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UTILIZATION OF ARTIFICIAL INTELLIGENCE/ICT TOOLS IN EDUCATION-IMPACT OF NEP 2020

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ABSTRACT

Information and communication technologies (ICTs) have spread through every perspective of life, emerging as prevailing entities. Over the past two decades, the alliance of ICT has totally transformed the operations & methodologies of approximately all fields, including governance and business. Education, as a totally socially-oriented effort, has traditionally been related to the educator's strength and their substantial interpersonal engagement with learners. The involvement of ICT in higher education naturally adapt to the creation of learning environments with a increased focus on students. Given the quick global change to digital media and information, the significance of ICT in the higher education is improving, and its role is poised to broaden further in the 21st century. The effective usage of ICT in higher education, accompanied with its integration into the learning and teaching processes, promotes accessibility and consistency in education, facilitating a manner of learning. Additionally, it plays a key role in describing the relationship between academic achievement and ICT.

Keywords: ICT, Integration of technology, obstacles and results, Teachers' attitudes, Teachers' beliefs, ICT use in the education

INTRODUCTION

The advent of cloud computing, big data, machine learning, artificial neural networks has authorised engineers for developing machines capable to counterfeit human brainpower. This study defines the machines with the ability to recognize, perceive, react, learn and resolve problems like artificial intelligence (AI). Such intelligent technologies are poised to transfigure future workplaces, symbolized the next disruptive creation. Many consider AI as a key driver in the 4th industrial revolution, with possible consequences for a revolution in education as well. In spite previous statement about the transformative impact of technologies like computers and television on education, they have primarily accelerated access to information without fundamentally altering the major educational systems. Though, teachers are constrained to assess current AI capabilities and finds ways to maximize learning. Given the accelerating interest, it is timely to explored recent AI research in education to furnished teachers with renovate apprehension of the field in anticipation of quick changes.

AI is increasingly publicized for its planned value in education. Loecx recommends that AI can fulfill as an efficacious learning tool, mitigating the overload on both the students and teachers accelerating powerful learning experiences.

With ongoing education reforms such as digitalization, gamification and personalized learning, there is a scope for abundant opportunities for incorporation of AI applications. AI techniques have been systematically employed to adaptive and create reactive tutorials through intelligent tutoring systems (ITS), compensating for shortages of teachers and delivering personalized learning experiences. As more ITSs are developed through out various subjects, the involvement of educators may undergo transformation, prompting a reexamination of the educational paradigm. Uncertainty about job displacement among teachers due to AI advancements are prevailing, prompting discussions among practitioners and researches about the nature of utilization and learning of AI.

This research includes a review of AI learning in education, concentrating on AI tools and techniques integrated into education post the expansion of AI. The review focusses on articles published from 2010 to 2020, a time frame corresponding to the emergence of the second and third generations of AI in studies. The research queries guiding this review are:

- (1) What is the present situation of AI in studies, and what research design and topics are evident during 2010 to 2020?
- (2) What are the trends in published studies regarding AI in education?

(3) What difficulties emerge from current research on AI in education?

Introduction of NEP2020

India has long been renowned for its ancient education system, notably the Gurukul method of imparting knowledge. However, significant shifts have been observed in the Indian education system post-independence. The initial education system emerged in 1968, by revisions in 1986, with minor amendments in 1992. For the past 34 years, the country has adhered to this educational framework. Nevertheless, in 2020, the Government of India proposed a novel education policy, that was received cabinet approval and is poised to pass through the two houses for enactment into law, pending the president's consent. Although the final structure is pending, the proposed changes are expected to largely remain intact, with potential alterations. Notably, this policy stems from suggestions made by students, parents, educators, and various stakeholders closely associated with the education sector. This marks a significant departure, as it is the first time in India that such widespread consultations and recommendations have been sought in crafting a policy of this nature. The forthcoming sections of this research paper will delve into the specifics, using a questionnaire to analyze the understanding and awareness of NEP 2020, predict the

potential outcomes of these changes, and assess the perspectives of stakeholders [68].

INDIAN EDUCATION SYSTEM

For the past 34 years, the prevailing education system has been in operation, but in 2020, significant reforms in the form of NEP 2020 are anticipated to bring about radical changes in the coming years. The evolution of education in India, ranging from the ancient Gurukul system to the influences of British education, has witnessed numerous upgrades and modifications. As we anticipate the replacement of the familiar 10+2 system with the 5+3+3+4 model and the elimination of the traditional Arts, Science, and Commerce streams in favor of students freely choosing subject combinations, several positive outcomes are expected. The emphasis on preparing students to be future-ready and equipped with relevant skills is crucial for personal success and national development across all facets. By eliminating subject stream boundaries and offering students the freedom to pursue their areas of interest, the education system aims to cultivate individuals capable of excelling in their chosen fields. Notably, the education sector comprises various stakeholders, including educational institutions (both government and private), teachers/professors, students, and parents [68].

OBJECTIVES OF NEP2020

The central emphasis of the NEP 2020 is on the modernization of the current educational framework that has been in place since the 1980's. Its core aim is to address the pressing need to align with the technological advancements of the 21st century. The purpose of this survey regarding the NEP 2020 is to... 1. To raise awareness among a segment of the population about the novel Education Policy (NEP 2020). 2. To assess the professionals' point of view in the field of education regarding the NEP 2020. 3. To pinpoint a fresh strategy for reforming higher education within NEP 2020 [68].

INDIAN EDUCATION POLICY

Since gaining independence, India has undergone two significant education policy changes – firstly in 1968 and then in 1986 – and the proposed reform in 2020 marks the third major shift. These changes have been driven by the evolving needs of the time. The primary goal of post-independence education policies has been to enhance literacy levels and education standards among the Indian populace, aiming to elevate skill sets to a global standard [68].

BARRIERS AND SOLUTIONS: STUDENT VIEW POINT

In spite of the well-documented benefits of incorporating Information and Communication Technology (ICT) in educational settings, insistent barriers

continue to obstruct its widespread endorsement. Schweizer, Frederick and Lowe (2006) have identified pivotal challenges, including student mobility, addressing special needs, and anxiety arising from standardized test outcomes. These problems remain significant obstacles to the effective implementation of ICT. Whelan (2008) introduces potential solutions, highlighting the importance of proposing more certified group- and challenge-driven learning activities, along with providing abundant learning support. Furthermore, Whelan (2008) highlights student-centered challenges such as inadequate technical skills hindering ICT access, a lack of delayed feedback from trainers, academic advisors and limited connection among instructors and peers.

To conquer these challenges and improve the educational experience, the author suggests several blueprints. These include improving student orientation, providing thorough training, highlighting the importance of trainer accessibility and effective administrative support, and increasing the use of podcasting and online conferencing tools. Tackling these obstacles necessitates a comprehensive approach that involves, enhancing infrastructure, refining the curriculum, adapting policies, building capacity and garnering support from governmental bodies. Furthermore, Castro Sánchez and Alemán (2011) argue for the

significance of students acquiring specific technical skills essential for effective learning in ICT environments [63-67].

CHALLENGES AND RESOLUTIONS IN CASE OF EDUCATORS

Obstacles hindering the effective integration of technology, as perceived by teachers, encompass a variety of issues:

Diminished expectations and lack of well defined objectives: Teachers often face challenges due to reduced expectations and a lack of clearly defined objectives for the utilization of information and communication technology (ICT) in educational settings, is highlighted by Al-Bataineh *et al.* (2008).

Inadequate time for proficiency acquisition: Teachers encounter difficulties in acquiring proficiency in new software or integrating ICT into classroom activities within a limited timeframe, as pointed out by Almekhlafi and Almeqdadi (2010). This time constraint hinders the effective incorporation of technology in educational practices. **Lack of skills in managing teaching materials:** Teachers face challenges related to a lack of skills in effectively managing teaching materials, as observed by Schweizer and Lowe, Frederick (2006).

Limited software competence and ingrained perspective: Teachers often encounter obstacles due to limited competence with software and ingrained perspectives on how and what students should learn, as

highlighted by Goktas, Yildirim, and Yildirim (2009).

Limited understanding and experience of ICT: Insufficient understanding and experience of information and communication technology (ICT) within educational contexts contribute to challenges faced by teachers, as noted by Honan (2008).

Excessive emphasis on teaching technical skills: There is an excess focus on teaching technical or operational skills rather than the core course content, as observed by Lim (2007). Challenges in the management classroom of due to large in class sizes (Tezci, 2011a). Insufficient motivation and insufficient Financial and technical support (Liu and Szabo, 2009).

Disturbance regarding the potential advantages of incorporating ICT in the classroom (Yildirim, 2007).

Teachers may face challenges due to a lack of definite and specific thoughts about how integrating technology into instruction will enhance student education, as noted by Al-Bataineh *et al.* (2008). This suggests that a clear understanding of the potential benefits and strategies for incorporating technology is crucial for successful implementation in educational settings [63-67].

ICT and Higher Education

Although we acknowledge that the integration of instructional technology in the educational processes of higher education is

at an early stage in Nigeria, the utilization of ICT in instruction is crucial for the advancement and growth of both faculty and students [15]. Specifically, higher education institutions, particularly those in Western regions, have embraced ICT as a method to provide students with the skills and knowledge needed for educational progress in the 21st Century.

The UNESCO report from 2002 emphasizes the pervasive influence of Information and Communication Technology (ICT) in the educational environment, asserting that it is a key factor in the success of education in the 21st century [15]. ICT not only gives value to learning procedures but also plays a crucial role in organizing and managing educational institutions. The report underscores that technologies are driving forces behind the development and innovation of both developed and developing countries, and all nations should strive to benefit from technological advancements. To achieve this, professionals, including faculty members, must receive training in solid ICT backgrounds, irrespective of particular computer platforms or software environments, to cope up with the evolving skills demanded by the global environment [15].

The use of ICT in the education system has particularly gained prominence among teachers, leading to the emergence of

a multi-dimensional learning approach through distance learning. This approach has been widely adopted in numerous schools in both developed and developing countries to cater to the needs of distance-education students, whether waged or unwaged (Bartololic-Zlomislic and Bates, 1998). The benefits of ICT are evident from various perspectives, facilitating the learning process and providing access to education for individuals in conducive environments. This, in turn, encourages effective knowledge delivery and quick responses to the questions posed by both teachers and students (Kaino, 2006) [15].

How ICT Enhances the Teaching Process

The desire to incorporate Internet-based teaching stems from the aspiration to bring about change, improvement, and introduce a new dimension to the teaching process. By utilizing the Internet, educators aim to diversify instructional methods and enhance the standards of activities assigned to the students [16]. Recognizing the necessity for student motivation in the learning process, the inclusion of the Internet serves as a motivational tool, particularly for those who may find traditional methods less engaging. This approach facilitates a more rapid shift of information from short-term memory to long-term memory. The Internet proves instrumental in motivating students who may feel disengaged in a traditional

classroom setting, thereby expediting the assimilation process [18][19].

Research around the world Research has demonstrated that Information and Communication Technologies (ICT) can contribute to enhanced educating outcomes and improved teaching methods for students. A study conducted by the National Institute of Multimedia Education in Japan illustrates this point, revealing that an increased exposure to educational ICT, integrated into the curriculum, significantly and positively influences student achievement. This impact is particularly notable in subject areas such as science, mathematics, and social studies [17]. However, addressing students' needs for technology access, meeting teacher technology requirements, and providing digital resources within budget constraints can be a challenging task.

When educators possess digital literacy and are proficient in utilizing ICT, their expertise contributes to the expansion of higher-order thinking expertness in students. This proficiency also enables teachers to offer innovative and personalized opportunities for students to express their understandings, ultimately preparing them to navigate ongoing technological changes in both society and the workplace [17]. Concurrently, there is a pressing need to address the challenges in education arising

from swift changes in culture, the economy, and technology [17]. Key questions include:

1. What will be the societal impact of technological progress on the labor market, education systems, and institutions?
2. How will countries and educational institutions navigate and respond to these evolving developments?
3. In what ways can the required skills be adapted to influence changes in the market?
4. How are institutions of higher education addressing the evolving demands of learning?
5. What influence will the accessibility of new technologies and online resources have on the learning process?
6. Can national frame works for learning outcomes identification and certification effectively accommodate the outcomes of open education?

There are many benefits of using ICT. Through ICT, for example, images can be easily used to teach and enhance student retentive memory; Educators have the capability to simplify intricate instructions and ensure student comprehension effectively. By leveraging technology, teachers can create interactive classes, making lessons more engaging and enjoyable. This approach has the potential to enhance student attendance and concentration levels. ICT provides distance learners the ability to use online instructional materials, access them easily,

and provide additional tools for resource-based learning to the learner [17].

Conversely, educators lacking experience in using ICT software may encounter challenges when integrating this technology into their lessons. Issues such as difficulty in setting up devices, budget constraints leading to an inability to afford the latest IT devices, and other logistical hurdles may arise. Furthermore, the use of ICT has the potential to hinder students' creativity, critical thinking, and analytical skills. Computer-based learning, in particular, has been associated with adverse effects such as eye strain and backache [17]. Additionally, plagiarism is a prevalent issue, as some students tend to rely on copying and pasting information from the Internet rather than generating their own ideas [17].

DISCUSSION

Research conducted in Poland [24-26] and other European countries [22] affirms that contemporary teachers' utilization of new technologies is narrow and predominantly of a regular nature. It is undeniable that Information and Communication Technologies (ICTs) have become a fundamental component of socio-pedagogical and educational landscape [27, 28]. Today, education without digital technologies is deemed impractical. Despite this, studies indicate that teachers and school administrators harbor apprehensions about the transformative effects associated with

the integration of new technologies [29]. They maintain a certain distance from consistent ICT implementation in their educational processes, citing insufficient experience as a common concern [30]. This reluctance is observed irrespective of whether these changes are applied in the context of traditional, contact-based learning or during periods of pandemic-induced remote education [23].

According to our survey findings, teachers (RQ3) predominantly employ ICT in various ways. Firstly, they commonly utilize it as a "found" architecture, often provided by head masters, such as the eRegister and interactive whiteboards. Independently, outside the classroom, teachers frequently use ICT for information retrieval, relying on open resources and popular educational websites. Additionally, ICT serves as a communication tool with parents, students and fellow educators through platforms like the eRegister and instant messaging. Contrastingly, when it comes to classroom use, teachers frequently integrate selected ICTs, such as quizzes, edu-apps, and online sources and material for students, incidentally and for particular purposes. This typically aims to enhance the appeal or diversity of traditional classes. Similar conclusions were already reached several years ago [31].

The progression of teachers moderately embracing technology within the

institutionalized school system—from individual self-governing engagement to utilizing it as a backbone, and eventually integrating it into professional work with an international perspective, such as in the classroom, is a characteristic trend. This pattern aligns with findings from other studies conducted on the educational systems of both Poland and Europe. In a 2017 assessment of the digitalization of Polish schools, nearly half of the teachers (based on student feedback) were reported not to incorporate digital resources during classes. The most recurrently utilized hardware included the classroom computer system and an interactive whiteboard. However, these tools were predominantly employed to facilitate one-way interaction, primarily through teaching methodologies like multimedia presentations and the animations, display of texts, videos, photographs/graphics.

Merely 20 % of the surveyed students reported having the chance to create their individual digital resources during class. Contrarily, educators expressed views—now considered outdated—that competencies in mathematics, mathematics, fundamental skills in science and technology, and learning-to-learn competencies [21] were deemed most valuable for effective ICT implementation in teaching. During that period, the prevalence of such lower rates of ICT usage was

extensive. As stated by OECD data [32], less than 40 percent of educators in Europe actively incorporated ICT in their classrooms. This trend persisted regardless of the school's facilities, hardware (the available infrastructure), and access to technology, together with online sources.

As per the survey, around 40% of teachers in the Silesia Province incorporate ICT into their school educating practices, even in the absence of prior technological experience, and while still in the process of acquiring digital competence (RQ2). Interestingly, educators with great experience are somewhat little inclined to leverage the digital potential of SNS social networks in the pedagogical and educational activities. Conversely, there is consistency among surveyed teachers in utilizing digital teaching aids. The people who experiment with ICT and implement ICT in school settings engage in such activities irrespective of the available software and hardware. This observation challenges a prevailing contemporary educational myth that assumes the "omnipotent" nature of electronic media. In other words, the belief that simply equipping an institution with computer hardware would inherently change the school environment and enhance students' achievements [33, 34].

The survey outcomes are closely intertwined with the conditions and reasons influencing educators utilization of ICT in

learning. Drawing on the TAM (Technology Acceptance Model) said in the introduction, it is noteworthy that neither gender nor the size of the municipality/commune (RQ1) where the school is situated emerged as factors differentiating the frequency of ICT use in educational activities. This suggests a more significant influence of other factors, particularly Social Influence and Facilitating Conditions.

Both variables, Social Influence and Facilitating Conditions, are heavily influenced by the teacher's work surroundings, including factors such as the school management's support for and advancement of ICT, as well as the individual experiences and competencies of the teacher [35]. These findings align with other geographical studies that underscore the significant role of solitary beliefs in shaping a teacher's choice of digital tools. In implementation of ICT, the extent and standards of activities offered are determined more by the substantial teaching, and IT competencies of the teachers and their preparedness for novel forms of work [36] than, for instance, the obtainability of materials and substances or the institution's infrastructure. The attitude of the management, including the head teacher, toward the adoption of new technologies is also identified as a crucial factor.

A more comprehensive perspective should be adopted, considering the school's

strategy either favoring or not favoring the advancement of ICT utilization in educational operations. The pivotal element in enhancing the frequency of ICT usage in studies is the active backbone from the management, encompassing policies that motivate, provide and develop infrastructure, organize coaching, and promote particular kits within the Institute environment. These findings are corroborated by international research; the Eurydice Report [37] emphasizes that the first determinant of the pedagogical usage of digital technologies is the competency of teachers, rather than pre-existing architecture of an institution. It also underscores the influence of strategies within a given environment that shape the improvement of these competences. Data from the TALIS (Teaching and Learning International Survey) report by OECD in 2019, which diagnoses teachers' continuing professional development needs, similarly indicates a gap or no close relationship between the level of digital competence used in teachers' personal lives and their proficiency in using technology effectively in the teaching process [38].

In the realm of media-based education, specific competences, and teachers' attitudes towards perceiving electronic technology as a means for modernizing and enhancing their expertised works, alongside the shaping of organizational culture, assume a

pivotal position. In the surround of these specific competences, attitudes, and the policies formulated by school head masters, it is pertinent to recall the findings of other geographical study [39] regarding the preparedness of recent educators to integrate ICT into the educational procedures. The study demonstrated that primary considerations include (a) the limited standards of educators substantive preparation for utilizing ICT in their work process, and (b) the faith among teachers and also their students possess superior skills in utilizing novel technologies. Interestingly, the study is also unveiled a third factor, apparently unconventional but significant from a managerial point of view: teachers' anxiety and stress related to the fear of damaging or shattering technological hardware [40].

The survey substantiated the assumption that the frequency of using the digital educating tools is influenced by the type of support available in the school surroundings, which forms part of the broader policy of a given institution. This encompasses the management's attitudes toward ICT use, their promotion of new solutions, and the institution's stance on students' smartphone use (RQ5). In Poland, this problem is presently not subject to top-down regulation; rather, the acceptance of specific solutions, such as a ban on smartphone use in class, the permission to

use smartphones during breaks, a complete prohibition on electronic device use at school, etc., relies on the unique character and policy of each school. Approximately 60% of Polish schools have incorporated a restriction on mobile phone use in classroom into their statutes [20].

This survey indeed affirmed that educational institutes with a major lenient policy towards the usage of e- devices by scholars tend to employ ICT more frequently in classroom. This underscores the critical & often underestimated significance of head educators (school managers') attitudes and support for ICT use. The survey results indicate that these factors interact and can potentially influence educators attitudes for incorporating new technologies into their work. Similar findings are evident in other studies, where positive influences on the utilization of ICT in studies include educational policy, available support in schools, and teachers' competences, experiences and attitudes [41-45]. This insight holds significant implications for the effectiveness and appeal of education. The investigation suggests that scholars express a desire to utilize a greater variety of technologies [46], but their readiness to do so is hindered by an overestimation of their digital competence compared to their actual proficiency [47]. Considering these factors, teachers attitudes and competences along with a school's

scheme that fosters such aspects, including support and advancement of ICT use by the management, emerge as a pivotal elements.

Outcomes

From various studies and articles examined, it is obvious that the advent of technological creations, especially in computers and related technologies, has spurred the development of artificial intelligence (AI). This transformative technology has permeated various sectors of community and holds the potential to significantly impact diverse industries. One such area experiencing a substantial influence is the education sector. To comprehend how AI has shaped education, it is essential to establish a foundational understanding of AI through its definition and description. Different aspects and features of AI were gleaned from various definitions found in the reviewed researches. A fundamental characteristic of AI, as suggested by its name, is the possession of a certain level of intelligence. This trait, traditionally exclusive to human beings, has now been replicated in AI systems [48], [49], [51], [52], [55], [58], [62]. This intelligence empowers AI, including computers and embedded systems such as robots, with human brain-like abilities such as learning, cognition, decision-making and adaptability functions [50], [53], [55], [56], [57]. The ongoing innovations leading to the utilization and

development of AI have presented the education sector, particularly educational institutions, with a chance to harness and incorporate AI into their practices.

Certainly, as gathered from various resources reviewed and analyzed, the integration and utilization of AI in academics have manifested in diverse forms. Initially, AI in education emerged through the use of computers and related technologies, serving multiple functions such as administrative tasks, instructional support, and facilitation of student learning, with specific applications detailed in the technology-focused descriptions [52], [54], [56]. Continued advancements, particularly the evolution of AI beyond computers to include embedded systems and digital platforms, have paved the way for the development and implementation of AI in web-based and online platforms. This expansion also led to the creation and deployment of robotics, exemplified by the emergence of humanoid robots (chatbots and cobots). These robots, operating separately or in collaboration with human trainers, undertake various educational responsibilities, including the dissemination of learning materials to learning people across different educational levels. Furthermore, the analysis of the described platforms in the various reviewed articles indicates that AI applications in education, in their diverse forms, have significantly

enriched learners' experiences, providing them with a more robust and rewarding learning environment [56], [57], [59], [60], [61], [62].

Consequently, the analysis suggests that AI has significantly impacted the study sector overall, particularly in its application within particular informative institutions. Educators utilizing or harnessing AI experience heightened efficiency and effectiveness in various tasks, encompassing administrative duties such as grading, reviewing, and giving feedback on student works. Moreover, engagement with AI, including diverse forms such as robots, web-based and online intelligent systems and chatbots, empowers educators to enhance instructional standards. Scholars, benefiting from AI's utilization of machine learning as indicated by various studies, enjoy a more enhanced and immersive learning experience. Through machine learning, AI assesses students' capabilities and needs, utilizing the findings to deliver and develop personalized or customized content. This approach ensures increased retention and engagement, ultimately contributing to improved learning outcomes.

Moreover, AI contributes to students' practical and experiential learning by synergizing together with other technologies like gaming, 3-D modelling, virtual reality and simulation, thus enhancing overall learning experiences. A particular study underscored the downside of AI,

emphasizing its potential to undermine academic integrity through practices like paper mill services and paper churning facilitated by AI, leading to concerns about cheating. Nevertheless, the majority of the examined studies elucidated various methods in which AI, including its benefits, integration and effect on instruction, administration, and learning positively influences education. The favorable outcomes, represented by the pros, outweigh the drawbacks or other gloomy effects.

AI education is presently acknowledged as an early-stage educational support. However, as educational needs progress, AI-integrated study is delinquent to play a major key role. Presently, AI systems contribute courses of diverse obstacle levels based on straightforward rule-based judgement, yet they have not arrived the pinnacle of intelligence in the realm of intelligent study. Ongoing investigation in AI education includes activities such as probability modelling and knowledge mapping. With the accelerated prevalence of educational interactions, AI systems will bring about larger volumes of data, contributing a clearer insight into the processes of learning and teaching. Subsequently, this promotes more accurate guidance for information. By integrating data mining, learner analytics and machine learning. AI system will provide high-quality material to teachers and students,

presenting to a supportive and measurable teaching and learning environment. In this stage, users will have admittance to various approaches for arriving at correct answers to any given question. Looking forward, an absolute AI system is visualized to construct scholars creativity and vision through the analysis of their emotional states, learning styles and initiatives, eventually increasing their learning capabilities and creativity while encouraging subjective initiative. The future widespread adoption of AI systems is expected to holistically effect the students, covering personal skills, learning capacities, knowledge proficiency, and career development, enlarging beyond very assistance in understanding particular knowledge.

Aided by Data mining, Machine learning and Learner analytics. AI systems are poised to deliver high grade-quality content to both Students and teachers, supporting educators and learning and rendering the entire procedure measurable. At this level, users will have admittance to diverse approaches to arrive at the accurate solution to any question. Looking ahead, the ideal AI system is envisioned to mold students creativity and imagination by evaluating their emotional condition, learning style, and initiative. This holistic approach aims to enhance creativity and learning capabilities while stimulating subjective initiative. AI systems are expected to be broadly utilized,

thriving on all the facets of scholars, including learning ability, knowledge mastery, personal skills, and career development, transcending the role of entirely assisting scholars in understanding particular knowledge.

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