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Research Paper

The Role and Importance of Artificial Intelligence in Academic Achievement of Disabled Students

Dr. Sanober Parveen[1]*, Prof. Poonam Chauhan[2]

ABSTRACT

In addition to the immediate effects that artificial intelligence (AI) and technology have had on people, they have also had a broader impact on education, improving accessibility and inclusivity for students with intellectual, mobility, hearing, and visual impairments. In addition to having both obvious and invisible needs, pupils with disabilities face obstacles in the classroom that many other students do not. The necessity to recognize and assist pupils with learning disabilities gave rise to the phrase "learning disabilities" (LDs). Samual Kirk originally used the phrase "learning disability" in 1963 to refer to pupils who struggle academically but do not fit into any other category. It was discovered that many students with learning disabilities were not receiving the necessary educational assistance, which led to the creation of this newest field in special education Learning disabilities such as dyslexia, attention deficit hyperactivity disorder (ADHD), and autism spectrum disorder (ASD) affect millions of students globally. Owing to their incapacity to learn via conventional methods and requirement for specialized instruction, these disabilities might present significant barriers to academic advancement. Early identification and intervention are crucial for these individuals, since research has shown that providing the appropriate support can lead to improved academic outcomes. Researchers are looking at using artificial intelligence to develop and enhance tools for more accessible learning settings. Artificial intelligence has not only affected students with special needs but also the development of inclusive pedagogies by educational institutions. By offering specialized assistance and solutions, it may significantly contribute to enhancing the accessibility of education for students with disabilities. The current study has attempted to address topics such as the role and importance of artificial intelligence in improving academic achievement of disabled students, the dangers associated with AI for disabled people.

Keywords: *Artificial Intelligence, Academic Achievement and Disabled Students*

In recent years, the intersection between children with disabilities' academic performance with artificial intelligence (AI) has opened up new and exciting options in the field of education. AI technologies are being employed more and more to support more inclusion and enhance the educational experiences of students with disabilities by meeting their unique needs and challenges. This convergence of AI with the objectives of disabled

[1]Assistant Professor, Aligarh College of Education, Chherat, Aligarh (202122) U.P.
[2]Professor, Department of Education, Aligarh Muslim University, Aligarh (202002)
*Corresponding Author

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students presents a workable way ahead for enhancing not just academic performance but also social integration, independence, and self-determination.

AI is crucial in helping disabled students succeed academically because it provides an insight into the ways that AI-driven tools and treatments are removing obstacles, expanding educational possibilities, and fostering equality in the classroom.

A number of new technologies are altering the way people work, especially for those with disabilities. People with disabilities are frequently caught in an awful cycle of social exclusion, employment discrimination, and participation in mainstream development programs in many developing Asian and Pacific nations. More than a billion individuals worldwide are estimated to have one or more impairments, according to the World Health Organization's (WHO) and Laabidi global report on disabilities. These individuals don't have access to jobs, healthcare, or education. They frequently lack the resources to pursue education in order to live more independent and fulfilling lives in the absence of practical assistance equipment. The World Health Organization estimates that over 1 billion individuals might use one or more assistive items or technologies. Microsoft has highlighted the influence of technology on many facets of life, work, and society at large in its Annual Report (letter to shareholders). It has shown that reliable technology that benefits individuals and society as a whole is needed in the globe. People with and without disabilities can be creatively inspired by the platforms and resources provided by technology. Microsoft is able to empower individuals with disabilities because of technological advancements. For example, it provides learning tools that assist youngsters who struggle with dyslexia learn more. The use of AI and machine learning has expanded as a result. Artificial Intelligence (AI) technology has been created to facilitate human performance of high-computing jobs through the use of computer tools. While machines may never be able to fully replace a person, they can help people by providing better workspace options. People with special needs may benefit from advancements in the education and learning sectors made possible by recent advances in artificial intelligence. This study will explore the tools which are used by disabled students and the role of these tools in improving the academic achievement of disabled students.

Concept of Artificial Intelligence

The goal of the multidisciplinary computer science discipline of artificial intelligence (AI) is to build devices, software, or systems that are capable of carrying out activities that normally call for human intellect. Although the science of artificial intelligence (AI) has its roots in ancient history and many philosophical influences, it really started to take shape in the middle of the 20th century. Building systems that can replicate cognitive processes that humans perform well—such as learning, reasoning, problem-solving, vision, and language understanding—and applying them to a variety of tasks and domains is the core idea behind artificial intelligence (AI).

Key Aspects of the Meaning and Concept of AI:

Simulating Artificial intellect (AI): AI seeks to imitate human intellect in software or computers so that they can comprehend, learn, adapt, and make decisions in the same way that humans do. It aims to mimic cognitive functions like perception, logic, and problem-solving.

Machine Learning: Machine learning, which includes training algorithms on data to identify patterns, make predictions, and enhance their performance over time, is a basic component

of artificial intelligence. Numerous artificial intelligence applications, including recommendation systems, natural language processing, and picture identification, employ machine learning.

AI systems are capable of reasoning and problem-solving since they are built with logic and algorithms. They are able to evaluate options, analyze facts, and make defensible conclusions based on the knowledge at hand.

Perception and Sensing: By using a variety of sensors, cameras, microphones, and other data sources, artificial intelligence systems are able to sense and comprehend their surroundings. AI applications involving perception include speech recognition and computer vision.

Natural Language Understanding: A key element of artificial intelligence (AI) that allows robots to comprehend and produce human language is natural language processing, or NLP. NLP is utilized in text analysis, language translation, and chatbot applications.

AI systems have the ability to adjust to dynamic environments and gain knowledge from past experiences. With systems for continual learning and data-driven feedback, they may improve both their performance and behavior.

Autonomy: Artificial intelligence (AI) systems are built to function independently, making choices and acting without continual human supervision. Drones and autonomous cars are two instances of AI-powered devices that function in different degrees of autonomy.

Expert systems are computer programs that simulate a human expert's decision-making process in a particular field. Artificial intelligence (AI) may be utilized to develop these programs. These systems have the ability to diagnose issues, provide recommendations, and give professional advice.

Applications: Artificial intelligence (AI) has several uses in a variety of areas, such as healthcare (drug development and diagnosis), finance (algorithmic trading and fraud detection), entertainment (recommendation systems), and customer service (chatbots).

Ethical Issues: Since AI technologies have the potential to create issues with privacy, prejudice, accountability, and societal effects, ethical issues are also included in the notion of AI. Responsible usage and ethical AI development are key facets of the discipline.

Artificial Intelligence (AI) is a dynamic and fast-moving discipline that is developing more complex AI systems as a result of continuous study and invention. It is an extremely important and fascinating issue in today's world because of its potential influence on so many facets of society, from commerce and transportation to healthcare and education.

Advantages of Artificial Intelligence

The following are some advantages of AI.

- Competent in work requiring attention to detail. When it comes to identifying some malignancies, such as melanoma and breast cancer, AI has shown itself to be just as accurate as medical professionals.
- Less time spent on data-intensive tasks. AI is commonly utilized to speed up the analysis of large data sets in data-intensive businesses including banking and

securities, pharmaceuticals, and insurance. AI is frequently used by financial institutions, for instance, to analyze loan applications and identify fraud.

- Reduces labor costs and boosts output. If an illustration, consider the usage of warehouse automation, which increased during the epidemic and is predicted to do so more if AI and machine learning are integrated.
- Produces findings that are reliable. High degrees of consistency are provided by the best AI translation technologies, enabling small enterprises to communicate with clients in their native tongue.
- Using customization can raise client satisfaction. AI has the ability to tailor advertisements, websites, messages, content, and suggestions to specific users.
- AI-enabled virtual agents are constantly accessible. AI systems operate continuously, without requiring breaks or sleep.

Disabled Students

"Disabled students" are those who are limited in their capacity to engage in educational activities or use educational resources in the same manner as students without disabilities due to physical, cognitive, sensory, or other limitations. There are many different kinds of disabilities, and they might include things like:

- Physical disabilities: These conditions limit a person's range of motion and may need the use of crutches, wheelchairs, or other assistive devices.
- Cognitive impairments: These include a wide range of illnesses that impair thinking, memory, or problem-solving skills. Examples of these illnesses include autism, learning disorders, and intellectual disabilities.
- One or more of the five senses can be affected by sensory disorders, which include hearing impairments (deafness or hard of hearing) and visual impairments (blindness or poor vision).
- Mental health issues: When they substantially affect a student's capacity to access and participate in education, conditions like anxiety, depression, or other mental health illnesses may also be classified as impairments.
- Chronic health issues: Regular attendance and participation in school activities may be restricted for students with chronic illnesses, such as diabetes, epilepsy, or chronic pain disorders.

The phrase "disabled students" emphasizes how crucial it is To ensure that everyone, regardless of disability, enjoys equal access to education. In order to enable handicapped students to engage in the educational process on an equal footing with their classmates who are not disabled, educational institutions are frequently compelled to provide accommodations and support services. Depending on the individual requirements of the student, these accommodations may include things like special education programs, accessible facilities, assistive technology, or additional time for tests. Promoting diversity, inclusion, and equitable access to education for all students—including those with disabilities—is the aim.

Effects of Disability

Depending on the kind and degree of the impairment, the students' access to supports and accommodations, and other factors, the impact of a handicap on academic achievement can vary greatly. Disabilities can have a negative effect on many aspects of academic attainment, student's general wellness and social relationships. These are a few typical outcomes:

1. Educational Opportunities:

- It may be difficult for students with impairments to take use of the same educational opportunities as their classmates. A smaller curriculum, less access to extracurricular activities, and less chances for advanced coursework or enrichment programs might be the results of this.

2. Social and Emotional Impact:

- Bullying and Stigma: Students with disabilities may experience bullying and social isolation as a result of prejudice and stigma, which can have a detrimental effect on their self-esteem and emotional health.
- Anxiety and Depression: Students may experience elevated levels of anxiety and depression as a result of the difficulties posed by disability.
- Low Self-Esteem: Self-esteem and confidence might be lowered as a result of difficulties completing academic assignments or interacting with others.

3. Academic Performance:

- Learning Disabilities: Disorders such as dyslexia or attention-deficit/hyperactivity disorder (ADHD) can impair a student's ability to read, write, and focus, making academic assignments difficult.
- Physical Disabilities: Students with mobility disabilities may find it more difficult to access classrooms and learning resources, which may have an impact on participation and attendance.
- Sensory Disabilities: A student's capacity to acquire and absorb information, which impacts reading, writing, and communication skills, can be greatly impacted by visual or auditory limitations.

4. Behavioral Challenges:

Some disabled children may behave disruptively in the classroom, which can impact both their own and their peers' learning. This is especially the case for individuals with behavioral or emotional issues.

5. Support and Accommodations:

A student's performance can be greatly impacted by the availability of accommodations and support resources. Students with impairments can benefit from accommodations such as specialized education, assistive technology, and additional time for exams.

6. Family Impact:

The student's family may also be impacted by the strain and difficulties of raising a kid with a handicap. In order to address the child's demands, careers might need to devote more time and money, which could have an impact on family relations and educational resources.

7. Potential for Success:

It's essential to recognize that students with disabilities can and do succeed academically and in life when provided with appropriate support and accommodations. Many individuals with disabilities have achieved remarkable accomplishments in various fields.

Academic Achievement

The term "academic achievement" describes the degree of performance, competency, or success that a learner or student has acquired in an educational environment, usually in the

context of formal education. It is a gauge of how successfully a learner has attained the criteria and objectives established by a curriculum, educational system, or institution. There are several ways to evaluate academic accomplishment, including assessments, grades, results on standardized tests, and other performance indicators.

Key Aspects of Academic Achievement

- **Grades:** A student's academic success is frequently indicated by the grades they obtain on their assignments. Usually, tests, assignments, assessments, and other evaluations of their knowledge and abilities are used to determine these grades.
- **Test results:** Students' academic performance is measured via standardized exams and assessments, which are then compared to a larger population or a set of educational criteria. These exams may cover a wide range of topics, including science, math, language arts, and more.
- **Attendance and involvement:** Consistent attendance, active participation in class discussions, and engagement in other educational activities can all serve as markers of academic success.
- **Completion of educational milestones:** Achieving specific educational milestones, such as graduating from high school, earning a college degree, or obtaining a professional certification, is a significant measure of academic achievement.
- **Awards and honors:** Students who excel academically may receive awards, scholarships, or other forms of recognition for their achievements.

Academic achievement can vary from one individual to another and may be influenced by factors such as a student's effort, motivation, learning abilities, the quality of instruction, and various external factors. Additionally, academic achievement is often used as a means to assess a student's readiness for further education or employment opportunities.

It's important to note that academic achievement is just one aspect of a student's overall development, and education is also about fostering critical thinking skills, creativity, social and emotional development, and a well-rounded understanding of the world. Nevertheless, academic achievement remains a significant factor in assessing a student's performance within the educational system.

Artificial Intelligence for Learning Disabilities

AI has been proposed for decades, but the field has not reached a consensus regarding what AI is. Consequently, there is a multitude of definitions of AI, and they vary based on the field. To clarify the understanding of AI, Samoili et al. (2020) conducted a qualitative analysis of over 50 documents defining AI, which were then used to develop an operational definition for AI by a high-level expert group. They concluded that AI is software and hardware designed by humans that act in the physical or digital dimension by perceiving the environment through data acquisition, interpretation, reasoning, or processing of information and then deciding the best action to take to achieve the given goal (Samoili et al., 2020). The popularity of AI has fluctuated in the past decades, and the recent high attention drawn in academia and industry is due to the development of a subcategory–machine learning (Thompson et al., n.d.), a milestone development, as it enables the machine to "learn" from "experience" and apply what it learned to solve new problems—similar to how humans usually do. This new feature has drawn enormous attention, and thus different AI technologies (e.g., natural language processing, computer vision) and applications are being developed and applied in every sector of society, including in the field of education (Zhai et

al., 2020). These formats include chat robots, communication assistants, adaptive learning devices, facial expression recognition, intelligent tutors, interactive robots, and mastery learning devices. The variation in the type and intensity of AI applications in education makes AI a powerful tool to identify and address the unique challenges SWLDs face with corresponding support.

In recent years, the literature has seen more publications regarding using AI to improve outcomes for students with learning disabilities. Poornappriya and Gopinath (2020) published a review study looking at machine-learning applications for dyslexia prediction and e-learning for learning and cognitive disorders. Among 24 reviewed studies, six employed external AI-based appearances to improve learning. Specifically, four were focused on providing customized or personalized learning, one was focused on the influence of online learning activities, and one was on general machine learning intervention. The majority of the reviewed studies (n = 13) focused on either screening, predicting, or diagnosing a learning disability or learning difficulty. Poornappriya and Gopinath's (2020) work shows an intense concentration of research in AI for SWLDs being focused on either predicting, screening for, or diagnosing a learning disability, while less attention was paid to improving SWLDs' learning, which is of most importance, yet complex.

This literature review shifted from Poornappriya and Gopinath's (2020) work by looking specifically at studies using AI to support SWLDs in aspects other than predicting, screening for, or diagnosing a learning disability. Three of the studies that Poornappriya and Gopinath (2020) reviewed are also included in this literature review as they met the inclusion criteria for this review (see Table 1 below). Additionally, the level of integration or depth of intensity of the AI technology also varies. The literature reviewed in this study showed multiple AI applications and levels of integration identified by Puentedura's (2006) SAMR Model.

METHODOLOGY

Three-stage procedure was employed to conduct this systematic literature review:

- Identifying literature based on the title and abstract,
- Reading the selected literature thoroughly.
- Analyzing the literature.

Questions to be Answer in this Paper

1. What are the tools used for disabled students?
2. What is artificial intelligence?
3. What is the role of AI in academic achievement of disabled students?
4. What are the problems associated with AI for disabled students?

AI-Powered Tools for Disabled Students

AI-powered resources for those with disabilities can improve accessibility and their educational experiences in a number of ways. Following are a few of the most important devices and tools which are used to enhance the educational achievement of disabled students.

- **Speech Recognition Software:** Students with dyslexia or mobility difficulties can be benefited from speech recognition software such as Dragon Naturally Speaking and Google's Speech-to-Text, which enables voice commands for text dictation, computer control, and other tasks.

- **Text-to-Speech (TTS) Software:** Text-to-speech software, including Read & Write and Natural Reader, translates written text into spoken language in English, increasing the accessibility of digital information for students who struggle with reading or vision issues.
- **Screen Readers:** Students who are blind or visually impaired can explore and access digital information due to screen readers like JAWS (Job Access with Speech) and NVDA (Non-Visual Desktop Access), which read aloud the stuff that is presented on the screen.
- **Optical Character Recognition (OCR)** Software Printed documents become accessible when OCR programs, like ABBYY FineReader and Adobe Acrobat, transform handwritten or printed text into digital forms that screen readers can read aloud.
- **Braille Displays:** Braille displays—such as those made available by Human Ware and Freedom Scientific—allow blind students to participate more easily in digital learning settings by giving them tactile access to digital material.
- **Accessible Document Conversion Tools:** Students with disabilities can access a wider range of information more easily by using software tools like Sensus. Access and Robo Braille, which can transform inaccessible documents into accessible formats like audio, Braille, or structured text.
- **Closed Captioning and Subtitling Tools**: AI-driven closed captioning systems may provide captions for videos, guaranteeing that students who are deaf or hard of hearing can access audio information. Examples of these services include Google's Live Transcribe and third-party tools like Kapwing.
- **Math Accessibility Tools:** Math accessibility tools driven by AI, such as Math Type and Math Jax, facilitate the manipulation of mathematical equations and symbols for students with visual or cognitive impairments.
- **Augmented Communication Devices:** Text-to-speech or symbol-based communication is one way that AI-driven communication tools, such Augmentative and Alternative Communication (AAC) applications like Proloquo2Go and Predictable, let students with speech difficulties express themselves.
- **Adaptive Learning Platforms:** Dream Box and Knewton are two examples of adaptive learning systems that employ artificial intelligence (AI) to customize curriculum and learning paths to meet the unique needs of each learner, including those with impairments.
- **Virtual Assistants:** AI virtual assistants, such as Google Assistant and Alexa from Amazon, can aid students who struggle with speech or mobility by offering voice-activated control over a variety of activities, such as making reminders and responding to inquiries.
- **Emotional and Behavioral Support programs:** Students with mental health issues, such as anxiety and depression, can get emotional support and chat-based interventions via AI-driven programs like Wysa and Woebot.
- **Mobility Aids and Navigation:** AI-powered navigation applications such as Blind Square and Way finder give students with vision impairments or other mobility issues information about their environment and assist them in navigating public areas.

AI chatbots created specifically for education can help students with impairments by responding to inquiries, sending out reminders, and offering study assistance.

- **Data Analytics and Learning Management Systems:** Educational establishments may monitor the requirements and development of students with disabilities through the use of AI-driven data analytics and LMSs, which allows for early intervention and customized support.

Role And Importance of Artificial Intelligence

Through the provision of tools and technology that are adapted to the particular requirements and problems of students with disability, artificial intelligence (AI) has a great importance as it has made the life of people easy, comfortable and contributed to the academic achievement of students and specially the disabled ones in a number of ways. The following are some important roles that are played by AI for improving the academic achievement of disabled students.

Personalized Learning: Using artificial intelligence (AI), adaptive learning systems are able to identify a student's areas of strength and weakness and modify the curriculum to suit their requirements. Students with disabilities may benefit most from this as they may need specialized instructional materials and a slower learning pace.

- Tools for Accessibility: AI can improve accessibility for students with disabilities by offering capabilities like text-to-speech and speech-to-text, screen readers, closed captioning, and tools for magnification. Students who suffer from visual, auditory, or movement disabilities can more easily access and participate in educational activities.
- speech Recognition: By translating spoken words into text, AI-driven voice recognition technology can assist students with speech and communication challenges, facilitating improved communication and engagement in class discussions and assignments.
- Predictive analytics: AI is able to examine academic performance data from pupils and pinpoint any weak points. Teachers can thus lessen the chance of pupils falling behind by stepping in early and offering extra assistance.
- Virtual Learning Assistants: With the use of artificial intelligence (AI), virtual assistants may support students with disabilities by answering inquiries, reminding them of appointments and assignments, and helping them stay organised and manage their time.
- Language Translation and Support: To ensure that students can comprehend and interact with the material, AI-powered language translation technologies can help non-native speakers and those in need of translation services because of hearing problems.
- Learning Analytics: AI may offer insights into a student's behavior and learning patterns, assisting teachers and support personnel in identifying areas for development and putting plans into action to improve the educational experience for students with disabilities.
- Cognitive support: Students with memory and cognitive impairments can benefit from cognitive assistance from artificial intelligence (AI), which includes interactive tests and flashcards that help them recall and comprehend knowledge better.
- Assistive Robotics: AI-driven assistive robots, or assistive robotics, can support students with physical impairments in a number of ways, such as mobility assistance, object retrieval, and task completion that may be difficult owing to physical constraints.

- Remote Learning and Telemedicine: AI can make education and healthcare more accessible for students with impairments who would find it difficult to attend in-person classes or appointments. AI can also offer remote learning and telemedicine services.

It's crucial to remember that, even while AI may be a very helpful tool for students with disabilities, it can only be applied in concert with human assistance and an inclusive education philosophy. To guarantee that AI tools and solutions are developed and used with the unique requirements of handicapped students in mind, as well as that they are accessible and equitable for everyone, educators, legislators, and technology developers must collaborate. Concerns around data security and privacy should also be carefully considered before integrating AI technology in educational contexts.

- Assistive Technology: Artificial intelligence may be used to construct assistive gadgets, which would allow people with disabilities to perform things that would otherwise be too difficult or impossible for them. For example, people with speech or mobility impairments can utilize AI-powered devices, such smart home appliances and speech recognition software, to communicate and control their environment.
- Improved Accessibility: AI has the power to increase a product or service's accessibility for those with impairments. AI, for example, may be used to provide audio explanations for films, increasing accessibility for those with visual impairments.
- Enhanced Medical Care: AI can support people with disabilities in both diagnosis and therapy. AI-enabled devices, for example, may be used to monitor the health of people with chronic illnesses and alert caretakers to any changes or emergencies.
- Increased Employment Opportunities: Artificial Intelligence can assist those with impairments in obtaining jobs and engaging in the workforce. Artificial intelligence (AI)-driven technologies, for instance, can assist in connecting job seekers with qualified candidates with those with impairments.

Disadvantages Associated with Artificial Intelligence

Although artificial intelligence (AI) has many benefits for students with disabilities, it's crucial to understand that there may also be drawbacks and difficulties when using AI in the classroom. These drawbacks include of:

- Lack of accessibility: It's possible that technologies and solutions powered by AI weren't always created with accessibility in mind. Students with disabilities may find some AI programs less accessible since they are not entirely compatible with assistive devices.
- Data privacy issues: AI frequently uses a lot of data for analysis and collecting. Because sensitive information about kids with disabilities may be misused or exposed, this might generate privacy issues.
- Technology reliance: Relying too much on artificial intelligence (AI) to assist education might result in a technological dependency. This might be an issue if technology malfunctions or is not available, which could leave students with disabilities without the services they require.
- Resource and cost constraints: Using AI solutions in educational contexts might be costly. These technologies may not always be accessible to children with disabilities since schools and other institutions may not have the funds to purchase them.

- Discrimination and bias: AI systems may unintentionally reinforce prejudices found in the training data. In example, if the training data is biased or not representative, this might result in the exclusion or discriminatory treatment of impaired pupils.
- Lack of human connection: Artificial intelligence (AI)-driven educational technologies may limit face-to-face communication, which is crucial for social and emotional growth. Socialization and communication with classmates and teachers are important components of education for certain individuals with disabilities.
- Over-reliance: Students with disabilities run the risk of being unduly dependent on AI technologies, which might impede their ability to solve problems on their own and advocate for themselves.
- Challenges with training and support: Not all educational institutions may have the resources to offer the training that teachers and educators need to use AI tools successfully. Furthermore, continuous technical help is frequently required to handle problems that could occur with AI systems.
- Ethical issues: The application of AI in education brings up ethical issues like data ownership, responsibility, and permission. These issues might be especially important for children with disabilities who would need extra protections and considerations.

CONCLUSION

With the constant development and improvement of these AI tools and technologies have enabled disabled students to engage in the educational process on an equal footing with their classmates by providing enhanced accessibility, customization, and assistance. AI is now become the basic need of all specially for disabled students. Artificial intelligence (AI) has the potential to significantly improve the lives of those with disabilities by giving them more options, increased freedom, raised the level of academic achievement and a higher standard of living. Now in this present scenario, it is needed to overcome the defects of AI-Powered tools like high cost, ethical issues, discrimination and biasness so that it may be accessible to all students who are facing the problem of disability.

REFERENCES

Amoili, S., López Cobo, M., Gómez, E., De Prato, G., Martínez-Plumed, F., & Delipetrev, B. (2020). AI watch defining artificial intelligence towards an operational definition and taxonomy of artificial intelligence. Joint Research Centre.

Bennett, C. L., & Keyes, O. (2020). What is the point of fairness? Disability, AI and the complexity of justice. *ACM SIGACCESS Accessibility and Computing*, (125), 1-1

Coeckelbergh, M. (2010). Health care, capabilities, and AI assistive technologies. *Ethical theory and moral practice*, *13*, 181-190.

Drigas, A., & Ioannidou, R.-E. (2012). Artificial intelligence in special education: Adecade review. International Journal of Engineering Education. http://dx.doi.org/

Drigas, A., & Ioannidou, R.-E. (2013). A review on artificial intelligence in special education. Communications in Computer and Information Science, 385–391.

Garg, S., & Sharma, S. (2020). Impact of artificial intelligence in special need education to promote inclusive pedagogy. *International Journal of Information and Education Technology*, *10*(7), 523-527.

Guo, A., Kamar, E., Vaughan, J. W., Wallach, H., & Morris, M. R. (2020). Toward fairness in AI for people with disabilities SBG@ a research roadmap. *ACM SIGACCESS Accessibility and Computing*, (125), 1-1.

Kennette, L. N., & Lin, P. S. ChatGPT and your assessments: Do they need to change?

Kohli, M., & Prasad, T. V. (2010, June). Identifying dyslexic students by using artificial neural networks. In *Proceedings of the world congress on engineering* (Vol. 1, No. 1, pp. 1-4).

Laabidi, M., Jemni, M., Ayed, L. J. B., Brahim, H. B., & Jemaa, A. B. (2014). Learning technologies for people with disabilities. *Journal of King Saud University-Computer and Information Sciences*, *26*(1), 29-45.

Poornappriya, T. S., & Gopinath, R. (2020). Application of Machine Learning Techniques for Improving Learning Disabilities. *Int. J. Electr. Eng. Technol. (IJEET)*, *11*, 392-402.

Russell, S. J., & Norvig, P. (2010). *Artificial intelligence a modern approach*. London.

Samoili, S., Cobo, M. L., Gómez, E., De Prato, G., Martínez-Plumed, F., & Delipetrev, B. (2020). AI Watch. Defining Artificial Intelligence. Towards an operational definition and taxonomy of artificial intelligence.

Seo, K., Tang, J., Roll, I., Fels, S., & Yoon, D. (2021). The impact of artificial intelligence on learner–instructor interaction in online learning. International journal of educational technology in higher education, 18(1), 1-23.

Smith, P., & Smith, L. (2021). Artificial intelligence and disability: too much promise, yet too little substance? *AI and Ethics*, *1*(1), 81-86.

World Health Organization. (2001). The World Health Report 2001: Mental health: new understanding, new hope.

Zhai, P., Ding, Y., Wu, X., Long, J., Zhong, Y., & Li, Y. (2020). The epidemiology, diagnosis and treatment of COVID-19. *International journal of antimicrobial agents*, *55*(5), 105955.

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Conflict of Interest

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