and jurisdictions. Findings derived from localised studies, controlled interventions, or specific disability categories cannot be indiscriminately generalised to all student populations. Accordingly, this paper adopts a measured tone—using hedging language such as ‘may support’ or ‘has the potential to’—except where claims are substantiated by robust evidence. This cautious approach is critical, given that tools demonstrating efficacy within average populations may inadvertently fail those learners whose communication, cognitive, or motor characteristics deviate from the datasets upon which they were trained.

3. Applications of Artificial Intelligence in Special Education

AI in special education is not a single technology. It includes machine-learning systems, natural-language tools, computer vision, speech recognition, predictive analytics, robotics and generative AI. The legal and educational implications depend less on the label ‘AI’ than on what the system does, what information it uses and how much influence its output has over a learner. A captioning tool that the student controls present a different risk from an algorithm that recommends placement in a lower instructional group. The first primarily assists access; the second may shape entitlement and opportunity.

3.1 Adaptive learning and intelligent tutoring

Adaptive learning platforms dynamically adjust the pacing, sequencing, instructional presentation, and feedback mechanisms based on student performance data. For instance, learners with dyslexia may be provided with iterative decoding exercises accompanied by auditory scaffolding, while those with dyscalculia might be presented with visual or stepwise explanations; similarly, students requiring structured routines can be offered tasks in consistent, predictable sequences. Intelligent tutoring systems facilitate immediate, responsive feedback and supplementary practice, thereby alleviating the dependency on continuous one-to-one human intervention. A recent OECD analysis outlines the applicability of AI-driven tools to diverse special educational needs—ranging from learning disabilities and physical or sensory impairments to developmental conditions and mental health requirements—while underscoring that rigorous evaluation of evidence, data security, governance, and accountability is essential prior to adoption (Linsenmayer, 2025).

It is critical to distinguish algorithmic adaptation from individualisation as understood in legal and pedagogical frameworks. Although a platform might recalibrate task difficulty based on response history, it frequently lacks the capacity to discern the underlying reasons for a learner’s difficulty, such as the inaccessibility of the assessment format, or the influence of external factors including fatigue, anxiety, language proficiency, or the efficacy of assistive technology. Consequently, educators remain essential in interpreting these outputs within the holistic context of the student. Automated adaptation ought to serve as a mechanism to expand educational pathways, rather than inadvertently restricting the curriculum.

3.2 Communication and sensory accessibility

Speech-to-text software, automated captioning, and transcription services facilitate academic engagement for students who are deaf or hard of hearing, whereas text-to-speech systems assist learners with visual impairments, dyslexia, or related reading difficulties. Image-description technologies translate visual diagrams and materials into text or speech, and object-recognition and navigation systems enhance physical mobility within educational environments. Additionally, voice recognition, eye-tracking, and augmentative and alternative communication devices enable students with speech or motor impairments to articulate preferences and contribute to classroom interactions. These applications align with the potential identified by the United Nations Special Rapporteur, who observed that artificial intelligence can augment communication, information access, mobility, education, and independent living (Quinn, 2021).

The utility of such tools, however, is contingent upon their reliability in authentic settings. Inaccurate captioning that omits technical terminology, image-description systems that misidentify content, or speech-recognition software that performs poorly with atypical speech patterns may simulate accessibility without providing functional efficacy. Consequently, accessibility measures must be validated in conjunction with the intended users, taking into account the specific linguistic and environmental contexts of deployment. While adherence to general web-accessibility standards establishes a necessary baseline, it cannot supersede the requirement for rigorous user testing and disability-specific evaluation.

3.3 Learning disabilities, neurodiversity and social support

AI-driven interventions are used to facilitate academic skills, including literacy, numeracy, organisational capability, and executive function. Generative artificial intelligence systems possess the capacity to articulate complex concepts in accessible language, generate illustrative examples, assist in the structuring of information, and facilitate multi-modal content conversion. Furthermore, research has explored the application of social robotics and simulated environments to address the communication and social learning needs of autistic students. Notwithstanding this progress, the current body of literature—while heavily skewed toward autism and learning disabilities—demonstrates significant fragmentation and a reliance on restricted methodological contexts (Hopcan et al., 2022; Zhang et al., 2024).

A disability-rights perspective necessitates critical scrutiny regarding the primary objectives of such interventions. Pedagogical technology should not be employed to compel neurodivergent learners to conform to normative standards of social behaviour, gaze, or affect. Instead, support mechanisms ought to be aligned with the individual's communicative autonomy, safety, and equitable participation. Systems that incentivize conformity by pathologizing neurodivergent expression risk exacerbating, rather than alleviating, systemic educational barriers.

3.4 Generative AI and teacher support

Generative AI can assist teachers in producing differentiated worksheets, simplified or extended explanations, vocabulary lists, visual prompts, alternative assessments, lesson summaries and parent communications. It may reduce the time spent transforming the same curricular content into several accessible formats. Harkins-Brown et al. (2025) describe lesson planning, individualised instruction and professional support as important areas of potential benefit, but they also stress the need for empirical validation and skilled review.

Generated material must not be treated as ready for direct use. Large language models may invent facts, provide developmentally inappropriate content, reproduce stereotypes or overlook a learner's specific accommodation. They may also produce superficially measurable goals that are disconnected from assessment evidence. The appropriate role is assistive: the teacher may use the output as a draft, but remains responsible for accuracy, pedagogical suitability and compliance with the student's plan.

3.5 Individualised Education Programmes and learning analytics

AI is increasingly discussed as a tool for drafting IEP goals, organising records and monitoring progress. Recent studies suggest that structured use of generative AI may improve certain formal qualities of IEP goals, particularly when users receive guidance and retain professional review (Rakap & Balıkcı, 2024; Waterfield et al., 2025). These findings are significant but should not be overstated. An IEP is not merely a well-phrased document. It is a collaborative educational plan grounded in assessment, the student's strengths and needs, family knowledge, classroom observation and professional judgment.

Learning analytics can reveal patterns in attendance, task completion, errors and progress. Used carefully, such information may support earlier intervention. Used carelessly, it may turn disability-related data into enduring labels. A prediction that a student is 'unlikely to succeed' can influence expectations even when the model does not account for accessible instruction or reasonable accommodation. Analytics should therefore trigger inquiry and support, not automatic restriction.

3.6 Universal Design for Learning

AI may support Universal Design for Learning by enabling multiple means of representation, engagement and expression. A lesson may be offered through text, audio, captions, simplified language, images, interactive exercises or translation. Students may respond through speech, typing, drawing or an augmentative communication device. This can reduce dependence on after-the-fact accommodation and make flexibility part of ordinary teaching. Yet universal design does not mean that individual accommodation becomes unnecessary. A broadly accessible system must still permit tailored adjustments where a learner's needs are not met by the standard design.

4. Educational and Accessibility Benefits

4.1 Personalised support without unnecessary segregation

One of AI's most important possibilities is to provide support within the general classroom. When accessible content, translation, captioning or differentiated practice can be delivered promptly, a student may participate in the same lesson as peers rather than being removed solely because materials were not prepared in an accessible form. This possibility is consistent with inclusive education: support follows the learner into the ordinary educational environment instead of requiring the learner to fit an inflexible system.

Personalisation can also protect dignity where it reduces public marking of difference. A student may use a mainstream device that contains accessibility functions rather than specialised equipment that visibly separates them from classmates. Nevertheless, personalisation must not become isolation. Education includes social participation, collaboration and relationships. A learner should not be directed into continuous one-to-one interaction with a machine merely because the software can generate endless practice.

4.2 Teacher capacity and preparation

Special educators frequently manage documentation, assessment, collaboration and differentiated planning under significant time constraints. AI may assist with routine drafting and conversion tasks, allowing more time for direct instruction and consultation. It can also provide examples, prompts or professional-learning resources. The benefit is strongest where the tool augments expertise. It is weakest where institutions use technology as a substitute for recruiting trained teachers, specialists or support staff.

There is therefore a distinction between reducing avoidable workload and transferring professional responsibility to an automated system. An institution should not justify staff reductions on the ground that AI can 'manage' learners with disabilities. Nor should a teacher be required to accept a system's recommendation without the time, information and authority needed to review it. Human oversight has little value if the human is overworked, inadequately trained or unable to override the system.

4.3 Communication, independence and learner agency

Assistive AI can enable a learner to communicate without waiting for another person to interpret or mediate every interaction. Real-time captions, predictive text, symbol-based communication and environmental description may strengthen independence. The most rights-enhancing systems are those that increase the learner's control: the user can choose when to activate the tool, correct its output, select a preferred mode of communication and understand what information is being processed.

Agency also requires the right not to use a particular tool. A student may prefer human interpretation, Braille, sign language or another established accommodation. The availability of a cheaper automated option does not automatically make it appropriate. Educational institutions should avoid treating AI as the default where it displaces a communication method chosen by the learner or where a human service is necessary for meaningful participation.

4.4 Earlier and more responsive support

Pattern recognition may help teachers notice persistent difficulty earlier and adjust instruction before failure becomes entrenched. This can be valuable where students have historically waited for support. The relevant outcome, however, is not the speed of labelling. Early identification should lead to accessible teaching, assessment by qualified professionals and appropriate support. It should not create a permanent predictive profile or encourage premature conclusions about ability.

5. Disability-Specific Risks and Ethical Concerns

5.1 Ableist data and the problem of the statistical norm

Machine learning systems derive pattern recognition from existing datasets; however, within the context of disability, relying on statistical averages can function as an imprecise and potentially discriminatory benchmark. Given the inherent heterogeneity of the disability community, a uniform diagnosis often belies significant variations in communication needs, necessary support structures, and adaptive strategies. Furthermore, training datasets frequently suffer from the underrepresentation of individuals across diverse impairment profiles, linguistic capacities, and socioeconomic strata. Such datasets may also inadvertently perpetuate historical systemic exclusion, where suboptimal academic achievement—stemming from inaccessible educational environments—is erroneously interpreted as indicative of diminished cognitive aptitude.

5.2 Incorrect assessment, classification and reduced expectations

AI systems can make mistakes that seriously affect students. An automated assessment tool may penalise a student for using assistive technology, communicating differently or taking additional time to complete a task. Speech-recognition software may misunderstand a student whose speech differs from the expected pattern, while camera-based systems may wrongly treat disability-related movement or lack of eye contact as evidence of inattention. A predictive system may also recommend an easier curriculum because it has learned from historical data in which students with similar disabilities were given fewer educational opportunities.

Such mistakes can create a continuing cycle of disadvantage. Once a student is placed in a lower academic group, the student may receive less challenging work, and later performance may then appear to confirm the system's original prediction. The harm is therefore not limited to one incorrect score: it can lower teachers' expectations and affect future educational opportunities. Important decisions should never be based entirely on AI-generated results. Schools must examine whether a system is measuring the student's knowledge or merely the student's ability to respond in the particular manner expected by the technology.

5.3 Privacy, disability information and constant monitoring

AI tools used in special education may collect highly personal information, including medical diagnoses, assessment reports, educational goals, audio and video recordings, eye movements,

emotional responses, behavioural patterns and location data. Some technologies collect this information continuously, creating a risk that the classroom becomes a place of constant monitoring rather than a supportive learning environment. Students may not fully understand what information is collected or how it will be used, and parental consent may have limited practical meaning when a digital service is necessary for the child to receive education or support.

Schools must therefore collect only information that is genuinely required for a clear educational purpose. They should determine who can access the data, where it will be stored, how long it will be retained and whether a technology company may use it to train its own AI models. Disability-related information should not be used for advertising, commercial product development or unrelated profiling. Schools should also consider whether continuous monitoring changes the relationship between teachers and students by replacing trust with surveillance.

5.4 Accessibility failures and uneven performance

An AI product marketed as inclusive may contain basic access barriers: unlabelled controls, inaccessible authentication, poor keyboard navigation, images without text alternatives or interactions that time out before a student can respond. Generative interfaces may be difficult for learners who require predictable structure or plain language. Chatbots may repeatedly demand rephrasing from a user with dyslexia or a communication disability. Accessibility should be treated as a continuing performance obligation, not a one-time checklist completed before purchase.

The Web Content Accessibility Guidelines 2.2 provide an internationally recognised baseline for digital content, including text alternatives, keyboard operability and support for diverse forms of perception (World Wide Web Consortium, 2023). Educational institutions should nevertheless go further by testing cognitive accessibility, compatibility with assistive technologies and performance for users whose speech, movement or communication differs from the assumed norm.

5.5 Automation bias, opacity and loss of professional judgment

Automation bias occurs when people give disproportionate weight to a computer-generated output, particularly where it is presented as a score or probability. Teachers may defer to a recommendation because they believe the system has processed more data or because institutional procedures treat the output as objective. Parents and students may find it difficult to challenge a decision when the vendor does not explain the model or when the school cannot identify which factors influenced the result.

Human oversight must therefore be substantive. The reviewer should understand the system's purpose and limits, have access to relevant information, consider the student's context and possess authority to reject or modify the output. A rubber-stamp process does not convert an automated decision into a human one. High-impact systems should also create records showing when AI was used, what it recommended and how the final decision was reached.

5.6 Digital divide and unequal institutional capacity

AI may widen inequality between well-resourced schools and institutions that lack reliable connectivity, accessible devices, specialist staff or the ability to evaluate vendors. Within a school, students may have unequal access to devices or quiet environments outside class. Systems designed for dominant languages may perform poorly in multilingual settings. An innovation strategy that assumes constant connectivity or expensive subscriptions can exclude the learners it claims to serve.

Equitable deployment therefore requires investment in infrastructure, training and non-digital alternatives. A student's entitlement to support should not depend on whether a family can purchase a premium application. Nor should the withdrawal of a commercial service abruptly remove an accommodation on which the student has come to rely.

6. Disability-Rights and International Legal Framework

6.1 From a deficit model to a human-rights model

The legal analysis of AI in special education depends on how disability is conceptualised. A medical or deficit model locates the problem primarily within the individual and encourages technologies that diagnose, correct or normalise. The social and human-rights models focus on the interaction between impairment and environmental, institutional and attitudinal barriers. This does not deny individual support needs. It changes the question from ‘How can the learner be made to fit the system?’ to ‘What barriers must the system remove so that the learner can participate on an equal basis?’

This distinction should shape problem formulation in AI. A system designed to predict who is likely to fail may preserve an inaccessible curriculum. A system designed to identify which formats, supports or environmental changes enable participation addresses the barrier instead. Rights-based design is therefore not an additional ethical layer applied after the model is built; it begins with the purpose for which the system is created.

6.2 Convention on the Rights of Persons with Disabilities

The CRPD supplies the principal international framework. Article 5 requires equality and non-discrimination and recognises reasonable accommodation as necessary to secure equality. Article 7 requires that children with disabilities enjoy human rights on an equal basis and that their best interests and views receive appropriate consideration. Article 9 extends accessibility to information, communications and information and communications technologies. Article 21 protects access to information and communication in accessible formats, while Article 22 protects privacy.

Article 24 is central. It recognises the right to education without discrimination and on the basis of equal opportunity, requires an inclusive education system at all levels and directs education towards the full development of human potential, dignity, talents and creativity. It also requires reasonable accommodation, support within the general education system and individualised measures that maximise academic and social development (Gregor, 2006). The Committee on the Rights of Persons with Disabilities has emphasised that inclusive education requires systemic transformation rather than the placement of disabled students in unchanged mainstream environments (Committee on the Rights of Persons with Disabilities, 2016).

Applied to AI, these provisions generate both negative and positive duties. Institutions must avoid discriminatory systems, but they must also take steps to make educational technology accessible and to provide accommodations. An AI tool cannot be justified solely because it benefits most students. Where it disadvantages a student with disability, the institution must consider modification, alternative access and whether continued use is proportionate. Procurement from a private vendor does not remove the institution’s responsibility.

6.3 Participation and public procurement

Article 4(3) of the CRPD requires close consultation with and active involvement of persons with disabilities through their representative organisations in decisions concerning them. Participation is particularly important in AI procurement because many failures arise from design assumptions that could have been identified through testing with disabled users. Consultation should include students, families, educators, disability organisations and technical specialists, with accessible methods for providing feedback.

Public procurement is a practical point of leverage. Contracts can require accessibility standards, documentation of training and validation data, performance testing across disability groups, limits on secondary data use, incident reporting, audit rights, deletion on termination and cooperation with complaints. Without contractual access to information, a school may be unable to explain or correct a harmful result. Quinn (2021) specifically urges States to incorporate disability into AI strategies and procurement practices.

7. Indian Legal and Policy Framework

7.1 Constitutional foundation

The constitutional basis for rights-sensitive educational AI is found in the guarantees of equality, life and personal liberty, and education under Articles 14, 21 and 21A of the Constitution of India. In the educational context, equality is not satisfied by offering every student an identical technological interface. Substantive equality may require accessible formats, additional time, alternative modes of response and individual support. Privacy under Article 21 is also engaged when educational systems collect intimate behavioural and disability-related information.

7.2 Rights of Persons with Disabilities Act, 2016

The Rights of Persons with Disabilities Act, 2016 (RPwD Act) translates many CRPD principles into domestic law. Section 3 requires equality, dignity, non-discrimination and reasonable accommodation. Sections 16 and 17 are particularly relevant to education. They require government and local authorities to endeavour that funded or recognised educational institutions provide inclusive education and adopt measures including accessible facilities, reasonable accommodation, necessary individualised support, early detection of specific learning disabilities, training of professionals, and the use of appropriate augmentative and alternative modes of communication.

Section 31 provides free education for children with benchmark disabilities within the statutory age range, while the accessibility provisions in sections 40 and 42 require standards and measures relating to information and communication technology, accessible electronic media, audio description, sign-language interpretation, close captioning and universal design. These duties are directly relevant when a school adopts an AI platform. If the platform is inaccessible, prevents a required accommodation or produces discriminatory outcomes, the problem is not merely poor product design; it may undermine statutory obligations of inclusion and equal participation.

The Act does not contain a specialised regime for educational algorithms. Nevertheless, its existing duties can guide interpretation. Reasonable accommodation should apply to the way an AI system is configured and used. Individualised support requires educators to resist standardised recommendations that ignore context. Accessibility duties apply to content and interaction, not only physical infrastructure. The absence of an express provision on AI should therefore not be treated as a regulatory vacuum.

7.3 National Education Policy, 2020

The National Education Policy, 2020 places equitable and inclusive education among the central objectives of reform. It recognises children with disabilities within socio-economically disadvantaged groups and supports assistive devices, appropriate technology, resource centres, trained special educators, accessible learning materials and participation in regular schooling. Its emphasis on technology must be read together with its commitment to equity. Digital innovation that is not accessible, affordable or pedagogically appropriate would be inconsistent with that commitment (Ministry of Education, 2020).

7.4 Digital Personal Data Protection Act, 2023 and Rules, 2025

The integration of artificial intelligence within educational environments frequently involves the processing of digital personal information. Section 9 of the Digital Personal Data Protection Act, 2023 establishes specific safeguards for data pertaining to children, mandating verifiable parental consent prior to processing, prohibiting activities likely to compromise a child's well-being, and restricting tracking, behavioural monitoring, and targeted advertising, subject to statutory exceptions. The Digital Personal Data Protection Rules, 2025 further delineate the implementation framework, establishing mechanisms for consent within a phased commencement structure.

In the domain of special education, relying exclusively on formal consent constitutes an insufficient governance strategy. Educational institutions should eschew the indiscriminate collection of

continuous audio, visual, biometric, or behavioural data, notwithstanding the existence of generalised parental authorization. Institutions are obligated to define a lawful and specific educational rationale, enforce data minimization, implement stringent security safeguards, maintain oversight of vendor access, and mandate clear retention and disposal protocols. Moreover, it is imperative to differentiate between data necessary for providing pedagogical accommodations and information extracted for the improvement of commercial products. Considering that many learners are minors and disability-related information is often uniquely sensitive, educational institutions should adopt standards that surpass the minimum requirements prescribed for routine administrative data.

7.5 Regulatory gap and institutional responsibility

India does not yet have a sector-specific statutory framework governing AI in special education. Existing law provides strong principles but leaves operational questions: when must an algorithmic impact assessment be conducted; what explanations must vendors provide; which uses require independent validation; and how should students challenge an AI-influenced decision? Until more specific rules emerge, educational institutions should not delay governance. They can adopt procurement standards, designate responsibility, maintain inventories of AI systems, classify uses by risk, consult affected communities and create complaint and review mechanisms.

8. Comparative Regulatory Guidance: The European Union AI Act

The European Union Artificial Intelligence Act offers a useful comparative model because it regulates AI by reference to risk and treats certain educational uses as high-risk. AI systems used to determine access or admission, evaluate learning outcomes, assess the appropriate level of education or monitor prohibited behaviour during tests may fall within the high-risk category. The Act also prohibits emotion-recognition systems in educational institutions, subject to narrow medical or safety-related exceptions. This is significant for disabled learners because emotion and attention inference may rely on facial, vocal or behavioural assumptions that do not reflect human diversity.

High-risk systems are subject to requirements concerning risk management, data governance, documentation, logging, information for deployers, human oversight, accuracy, robustness and cybersecurity. Following the political agreement of 7 May 2026 on simplification of the AI Act, the European Commission states that rules for systems in high-risk areas, including education, are scheduled to apply from 2 December 2027. The precise European timeline is less important for the present paper than the regulatory insight: educational AI that materially shapes access or assessment requires stronger safeguards than ordinary productivity software (European Commission, 2026; European Parliament & Council of the European Union, 2024).

The EU approach should not be copied mechanically into Indian education. It is nevertheless useful in distinguishing low-impact assistance from systems that influence rights and opportunities. A risk-based approach can also prevent overregulation of simple accessibility tools while imposing meaningful duties on predictive assessment, placement, proctoring and behavioural monitoring.

9. Proposed Disability-Rights AI Assessment Test

The legal principles discussed above need an operational form. Before procuring or deploying an AI system in special education, an institution should complete a documented assessment proportionate to the system’s impact. The following ten-part test is designed as a minimum framework. A negative answer does not always require rejection, but it requires mitigation, justification and, for high-impact uses, independent review.

Table 1
Disability-Rights AI Assessment Test for Educational Institutions

Requirement	Key question	Minimum evidence
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Requirement	Key question	Minimum evidence
1. Educational necessity	What defined educational barrier or task is the system intended to address?	A written purpose statement; comparison with less intrusive alternatives; evidence that the use is pedagogically relevant.
2. Accessibility	Can learners with different sensory, physical, cognitive, speech and learning disabilities use the system effectively?	Conformance testing; assistive-technology compatibility; testing with intended users; accessible support and documentation.
3. Non-discrimination	Has the system been tested for disability-related error and disparate impact?	Disaggregated validation where lawful and feasible; known limitations; mitigation of proxy discrimination; review of training-data representation.
4. Individualisation and accommodation	Can the system be adjusted to the learner rather than forcing the learner into a standard profile?	Configurable timing, input and output; accommodation pathways; no automatic penalty for assistive-device use or alternative communication.
5. Meaningful human oversight	Can a trained professional understand, question and override the output?	Named reviewer; training; access to relevant information; authority to depart from the recommendation; recorded reasons for high-impact decisions.
6. Privacy and data minimisation	Is each category of data necessary for the stated purpose?	Data map; retention period; security controls; limits on secondary use and model training; deletion and breach-response procedures.
7. Transparency	Do students, parents and educators know when AI is used and what its limits are?	Plain-language notice; explanation of factors and uncertainty; disclosure of vendor role; accessible information about complaints.
8. Participation	Were persons with disabilities and affected educators involved in design, procurement or evaluation?	Documented consultation; accessible feedback processes; involvement of students, families and representative organisations.
9. Contestability and remedy	Can an affected person challenge an output or decision without disadvantage?	Human reconsideration; correction of data; suspension of disputed outputs; grievance route; timely remedy.
10. Continuing review	Does the institution monitor performance after deployment?	Incident logs; periodic accessibility and bias testing; user feedback; review after software updates; exit plan and alternative support.

9.1 Risk classification in practice

The intensity of review should reflect the function of the system. Low-impact uses include optional text-to-speech, formatting assistance and teacher-controlled drafting where no personal data is entered

and all output is reviewed. Medium-risk uses include adaptive practice, progress analytics and communication tools that process student data but do not determine entitlement. High-impact uses include disability screening, placement, automated assessment, behavioural monitoring, examination proctoring, risk scoring and recommendations that materially influence an IEP or access to a programme. High-impact uses should require an impact assessment, independent validation, senior approval and a clearly available non-automated review process.

9.2 Institutional governance measures

- Maintain an inventory of AI systems, their purpose, vendor, data inputs, users and risk classification.
- Adopt a written policy distinguishing permitted assistance from prohibited or approval-dependent uses.
- Require vendors to disclose material limitations, validation populations, accessibility testing, subcontractors and secondary data uses.
- Train teachers and administrators to recognise hallucination, bias, accessibility failure and automation bias.
- Provide accessible notices and complaint routes for students and families.
- Conduct periodic audits and re-assess systems after significant updates or changes in use.
- Ensure that an equivalent human-supported route remains available where AI cannot meet the learner's needs.
- Create an exit plan so that discontinuation of a vendor does not remove an essential accommodation.

10. Recommendations

1. **Adopt disability-inclusive procurement standards.** Governmental and educational authorities must mandate accessibility compliance, disability-impact assessments, robust data governance, audit prerogatives, and significant human oversight mechanisms within procurement documentation and contractual frameworks.
2. **Prohibit determinative automated decisions in high-impact educational matters.** AI should not independently determine admission, placement, disability status, curriculum level, disciplinary action or withdrawal of support. Such matters require qualified human decision-makers and a reasoned process.
3. **Require algorithmic and accessibility impact assessments.** Institutions should assess likely effects on different disability groups before high-impact deployment and publish an accessible summary of the purpose, risks and safeguards.
4. **Protect disability and behavioural data.** Schools should minimise collection, prohibit commercial reuse, establish retention limits and avoid continuous monitoring unless it is demonstrably necessary, proportionate and supported by safeguards.
5. **Guarantee explanation and contestability.** Students and parents should be told when AI materially contributes to a decision and should be able to obtain human reconsideration, correct inaccurate data and challenge the result.
6. **Invest in teachers and support services.** AI funding should not replace investment in special educators, interpreters, therapists, counsellors and accessible infrastructure. Technology is most useful when skilled professionals have time to use it critically.
7. **Include disabled people in governance.** Students with disabilities, families and representative organisations should participate in policy, design, pilot testing and review. Their involvement should be accessible, compensated where appropriate and capable of changing the outcome.
8. **Support independent research in Indian contexts.** Research should examine performance across Indian languages, disability groups, rural and urban settings, public and private schools and different levels of digital access. Claims made by vendors should not substitute for independent evidence.

9. Develop sector-specific guidance. The Ministry of Education and disability authorities should issue practical guidance aligning educational AI with the RPwD Act, data-protection law, accessibility standards and child-rights principles.

10. Preserve non-AI alternatives. A learner should not lose an effective human or non-digital accommodation solely because an automated option is cheaper or administratively convenient.

11. Conclusion

Artificial intelligence can make special education more accessible, flexible and responsive. Adaptive tools, captioning, alternative communication, accessible content generation and teacher-support systems may reduce barriers that have historically limited educational participation. The promise is real, but it is conditional. A technology does not become inclusive merely because it is described as personalised or because a student with disability can open the application.

The deeper inquiry concerns what the system measures, whose behaviour it treats as normal, what data it collects, how its output influences expectations and whether the learner can understand and challenge its use. An accessible interface can coexist with a discriminatory model. A rapid prediction can be less educationally valuable than a slower, contextual human assessment. A well-phrased automated IEP goal can remain inappropriate if it is not grounded in the learner's circumstances and aspirations.

Disability rights provide the appropriate governing framework. Equality, reasonable accommodation, accessibility, privacy, participation and inclusive education are not obstacles to innovation; they define the conditions under which innovation is legitimate. Existing Indian law already creates substantial duties, even though it does not yet contain detailed rules for educational algorithms. Institutions should act on those duties through careful procurement, data minimisation, meaningful oversight, participation and accessible mechanisms for review.

AI should therefore remain a support to human education rather than a substitute for educational responsibility. Its proper purpose is not to classify disabled learners more efficiently or to automate lower expectations. It is to remove barriers, widen communication, strengthen professional support and enable students to learn and participate on equal terms. The ultimate measure of success is not whether an algorithm can predict a learner's limitations, but whether the educational system—assisted by technology—recognises the learner's potential and creates the conditions in which that potential can develop.

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