Turning Raw Survey Data into a Report: Assessing Teachers' Opinions on ChatGPT

Lisa M. McLaughlin, Safa Muhanna, and Jacqueline Zamora

Educational Technology Leadership, New Jersey City University

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Dr. Christopher Shamburg

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ChatGPT is a fairly new and emerging artificial intelligence (AI) tool that is capable of generating detailed research-based responses to user prompts, questions, and commands. AI has been used in educational institutions in different forms and can help tailor lessons to meet individual student needs (*Artificial Intelligence in Education: A Review*, 2020).

A survey of 100 teachers from diverse backgrounds and experience levels was conducted to explore their views on ChatGPT, AI, and technology in education. The collected data was analyzed using pivot tables. By analyzing both qualitative and quantitative data, teachers' concerns and visions for the integration of AI in education settings were explored. This report highlights the valuable insights and opinions from the surveyed educators.

Qualitative Analysis

The qualitative analysis delved into the varied perspectives of educators, examining how their experiences and teaching environments influence their views on the role of technology in education and their optimism for the future. The study revealed several themes about educators' opinions and predictions about ChatGPT as follows:

Enhanced learning and engagement - Most educators felt that, when implemented correctly, ChatGPT could enhance students' learning outcomes with its personalized instruction, feedback, and support, ultimately leading to increased student engagement.

Widened achievement gap - Teachers were concerned that student use of ChatGPT would exacerbate existing inequalities in education with students relying on AI to complete their work.

Reduced teacher workload - Educators surmised that ChatGPT and AI would alleviate their workload by helping complete tasks such as grading and lesson planning.

Increased equity and accessibility - Some teachers' responses to the survey conveyed the anticipated belief that ChatGPT would provide access to high learning resources for all students.

Quantitative Analysis

The quantitative data collected and analyzed provided insights into how teaching location, grade level, and years of teaching experience correlated with educators' views on the potential benefits or harms of technology in education, as well as their outlook on the future of the educational field. The following table and figures present detailed analyses of the trends, highlighting key findings that reflect the diversity of opinions.

As seen in Table 1, teachers from rural, suburban, and urban areas, answered the question, "I'm optimistic about the future of education" as follows":

Table 1

Percentages of teachers who answered the survey question, "I'm optimistic about the future of education."

I am optimistic about the future of education						
	Strongly agree	**Agree**	**Neither agree or disagree**	**Disagree**	**Strongly disagree**	**Grand Total**
Rural	5	8	5	3	4	25
Suburb	5	13	8	10	7	43
Urban	7	5	8	8	4	32
Grand Total	**17**	**26**	**21**	**21**	**15**	**100**

Figure 1

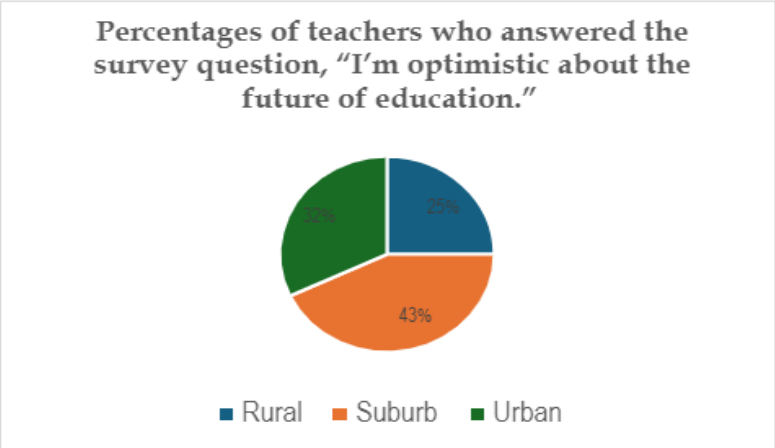

Figure 1 shows the distribution of optimism about the future of education among 100 participants by teaching location. The breakdown of the results indicated that 25% of rural participants, 43% of suburban participants, and 32% of urban participants are optimistic. Suburban participants demonstrated the highest level of optimism, followed by urban participants, with rural participants showing the lowest level of optimism.

Figure 2

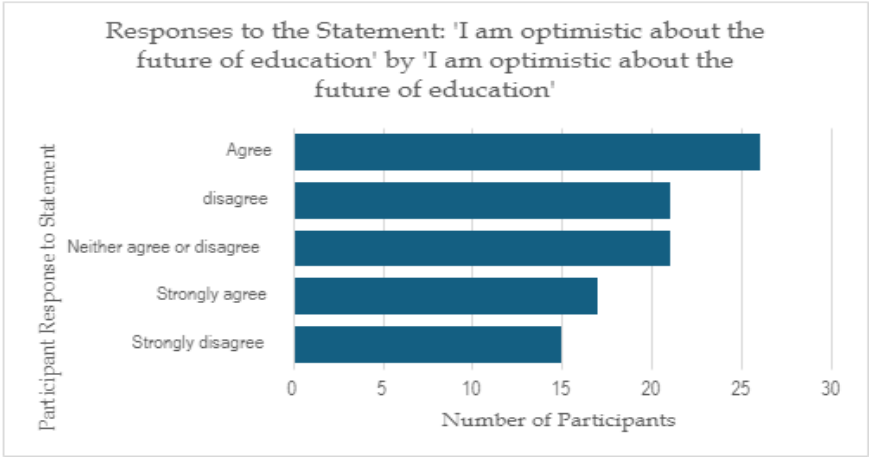

Figure 2 illustrates the distribution of participants' opinions on optimism about the future of education. The data revealed a broad spectrum of responses, with many participants expressing agreement or neutrality. Disagreement also represented a substantial

portion of the responses, while fewer participants strongly agree or strongly disagree. This distribution showed that opinions on the future of education vary widely among participants, reflecting both optimism and caution.

Figure 3

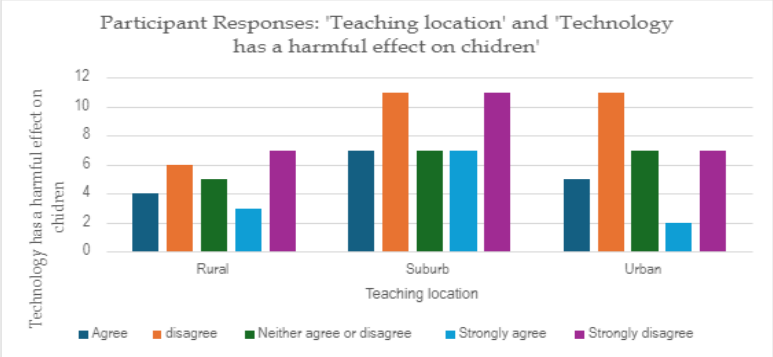

Figure 3 illustrates the distribution of opinions on the impact of technology on children across different teaching locations. Rural areas had a significant number of "strongly disagree" responses, suggesting that some respondents view technology as less harmful. They also showed a slightly higher count in the "strongly agree" category compared to urban areas, indicating mixed views. Suburban areas presented a balanced distribution with the highest overall response count, reflecting diverse opinions on technology's effects. Urban areas showed fewer "strongly agree" responses, indicating less intense agreement that technology is harmful. Overall, there were varying perceptions, with rural areas showing a mix of views, suburban areas displaying a wide range of opinions, and urban areas exhibiting more critical or neutral perspectives.

Figure 4

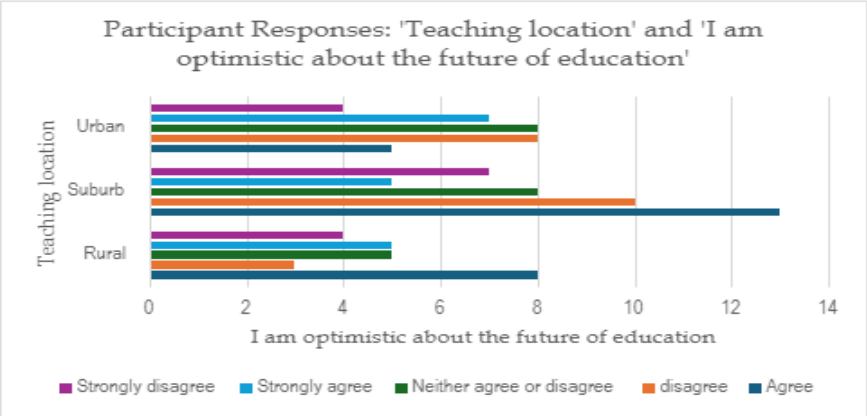

Figure 4 highlights the distribution of optimism about the future of education across different teaching locations. Rural areas indicated a mix of agreement and disagreement, with responses spread across various categories. Suburban areas had the highest overall response count, with a noticeable presence in both agreement and disagreement categories. Urban areas reflected a varied distribution of opinions, with responses spread across agreement, disagreement, and neutral categories. The data highlights that optimism about the future of education varies across teaching locations, with each area reflecting a range of views.

Figure 5

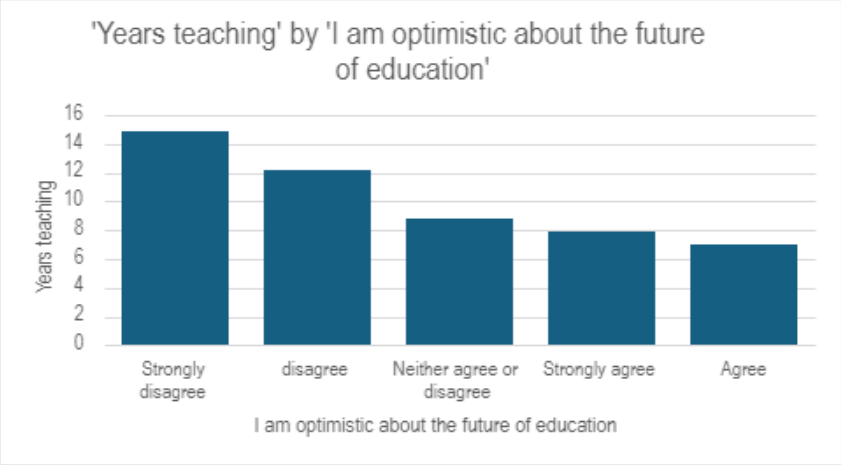

Figure 5 presents the average years of teaching for each level of optimism about the future of education. Respondents who “strongly disagree" with the statement about optimism about education had the highest average years of teaching. Those who "disagree" also reported a higher average compared to the other groups. Conversely, respondents who "neither agree nor disagree," "strongly agree," or "agree" had lower averages, with the fewest years reported by those who "agree." Greater teaching experience was associated with lower levels of optimism about the future of education.

It is evident from the data scrutinized that educators hold diverse views on ChatGPT in education, and have cautious optimism about its potential benefits. Similar to the work of Liu and Guo (2020), the analyzed data shows that K-12 educators approach the integration of ChatGPT in education with a mix of optimism and caution. Ongoing research will be crucial for realizing ChatGPT’s full benefits within our educational systems. Understanding teachers' opinions is important in order to capitalize on ChatGPT’s strengths

and address potential issues that may arise. As one recent study about technology in education aptly noted, “Active involvement of educators provided insights that would be impossible to otherwise acquire or foresee” (Korozi et al, 2018, p. 702).

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