



A STUDY ON BENEFICIARIES OF ARTIFICIAL INTELLIGENCE (AI) TOOLS USED IN EDUCATIONAL SECTOR AMONG STUDENTS WITH SPECIAL REFERENCE TO COIMBATORE CITY

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ABSTRACT

Artificial Intelligence (AI) in education is like having a helpful digital friend that makes learning more fun and personalized. It's about using smart technology to make studying easier. AI in education helps computers understand how you learn and what you need help with. It's like a clever assistant that adapts to your unique style of learning. To Evaluate the Student's utilization of AI tools used for Education purpose among Students. The sample size taken for this study is 270 respondents. This study aims to examining how the students gets benefited in the usage of the new AI tools, and explore the ways to enhance its accessibility and relevance to the student's academic journey. The main objective of the study is to examine how the students gets benefited by using the AI tools, in Coimbatore city has been taken for the current research work. For this study we have adopted the Convenience sampling. The analysis involved simple percentage analysis, rank analysis, chi-square test, and one-way ANOVA. Therefore, it can be concluded that the majority of the students are not updated with the knowledge of new technologies in AI tools for educational sector. So, they have to know about the tools which is available for education and the students can improve their skills and they can achieve their future goals.

Keywords: Artificial intelligence, AI tools, Education, Students

INTRODUCTION:

Artificial Intelligence (AI) is an exciting field that's all about making computers smart in a way that's similar to how humans think and solve problems. Imagine having a computer that can understand, learn, and make decisions just like we do! In simple terms, AI is like adding a thinking brain to machines. AI uses special sets of instructions called algorithms, guiding the computer on what to do. But what sets AI apart is its ability to learn from information or data. It's like when you learn from experiences and get better at something – AI does that, but much quicker. In real life, you've likely encountered AI already. When your phone predicts words as you type, that's AI understanding your language patterns. When you ask a virtual assistant like Siri or Alexa for help, that's AI processing and responding to your voice. AI also plays a role in recommendation systems, suggesting movies or songs based on your preferences. It's an exciting journey into the future, where AI can make technology work intelligently for us. So, buckle up for an adventure in building a smart project that could change the way we interact with technology.

Artificial Intelligence (AI) in education is like having a helpful digital friend that makes learning more fun and personalized. It's about using smart technology to make studying easier. AI in education helps computers understand how you learn and what you need help with. It's like a clever assistant that adapts to your unique style of learning. AI tools in education can be like your own virtual tutor. They learn from how you solve problems and what you enjoy learning, making lessons more interesting and interactive. Artificial Intelligence (AI) tools in education that use smart technology to make your learning journey awesome. AI tools in the educational sector are like smart helpers designed to make learning more personalized and interactive for students. AI tools in education are like your personal learning assistants that enhance your study sessions, offer instant feedback, and make learning enjoyable.

OBJECTIVES OF THE STUDY:

- 1) To study the demographic profile of the Sample Respondents.
- 2) To Evaluate the Student's utilization of AI tools used for Education purpose among Students.
- 3) To Analyse Students perception towards using AI tools for Education.
- 4) To find out the level of satisfaction of Students with regard to their education by using of AI tools.
- 5) To gather the feedback from the students regarding their experience by using of AI based education tools.
- 6) To offer suitable Suggestions and Recommendations for the success of AI used in educational sector.

STATEMENT OF THE PROBLEM:

This study will be diving into the fascinating world of artificial intelligence in education. We'll be exploring how students in Coimbatore city are benefiting from the use of AI tools. You'll look at different AI applications and tools, like personalized learning platforms, intelligent tutoring systems, and automated grading tools. Your study will also examine what are the impacts of AI on student learning outcomes, engagement, and overall educational experience. This study aims to examining how the students gets benefited in the usage of the AI tools, and explore the ways to enhance its accessibility and relevance to the student's academic journey. And of course, you'll provide recommendations to optimize the use of AI and enhance student learning in Coimbatore city.

REVIEW OF LITERATURE:

David Baidoo-Anu (2023)² “Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning” The generative AI tool ChatGPT took the world by surprise with its sophisticated capacity to carry out remarkably complex tasks. The extraordinary abilities of ChatGPT to perform complex tasks within the field of education has caused feelings among educators, as this advancement in AI seems to revolutionize existing educational praxis. This is an exploratory study that synthesizes recent extant literature to offer some potential benefits and drawbacks of ChatGPT in promoting teaching and learning. The study offers recommendations on how ChatGPT could be leveraged to maximize teaching and learning.

Dr. Padma & Dr. Rama. C (2022)¹³ “A Study of Artificial Intelligence in Education System & Role of AI in Indian Education Sector” Artificial intelligence (AI) is a branch of science that creates and studies machines aimed at stimulating human intelligence processes. The primary goal of AI is to improve the speed and efficiency of routine processes. As a result, the number of businesses adopting AI continues to rise around the world. The widespread use of technology in education is changing the way we teach and learn.

Choudhry Umer Sultan (2023)³ “Benefits of Artificial Intelligence in Education” Artificial intelligence (AI) is currently a top priority in both politics and science. Every time a new technology is developed, there is a lot of excitement about its potential effects on society and the economy. Despite acknowledging the fact that the foundations for AI have existed for a number of decades, recent technology advancements are what AI may do. This study examines what this might imply for education, learning, and teaching. It seeks to offer a critical analysis and forward-looking perspective on AI advancements as a starting point for educated policy-focused conversations about the future of these sectors.

RESEARCH GAP:

The review of literature has shown various studies that have been conducted to identify and assess perception and attitude of the students towards using of AI tools especially ChatGPT and Chatbot. The research gap is found when it comes to study, benefits

gained by the students by using of AI tools and after the development of AI in educational sector, has emerged as the only available option to continue learning.

Research Methodology:

In the research methodology the research is mainly focused on the Coimbatore city with 257 respondents of Students, the sample method of study is the Convenient sampling method. the analysis part of the research, the Simple percentage analysis, Rank Analysis, Chi-Square, and One-Way ANOVA are used for research.

Analysis and Interpretation:

Table 1: Simple percentage analysis of A study on beneficiaries of artificial Intelligence (AI) tools used in educational sector among students with special reference to Coimbatore city.

STATEMENT	NO OF RESPONDENTS	PERCENTAGE
GENDER - MALE	136	53%
AGE – 19 - 20	194	76%
EDUCATIONAL QUALIFICATION – U.G	179	70%
NATURE OF COLLEGE - PRIVATE	186	73%
FAMILY TYPE – NUCLEAR	150	59%
PREFERNECE OF AI TOOLS - CHATGPT	100	39%
NO. OF AI TOOLS USED - THREE	121	47%
RECOMMEND OF AI TOOLS - YES	122	48%

INTERPRETATION:

Majority (53%) of the respondents are Male. Majority (76%) of the respondents are between the age of 18 – 20 years. Majority (70%) of the respondents are belonging to the Under Graduate degree. Majority (73%) of the respondents are pursuing in Private colleges. Majority (59%) of the respondents from Nuclear Family. Mostly (39%) of the respondents had chosen the ChatGPT. Mostly (47%) of the respondents prefer of three tools.

Table 2: Showing the Rank of the uses of AI tools in educational sector in Respondents view

FACTORS	1	2	3	4	5	6	7	8	9	10	TOTAL	RANK
Personalised learning experience	48	40	29	2	17	3	27	4	52	34	1461	5
Providing of Information	14	40	13	54	30	39	20	24	6	10	1671	1
Problem Solving	16	6	47	24	18	32	8	46	51	14	1312	6
AI tool environment	13	40	9	13	24	22	32	71	11	20	1290	8
Guidelines for AI tools	9	24	3	30	65	28	29	4	26	38	1288	9
Understanding of Information	42	36	10	39	59	15	6	29	14	6	1531	3
Rephrasing your Information	67	16	32	27	11	2	26	31	17	27	1593	2
Availability of Resources	6	26	56	44	22	37	20	12	10	17	1520	4
Artwork and writing platform	16	20	35	17	4	48	32	31	19	34	1296	7
Other AI Tools	25	8	22	6	6	30	56	4	50	56	1118	10

INTERPRETATION:

The above table shows that the Personalised learning experience shows fifth rank, Providing of Information shows First rank, Problem solving shows sixth rank, AI tool environment shows eighth rank, Guidelines for AI tools shows ninth rank, Understanding of Information shows third rank, rephrasing your information shows second rank, Availability of resources shows fourth rank, Artwork and writing platform shows seventh rank and Other AI tools shows tenth rank.

Table 3: To Show the Relationship between Educational qualification and Level of preference towards AI tools

FACTOR	CALCULATED VALUE	TABLE VALUE	DF	REMARKS
Educational Qualification and ChatGPT	.013	16.19	9	Significance at 5% level.
Educational Qualification and Quill Bot	.357	21.02	12	Significance at 5% level.
Educational Qualification and Grammarly	.402	16.19	9	Significance at 5% level.
Educational Qualification and Chat Bot	.227	21.02	12	Significance at 5% level.
Educational Qualification and Brainly	1.69	21.02	12	Significance at 5% level.
Educational Qualification and Slides go	.043	21.02	12	Significance at 5% level.
Educational Qualification and Notion AI	.662	21.02	12	Significance at 5% level.

Educational Qualification and Tutor AI	.158	21.02	12	Significance at 5% level.
Educational Qualification and Notedly	.001	21.02	12	Significance at 5% level.
Educational Qualification and MyEss AI	.002	21.02	12	Significance at 5% level.

INTERPRETATION:

The above chi-square table shows that the factors are less than the table value and the null hypothesis is accepted. Hence, there is no significant relationship between educational qualification and level of preference towards the AI tools of the respondents.

Table 4: Show the significant association Age and satisfaction towards providing better service

FACTOR		SUM OF SQUARES	DEGREE OF FREEDOM	MEAN SQUARE	F	SIG	S/NS
Information Generator	Between Groups	.008	1	.008	.008	.929	NS
	Within Groups	256.300	254	1.009			
	Total	256.309	255				
Rephrasing of Information	Between Groups	1.084	1	1.084	1.508	.221	S
	Within Groups	182.525	254	.719			
	Total	183.609	255				
Plagiarism	Between Groups	1.699	1	1.699	1.777	.184	S
	Within Groups	242.766	254	.956			

Checker	Groups						
	Total	244.465	255				
Grammar	Between Groups	4.222	1	4.222	3.554	.061	S
	Within Groups	301.743	254	1.188			
	Total	305.965	255				
Finding Solutions	Between Groups	9.059	1	9.059	6.222	.013	S
	Within Groups	369.812	254	1.456			
	Total	378.871	255				
Clarification of Queries	Between Groups	.973	1	.973	.725	.395	S
	Within Groups	340.965	254	1.342			
	Total	341.937	255				
Presentation Maker	Between Groups	10.860	1	10.860	6.525	.011	S
	Within Groups	422.749	254	1.664			
	Total	433.609	255				
Content Creation	Between Groups	6.177	1	6.177	4.117	.044	S
	Within Groups	381.100	254	1.500			
	Total	387.277	255				
Notes Generator	Between Groups	3.171	1	3.171	1.723	.190	S
	Within Groups	467.512	254	1.841			

	Groups						
	Total	470.684	255				
Document Convertor	Between Groups	5.100	1	5.100	2.799	.096	S
	Within Groups	462.771	254	1.822			
	Total	467.871	255				

INTERPRETATION:

There is significance association between Age and Satisfaction of AI Tools for Better Services, and one of the factor is not significance between the Age and Satisfaction of AI Tools for Better Services.

SUGGESTION

- Increase student's engagement by doing innovative method by using with updated Technologies of AI tools.
- AI can recommend learning resources like articles, videos, or practice problems based on a student's interests and areas they're focusing on.
- These AI tools used to analyze a student's performance and adjust the learning materials to their individual needs.
- Now there are many AI tools are new and updated to provide the data's want.
- Most of the Students refers only ChatGPT because of its content deliver, it is better than other AI tools.

CONCLUSION

Technology has truly revolutionized in Education landscape, and benefit the students by offering better AI tools. The study analysed those benefits gained by Students from AI tools in the Coimbatore city. In Coimbatore city the population may be around 35,00,000 lakhs population and the study focused on students in both public and private College as a respondent. In this study, majority of the respondents are male participants for research. The most of the respondents prefers only the AI tool which is popular to everyone is ChatGPT and Chat Bot, and the respondents have responded that they were aware of only two to three tools.

While there are many benefits to incorporating AI in education, there are also several challenges and concerns that need to be addressed. Students must carefully consider the benefits of implementing AI tools for their work and ensure that they are taking appropriate measures to protect their privacy and prevent bias. By balancing the benefits and challenges of AI in education, we can create a more personalized, efficient, and effective learning experience for all students. Therefore, it can be concluded that the majority of the students are not updated with the knowledge of new technologies in AI tools for educational sector. So they

have to know about the tools which is available for education and the students can improve their skills and they can achieve their future goals.

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