

Artificial Intelligence and Digital Humanities in Inclusive English Literature Education: Opportunities and Challenges for Learners with Special Educational Needs

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HOW TO CITE:

Kiran Mani Tripathi, Prathyaksh Janardhanan, Nand Kumar Dewangan, Hidha Jayathilakan, Pinaki Subhra Samanta, Gourhari Behera (2026). Artificial Intelligence and Digital Humanities in Inclusive English Literature Education: Opportunities and Challenges for Learners with Special Educational Needs. International Journal of Special Education, 41(15s), 398-411

ABSTRACT:

Artificial intelligence and digital humanities are increasingly reshaping inclusive English literature education by expanding access to texts, supporting interpretation, and enabling flexible forms of participation for learners with special educational needs. This article explored barriers to reading, writing, communication, sensory access and literary expression, and how these barriers could be lessened through the use of digital tools, assistive technologies, adaptive systems, generative applications and multimodal platforms. This paper reviews the publications on artificial intelligence, inclusive education, accessibility, disability, digital humanities and special educational needs from 2018-2025 using a structured integrative approach. The results showed that the following technologies can enhance access, engagement, independence, and creative participation: Text-to-speech systems, speech recognition, digital annotation, adaptive reading tools, augmented reality, automated feedback, and AI-assisted writing. These 21st-century tools facilitated differentiated instruction and enabled students to respond in a variety of ways: speaking, writing, using images, audio or digital story telling. Meanwhile, there were

COPYRIGHT STATEMENT: Copyright: © 2026 Authors. Open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).	many concerns about the inequalities, biases, inaccuracies, privacy, data protection, teacher preparation, and excessive reliance on automated systems. It was clear that while technology was available, it was not sufficient for meaningful inclusion. Appropriate use depended on accessible design, continuous teacher engagement, ethical protection and safeguarding, institutional support, and congruence with explicit literary learning outcomes. There is a need for more classroom-based and participatory research with a variety of disability groups, educational levels, and low resource contexts. When used with and informed by human judgment, equity, and learner-centred practice, AI and digital humanities can enhance inclusive literary education. Keywords: artificial intelligence, digital humanities, inclusive education, English literature education, special educational needs
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1. Introduction

AI and digital humanities have started to reshape the study and teaching of English literature by extending access, interpretation and discussion, and production of written and literary texts. These new technologies for digital annotation, text-to-speech, speech recognition and adaptive reading, automated vocabulary support, generative writing assistance and multimodal resources have opened up new avenues for students who struggle with traditional print-based learning. This is particularly important for inclusive education in which equal participation in school is not limited to access to classroom spaces. It also calls for flexibility in materials, communication, teaching and learning, and opportunities for all learners to interact with literature. UNESCO (2020) suggested that inclusion must address the various barriers that limit participation and achievement in different educational contexts.

There are a number of difficulties for learners with special educational needs in accessing English literature. Poems, dramas, fiction, and critical discussion may be inaccessible because of complex vocabulary, figurative language, lengthy passages, unfamiliar cultural references, rigid assessment formats, and reliance on visual and/or auditory processing. Dyslexic learners might be limited in their decoding and fluency or Visual Impaired learners might need screen-

readable texts and audio formats. Students who have hearing impairments, autism, attention difficulties, communication disorders, or intellectual disabilities may require captioning, structured explanations, visual supports, simplified prompts, and/or alternative means of expressing interpretation. These needs can be fulfilled by the use of AI, such as personalised pacing, adapting text to the learner, instant feedback, and different modes of engagement; however, AI must be used within the context of educational goals and public policy safeguards (Miao et al., 2021).

Digital technologies can also enhance involvement by allowing learners to annotate the passage, map characters, investigate themes, develop ideas and make literary responses via text, speech, images or audio recording. AI and emerging technologies for personalised learning and for mitigating some learning barriers have been demonstrated in inclusive education, but their usefulness relies on the proper design, teacher training, and sensitivity to learner diversity (Salas-Pilco et al., 2022). Assistive systems can enhance communication, independence, and access for children with disabilities; however, the effectiveness of the technology depends on the children's disability and their educational environment (Zdravkova et al., 2022).

These opportunities come with challenges of unequal access, algorithmic bias, inaccurate content, privacy, dependence and a potential decrease of teacher–learner interaction. Inclusive digital education, therefore, needs inclusive educational infrastructure, inclusive professional support, inclusive governance and inclusive participation of learners in decision making about technology. (European Agency for Special Needs and Inclusive Education, 2022). Under this background, the article discussed the role of AI and digital humanities in the inclusive English literature teaching. It highlighted four issues: the impact of these tools on accessibility and participation, their instructional effectiveness, the practical and ethical issues that restrict their use and what the future directions of research and inclusive practice should be.

2. Conceptual Foundations

2.1 Artificial Intelligence and Digital Humanities in Literature Education

Artificial Intelligence in Education encompassed machine learning, natural language processing, generative systems, automated feedback, adaptive learning, and data-driven support. In the field of English literature teaching, these aids helped students read, interpret, compose and read difficult texts. Digital humanities introduced techniques like digital annotation, corpus analysis, text mining, topic modelling, and archival exploration.

Digital humanities also encompassed developing and utilizing accessible digital archives, electronic scholarly editions, searchable literary corpora, literary maps, character networks, and multimedia archives. In an inclusive English literature teaching process, students can use these resources to enlarge the text, hear the reading of the passage, search for repeated words, trace the setting, compare literature, and explore the relationship of characters. They were not only valuable for computational analysis, they had several ways of being able to enter the literary texts. Accessible design of digital collections could benefit learners with learning challenges in the areas of print access, linear reading, memory, visual processing, or sustained attention.

Previous studies revealed that AI in education has been mainly focused on technical development rather than on teacher's role, indicating a need for increased pedagogical integration of AI tools (Zawacki-Richter et al., 2019). When implemented carefully, AI systems could be used to personalize instruction and to aid in decision making (Chen et al., 2020). The topic modelling method also revealed the potential of computational approach in recognizing common themes in poetry (Navarro-Colorado, 2018).

2.2 Inclusive English Literature Education

Literature instruction for inclusive learning was designed to provide equal learning opportunities for students with various needs in all four aspects: entrance, participation, interpretation, and assessment. Teaching and learning materials, including literature, and class activities needed to be presented flexibly, using a range of different response formats and providing access to supportive materials so that all students could access the texts through reading, listening, viewing, speaking, or creative expression. Multiple means of engagement, representation, and action were promoted by UDL, which made it appropriate to adapt literary instruction with varying learner profiles (CAST, 2024). However, inclusive design required evidence-based implementation, and the efficacy of UDL was contextually grounded, reliant on teacher capacity, and required careful evaluation (Murphy, 2021).

2.3 Learners with Special Educational Needs

The article included learners with dyslexia, visual and hearing impairments, autism, attention difficulties, intellectual disabilities, communication needs and other specific learning difficulties. The dyslexia issue was particularly significant given that issues of decoding, fluency, spelling and written expression may limit access to literary texts and classroom discussion (Helland, 2022). Sensory and communication disabled learners frequently needed assistive technologies including screen reading and text-to-speech software, captioning, speech recognition and alternative keyboards, and augmentative communication devices. Access to appropriate AT was also uneven, with limited

availability of cost, infrastructure, training and maintenance services, as observed globally (World Health Organization and United Nations Children's Fund, 2022).

3. Methodology

3.1 Research Design

A structured integrative approach was used to explore the use of AI and digital humanities in supporting inclusive English literature education for students with special educational needs. Empirical studies, conceptual papers, policy documents, and institutional reports were seen as providing a picture of technological, pedagogical, ethical and accessibility-related perspectives. The process was not about the technical development of digital tools but rather aimed at exploring how such tools could be used for education. Special focus was placed on learner participation, individual support, accessible literature, creative expression, teachers' practices and barriers to implementing equity across various educational contexts.

3.2 Search Strategy

A search was carried out in the relevant databases including Scopus, Web of Science, ERIC, Google Scholar and selected publisher databases. The search covered materials published between 2018 and 2025. The keyword combinations were, "artificial intelligence", "digital humanities", "English literature education", "inclusive education", "special educational needs", "disability", "assistive technology", "accessible reading" and "creative writing". Boolean operators were used to join together similar words and to limit the results. Reference lists of highly relevant publications were also reviewed to find other publications on the same theme.

3.3 Eligibility and Study Selection

Any publications that focused on the intersection between artificial intelligence, digital tools, digital humanities, or assistive technologies, and inclusive education, literacy, literary learning, reading, writing, or classroom participation were included. Sources had to be written in English and between 2018 and 2025 and had to be clearly relevant to pupils with special educational needs

and/or disabilities. Studies that were entirely about developing a technical system or general literary criticism or mainstream education and not having an inclusion dimension were excluded. There were also some duplicate records, texts, editorials, and publications which were not sufficiently educationally relevant that were removed.

3.4 Data Extraction and Thematic Synthesis

A structured recording framework was used to extract the information from each selected source. The information obtained consisted of the year of publication, context of education, learner group, type of technology, purpose of use, reported benefits, implementation challenges, ethical issues, and recommendations for practice. The results were analyzed in relation to each other within and across studies for the purpose of recognizing similarities and differences. The related evidence was then organized under themes of accessible reading, personalised learning, literary interpretation, creative participation, educational opportunities, digital inequality, algorithmic bias, privacy, teacher preparedness, and institutional support. The themes helped the organisation and interpretation of the discussion.

4. Applications in Inclusive English Literature Education

4.1 Accessible Literary Texts and Reading Support

Assistive technologies were used to expand access to literary texts by altering the printed medium so it would meet the varied sensory, linguistic and cognitive needs of individual users. Text-to-speech assisted learners with visual impairments and learners who had dyslexia; speech-to-text assisted learners who had difficulties with handwriting or keyboard use. Conventional printed materials were less of a barrier because they could be made larger, have a higher contrast, contain captions, and be read aloud to people who are visually impaired, were simplified, and were available in electronic format. Assistive technologies were shown to have a positive effect on participation when they are well

adapted to the needs of the individual learner, and their goal is to facilitate the learning process in the classroom (Fernández-Batanero, Montenegro-Rueda, Fernández-Cerero, & García-Martínez, 2022). Additionally, to be educational, their support from the teachers was crucial, as were their cost and ongoing technical access (Mukhtarkyzy et al., 2025). Additionally, the AR also provided visual and interactive interactions with literary settings and characters (Quintero et al., 2019).

Accessible digital archives and electronic literary editions may also contribute to inclusive reading by allowing for electronic searching of text, audio narration, explanatory annotations, illustrations, and variable display settings within the same learning space. Students had the option to travel through content passages and supporting text without ever leaving the text. Digital editions might also include a glossary, a historical overview, a list of characters, and hypertext links to explanations of obscure references. This was particularly helpful if the literature had unfamiliar words, more complex story lines, or settings that were unfamiliar to the people. The accessibility relied on keyboard navigation, screen reader support, captioning, page organization and visual alternative.

4.2 Personalised and Adaptive Literary Learning

Literary instruction was more attuned to the differences in reading ability, attention, vocabulary, and processing speed as a result of using artificial intelligence. Adaptive systems can change reading difficulty, give an instant definition, break up a long reading into shorter chunks, and give reading prompts according to learner progress. The repeated practice was also facilitated with these instruments without disturbing the students in their self-confidence in front of peers. AI-driven personalisation was shown to enhance engagement and autonomy while preserving the teacher's role in content selection and data analysis (Pagliara et al., 2024). Additionally, personalised feedback and flexible pacing were linked to higher access for students with diverse disabilities (Melo-López et al., 2025).

The use of AI in special education also had promise in delivering personalized teaching, assessment and communication assistance (Hussein & Al-Hendawi, 2025).

4.3 Support for Literary Interpretation and Expression

Students used digital humanities tools to recognize themes, rhetorical patterns, relationships between characters, and shifts in the narrative. Digital annotation enabled students to mark up text, add comments, hear explanations read aloud, review challenging parts, etc. Questions directed by AI might lead students to consider imagery, symbolism, tone, and point of view, but could not supplant teacher-led discussion. In addition, computational techniques were shown to be able to identify rhetorical devices like chiasmus, epanaphora and epiphora in large texts, providing new angles to approach literary interpretation (Dubremetz & Nivre, 2018). Digital literary studies involved analyzing and interpreting texts, uncovering complexities and making them visible and discussable (Dong, 2020; Szpakowicz et al., 2018).

Literary interpretation might also be made more visible and manageable through other digital humanities approaches. Novel/Drama character-network diagrams could help to explain relationships; literary mapping could help to link events to geographical locations. Learners may compare repeated words, images, themes or stylistic patterns within passages by using searchable corpora. These techniques are suggested as a way of interpreting, not replacing, context reading. Teachers still had to educate students about the significance of patterns, clarify inaccurate computer-generated patterns, and guide students to relate visual or computer-generated evidence to tone, symbolism, period, and authorial decisions. Multimodal responses using speech, pictures, diagrams and/or audio provided learners with alternative means of demonstrating understanding.

4.4 Inclusive Creative Writing and Participation

AI Writing Tools increased engagement by assisting learners to brainstorm ideas, structure plots, fill in sentences, fix word structures, and refine their writing. Students who had motor or language or communication weaknesses benefitted from the physical and cognitive load reduction of predictive text and speech recognition when writing. Special educators were responsible for making decisions about instruction but still leveraged AI to support planning, word choice, sentence building, and providing feedback for students who had

disabilities (Goldman et al., 2025). Learners could also creatively combine words, sound, images, and movement in their creative work, through the use of digital poetry, multimodal storytelling and interactive composition. These forms allowed for expression beyond the written word, and enhanced literary production for students who were more visually, verbally or performatively inclined (Morales-Romo, 2022). The use of AI and DH in inclusive English literature learning is summarized in Table 1.

Table 1. Applications of Artificial Intelligence and Digital Humanities in Inclusive English Literature Education

Area of application	Digital or AI-supported tools	Learners primarily supported	Inclusive educational function	Expected literary-learning contribution
Accessible literary reading	Text-to-speech, audiobooks, screen readers, adjustable digital texts, captions	Learners with dyslexia, visual impairments, hearing impairments, and reading difficulties	Converts literary texts into accessible sensory and linguistic formats	Improves access to poetry, fiction, drama, and critical passages
Personalised literary learning	Adaptive reading systems, vocabulary support, automated prompts, text simplification	Learners with varied reading levels, attention difficulties, and cognitive-processing needs	Adjusts text complexity, pace, prompts, and instructional support	Supports comprehension, sustained attention, and independent reading
Digital literary interpretation	Digital annotation, searchable corpora, topic modelling, character networks, literary maps	Learners requiring visual, structured, or repeated support	Makes themes, relationships, settings, and textual patterns more visible	Strengthens interpretation of imagery, characterisation, narrative, and style
Inclusive literary discussion	AI-guided questions, speech-to-text, multimodal response platforms	Learners with communication, motor, language, or written-expression difficulties	Provides alternative ways to participate in discussion and interpretation	Expands engagement and allows varied demonstrations of understanding

Creative writing support	Predictive writing, grammar assistance, idea generation, speech recognition	Learners with writing, communication, spelling, or motor difficulties	Reduces mechanical and cognitive barriers during composition	Supports planning, drafting, revision, storytelling, and poetic expression
Digital humanities access	Accessible archives, electronic editions, multimedia collections, linked glossaries	Learners with sensory, memory, attention, or print-access difficulties	Combines literary texts with audio, images, contextual notes, and searchable content	Supports contextual understanding and exploration of literary works
Multimodal literary creation	Digital poetry, audio narratives, visual storytelling, interactive composition	Learners whose strengths are visual, oral, auditory, or performative	Extends creative participation beyond conventional written responses	Encourages literary agency, creativity, and inclusive authorship

Figure 1 presents the pathway through which learner needs, technological supports, teaching practices, and ethical safeguards may contribute to inclusive literary-learning outcomes.

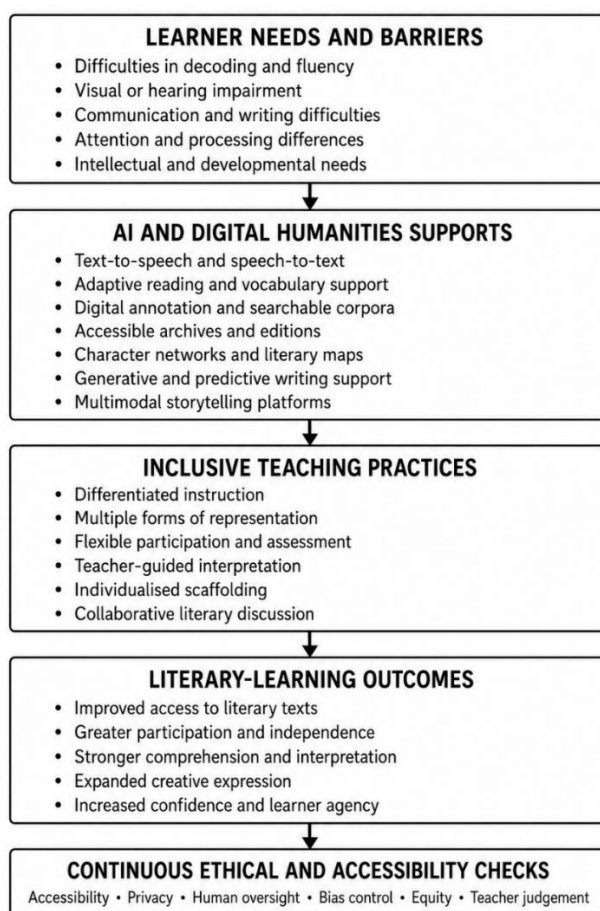


Figure 1. Conceptual Pathway for AI- and Digital Humanities-Supported Inclusive English Literature Education

5. Educational Opportunities

English literature education with special educational needs could use the opportunities brought by the application of artificial intelligence and digital humanities. Accessible platforms, virtual environments, adaptive interfaces and AI tools may help eliminate barriers of reading, communication, attention and written expression. Research on AI and virtual reality highlighted their potential for enhancing participation, engagement, and access for students with disabilities when used alongside the appropriate pedagogy (Chalkiadakis et al., 2024). These tools could be used in literature classrooms to “take a walk” through new environments, imagine scenes, track character interactions, and interact with text in many ways. While much of the evidence pointed to inclusive education in general and not just English classrooms, the principles identified for granting access apply to literary teaching if used to generate access in reading, interpretation, discussion, and creative response.

Augmented reality also provided opportunities to bring literature to life through the use of visual, spatial, and interactive experiences. It was found that the educational outcomes were linked to motivation, attention and learner engagement, but that varied depending on the quality of subject design and implementation (Garzón et al., 2019). These features may help students who struggle to learn from traditional textbook-based lectures. These benefits to English literature education did, however, have to be subject specific tested before being transferred to the English language classroom as greater involvement did not necessarily imply greater understanding or critical interpretation of the literature.

Universal Design for Learning also reinforced inclusive practice, through the facilitation of multiple modes of representation, engagement and expression. The evidence indicated that with the use of instructional flexibility systematically, not in general, this framework can enhance access and learning (Alqurashi, 2023). Using generative AI and chatbots, students might get instant

explanations, word help, prompts, and feedback, and work more independently (Tili et al., 2023).

However, educational effectiveness was not determined by technological availability. Successful results were determined by teacher support, ease of access, appropriateness of the tools, dependable infrastructure, and careful consideration of how tools would enhance literary comprehension and not merely online activity.

6. Challenges and Ethical Concerns

6.1 Accessibility and the Digital Divide

Schools and learner groups were not equally well resourced with access to AI-supported and digital humanities tools. A large number of pupils with SEN did not have appropriate devices, reliable internet connections, accessible software, technical support or digital resources tailored to their needs. In low and middle-income areas, the barriers were more significant as a result of insufficient funds and infrastructure, which limited the sustained use of technologies (Lynch et al., 2024). Inclusive English literature classrooms, learners who do not have equal access to learning opportunities may not have access to audiobooks, screen readers, captioned resources, adaptive platforms, and multimodal literary activities.

6.2 Algorithmic Bias and Misrepresentation

Automatically generated explanations, summaries, characters and literary interpretations may regenerate stereotypes, disability bias, or exclusionary assumptions found in training data. These systems can make disability easier to experience, misrepresent neurodivergent learners, or favor the linguistic and cultural point of view. Algorithmic bias could also impact recommendations, evaluations and tailored learning sequences, specifically for disadvantaged groups (Baker & Hawn, 2022). Transparency, inclusion of datasets, human oversight, and continual assessment of the fairness of the learners and communities represented in generated literary content were, however, essential to use of this for ethical purposes (Holmes et al, 2022).

6.3 Privacy, Safety, and Learner Data

Data related to reading, writing, disability needs, communication problems and classroom behaviour were often gathered by AI platforms. If there are no security measures in place, this information might be kept, used again, or disclosed for a purpose different from the original education goal. In the realm of education, generative AI guidance emphasized the importance of informed consent, age-appropriate protection, transparency, and responsible data governance (Miao & Holmes, 2023). Teachers also had to consider carefully the commercial platforms, limit unessential data collection, keep the confidentiality of learners and ensure that sensitive data about learners were not made public via automated systems (European Commission, 2022).

6.4 Overdependence and Reduced Human Interaction

Excessive reliance on AI could weaken teacher guidance, peer discussion, close reading, and independent interpretation. Learners may take it for granted that automated summaries and/or generated responses are accurate, in context and literary nuanced without questioning them. This risk was particularly relevant for those students who needed to be supported by humans in a structured way to develop their confidence and critical thinking. While large language models can provide assistance for explanation and writing, they also made mistakes, invented information, and gave excessive answers (Kasneci et al., 2023). Digital tools could therefore not be used in place of teacher judgement, collaborative learning, creativity and the sustained engagement with literary texts. Table 2 lists the major educational opportunities, associated risks and needed safeguards.

Table 2. Educational Opportunities, Risks, and Safeguards in Inclusive Literary Education

Educational dimension	Potential opportunity	Main risk or limitation	Required safeguard
Access to literary texts	Audio, enlarged text, captions, simplified passages, and accessible editions may reduce print and sensory barriers	Students without suitable devices or connectivity may remain excluded	Equitable access to devices, accessible platforms, technical support, and offline options
Personalised learning	Adaptive tools may adjust difficulty, pace, vocabulary, and prompts	Automated adaptation may oversimplify literary content or misjudge learner needs	Teacher verification of adapted material and regular assessment of learner progress
Literary interpretation	Digital annotation, corpora, maps, and character networks may clarify complex patterns	Computational patterns may be treated as complete interpretations	Combine digital analysis with contextual reading, discussion, and teacher explanation
Creative writing	Generative and predictive tools may support planning, drafting, and revision	Learners may become dependent on machine-generated language or ideas	Require learner reflection, transparent tool use, and teacher-guided revision
Representation of disability	AI may produce varied examples and accessible explanations	Training data may reproduce stereotypes, cultural bias, or inaccurate disability representation	Bias checking, inclusive datasets, human moderation, and consultation with disability communities

Learner data	Performance data may help personalise instruction	Disability-related and behavioural data may be stored or reused without informed consent	Data minimisation, privacy protection, age-appropriate consent, and transparent platform policies
Teacher practice	Digital tools may help teachers differentiate literary instruction	Limited training may result in inappropriate tool selection or superficial use	Sustained professional development in accessibility, pedagogy, ethics, and digital competence
Learner interaction	AI may provide immediate prompts and explanations	Excessive use may weaken peer discussion and teacher-learner interaction	Use technology within blended, collaborative, and teacher-led learning environments
Assessment	Multiple formats may allow learners to demonstrate understanding more equitably	AI-generated responses may obscure the learner's actual comprehension	Use oral explanation, reflective commentary, process evidence, and teacher judgement

7. Implications for Inclusive Practice

7.1 Implications for Teachers

There is a need for continuous professional development of teachers in digital competence, disability awareness, accessible pedagogy, and the thoughtful use of AI tools. Teachers need ongoing professional development in digital competence, disability awareness, accessible pedagogy, and thoughtful use of AI-supported tools. They had to determine if a platform is truly aiding in literary engagement or introducing technological added value. The professional development needed to incorporate differentiated instruction, data privacy, identification of bias, and how to appropriately modify reading, discussion, and writing assignments for diverse learner profiles. In addition to the access to digital platforms, online education research also required that teachers should be ready, that there should be institutional support, and that instructional planning should be flexible when it comes to effective use of technology (Fernández-Batanero, Montenegro-Rueda, Fernández-Cerero, & Tadeu, 2022).

7.2 Implications for Curriculum and Assessment

Literary texts had to be made available in several different formats for inclusion in literature-English curricula – audio, large print, simplified, captions, and screen reader formats. Learning activities may enable learners to respond by way of speech, writing, an image, performance or through digital storytelling. Assessments also had to be flexible regarding time, task type, and expression. AI tools might help with content creation, word choice, and interpretation, but they would need to be used to develop more than just regurgitated answers. The design of the curriculum had to ensure that close reading, interpretation, creativity and critical engagement remained central to the curriculum while minimizing any unnecessary obstacles.

7.3 Implications for Schools and Policymakers

Reliable infrastructure, accessible devices and technical support, staff training, and clear principles of ethical use of AI were needed in schools and by policymakers. Funding priorities were to ensure that those most likely to be excluded from learning would be. There were also institutional policies to be developed to tackle issues such as data protection, platform transparency, procurement and assessing claims to accessibility. UNESCO (2023b), cautioned

that the choice of educational technology should be based on the needs of the learners and not commercial pressure. Therefore, working together between teachers, special educators, family, administration, and technology

developers needed to be a key component to make digital inclusion equitable, feasible, and educationally relevant. The interlinked roles of all stakeholders in the implementation of sustainable and inclusive practices are highlighted in Figure 2.

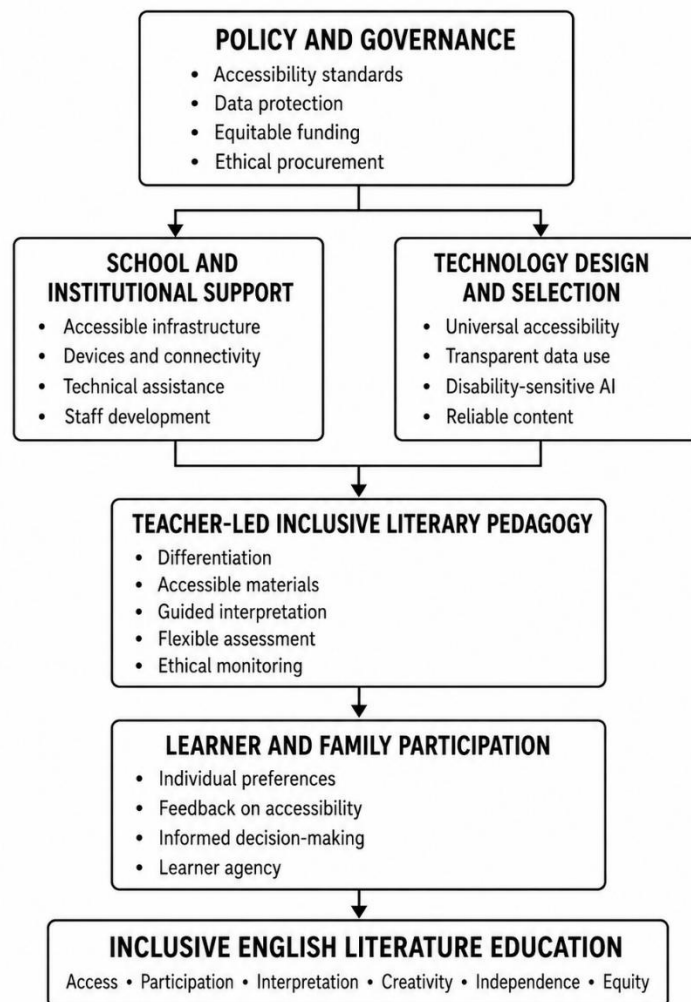


Figure 2. Multi-Level Framework for Implementing AI and Digital Humanities in Inclusive English Literature Education

8. Research Gaps and Future Directions

Existing literature regarding the use of AI and DH in inclusive English education was still disjointed. While there was significant discussion on the possible potential of accessible platforms, adaptive reading tools, automated feedback, and generative systems, there is less research that measures their long-term impacts on literary comprehension, critical interpretation, writing development, and learner independence. There was also some limited evidence collected in classrooms, but not specifically with respect to persistence across grades, schools, and disability

groups. Learners with intellectual disability, hearing impairment, communication issues, autism and multiple disabilities were a need for more attention than existing studies tended to focus on dyslexia or accessibility in general.

Another gap was digital humanities as such. Previous research did not consider learners with special educational needs, and the literature on digital archives, electronic literary editions, corpus tools, literary maps, and network visualisations was scarcely explored. Few publications discussed focused on AT and/or AI-supported education in general, with little

evidence on their use for teaching poetry, fiction, drama and literary criticism. Future research should therefore examine the effectiveness of these techniques for understanding text, awareness of context, confidence in interpretation and independent engagement with text.

Research from non-Western, low-resource, rural, and multilingual settings also remained insufficient. Education technology has been used on a massive scale during the school closures, demonstrating that online access does not lead to meaningful learning, and that barriers to access can exacerbate inequality when technology takes the place of the teacher, quality of information available, and local support systems (UNESCO, 2023a). Future studies should hence investigate combinations of AI-supported instruction with teaching-led and blended instruction to identify which of these combinations led to real improvement in literary engagement and understanding.

8.1 Limitations of the Evidence Base

There was significant variation in the education level, learner group, technology, research design and measured outcome of the available evidence. Various sources referred to inclusive education, or assistive technology, in general, but not specifically to English literature teaching. Findings were thus interpreted according to their implications for literature education, and the transfer could not be used to establish equivalent findings in literature classrooms. Some of the findings were also more applicable to technologically resourced settings, due to the concentration of these publications. These restrictions necessitated careful interpretation of claims with regards to effectiveness.

Learners with special educational needs, teachers, families, special educators, therapists, and disability advocates should all be engaged in the design of technology from the outset of that design. Their experiences may help to determine features which are not accessible, assumptions that may be inappropriate, concerns about privacy, and real-life classroom challenges. Further research is also recommended to include

long-term observations, heterogeneous student samples and specific educational targets. This work would be helpful in creating new technologies that facilitate, not exclude, agency and critical literary learning, and in avoiding new forms of exclusion and dependence.

9. Conclusion

AI and digital humanities present significant opportunities to make English literature teaching more accessible, flexible and participatory for learners with special educational needs. Text-to-speech, speech recognition, adaptive reading systems, digital annotation, multimodal storytelling, automated feedback, and generative support can help to mitigate challenges related to reading, writing, and communication, as well as sensory access and classroom participation. However, their educational value may be determined by the careful selection, adaptation and use in the teaching process. Literary understanding, creativity, expression and independence should be enhanced by technology, not supplanted by it, as close reading, teacher guidance, peer interaction and critical thinking are essential. Inclusive design needs to be at the heart of the design process so that digital resources are sensitive to differences in language, thinking, senses and physical abilities. Teachers need ongoing professional development to evaluate accessibility, detect any bias, safeguard pupil information and to be able to determine if digital tools are really leading to better learning. Schools and policy makers also need to make sure schools have devices and connectivity that are available equally, as well as technology support and content that is available to everyone with a disability. Ethical protections are needed to address privacy concerns, algorithmic discrimination, inaccurate outputs and too much reliance on automated systems. Further research in the classroom should include teachers, families, and specialists as well as learners with disabilities to assess outcomes in the long run. AI and digital humanities can enhance the participation of English education in the field of literature with the guidance of evidence, human judgment, and inclusive principles.

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