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# Implementation and evaluation of genAI aided tools in a UK Further Education college

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## 120-word abstract

AI-tools have the potential to transform education within the post-16 vocational education sector. Vocational education involves practitioners teaching students about trades, and consequently developing their own dual identity as educators as well as discipline specialists. However, these educators are not always confident in using digital technologies. In this chapter we will reflect on the implementation and evaluation of an AI-assisted tool 'TeacherMatic' within a specialist further education college in England. We will examine the effectiveness of the tool together with teachers' attitudes towards the tool and AI-assistance in general. We will discuss the tools' effectiveness and give recommendations on how the tool could be improved within the context of specialist technical education.

## 1. Context

This chapter explores the introduction of a commercial generative AI teacher assistance tool at Leeds College of Building (LCB), a specialist further education (FE) college in the north of England. We begin with a description of the post-16 education sector in England, and some of the complex issues within this sector. We then explore the claims of the tool and how it may support educators in this context. We present the results of an evaluation of the tool and make suggestions about how such tools need to evolve to maximise support for educators.

The post-16 education sector in England comprises FE colleges, sixth-form colleges, specialist colleges and private training institutions. The sector has been labelled "post-compulsory education and training" (Tummons, 2020) as a catch all for what it provides, which itself is somewhat of a misnomer, as all under 18s must be in education, employment (typically apprenticeships), or training in the UK. (GOV.UK, n.d.). In England qualifications are delivered at 9 distinct levels, with levels 1-2 being typically associated with examinations at age 16 (e.g., GCSE), level 3 being a typical school leaver qualification (e.g., A levels) and levels 4-6 associated with each of the 3-years of an undergraduate university education (GOV.UK, n.d.).

In England, FE colleges have somewhat of an identity crisis, between schools and higher education. This is reflected in the choice of teaching unions available. Educators can be members of the schoolteachers' unions NASUWT/NEU or members of the University and College Union (UCU). Some colleges attempt to develop a university ethos and include University Centres within their colleges. These teach qualifications at level 4 and above. Whilst other colleges can be a more school-like approach, with registers, and strict timekeeping. FE colleges deliver both 'academic' qualifications and vocational training. Vocational training is education relevant to a specific trade or vocation. The post-16 sector has been described as a "Cinderella sector" (Orr & Simmons, 2010), with poor funding and little understanding of the sector by policymakers, who are rarely educated in the sector and show little understanding of it (Saunders, 2020). As Husband and Mycroft (2020) point out, the sector has "educations' problems inscribed in its DNA" (p. 342).

LCB is the only specialist FE construction college in the UK. The college has approximately 6,500 learners, typically aged 16-24, covering subjects that range from architecture to welding. It offers a diverse mix of qualifications from below level one to level six undergraduate degree courses, which are provided by a wide range of awarding bodies. The student body comprises both full-time and part-time students, as well as workplace-based learners completing apprenticeships, who attend either one day a week or follow longer block-release patterns.

As a specialist construction college, most qualifications are vocational. The Whitehead (2013) review of vocational qualifications noted the importance of educators in vocational training having occupational expertise and experience. Within LCB, nearly all educators have a 'dual identity' as both an educator and a construction specialist, with the most teacher training being delivered as 'in-service' while staff are also teaching full time.

Initial teacher training (ITT) in the FE sector became compulsory from 2001, to professionalise the FE teacher workforce (Simmons & Thompson, 2007). However, in recent years the number of completers in ITT has been dropping (Zaidi et al., 2018). The UK government recognises the difficulties the sector faces in its workforce, and is concerned about the difficulties of recruitment, and the quality of ITT courses (Department for Education, 2023).

Following the Lingfield (2014) review into Professionalism in FE, there has been a focus on the nature and status of the FE teacher. While Lingfield notes the necessity of bolstering professionalism, he notes that this is challenging within the context of FE, where salaries and status are less favourable than in schools. The Education and Training Foundation was established to support the development of professionalism within the sector, with some teachers gaining professional QTLS (Qualified Teacher Learning and Skills) status. Further progress has been hampered by narrow conceptions of teacher professionalism and micromanagement by both employers and government (Gleeson et al., 2015). Market changes within the FE sector such as mergers of colleges, rationalisation of college provision, and the creation of large college groups have further impacted the FE landscape and created pressure on the idea of teacher professionalism (Gleeson et al., 2015). Pay and conditions vary from college to college, as do responsibilities and procedures. The idea of high workplace autonomy as a marker of teacher professionalism is often absent in the sector (James, 2017). The idea of what professional is, can be quite different in the minds of politicians, managers, and deliverers of teacher training programs. Jones (2020) calls this the "professionalism of the imagination."

Educators who are excellent professionals in their craft or trade skill sometimes find it hard to transition into teaching and acquire the necessary additional teacher identity (Springbett, 2018) as an FE professional. This may reflect shortcomings in their ITT programs, or be a consequence of the audit culture, and ever-increasing number of forms, documents, and other paperwork demanded of them to meet educational or funding requirements (Gleeson et al., 2015). Staff retention is affected by these factors (Tully, 2023).

AI assistance may offer an opportunity to the FE sector to provide workload relief, supporting the wellbeing of teachers (Hashem et al., 2024). Highton et al. (2017) highlighted that lesson planning and resource generation take the most time, and so LCB was interested in exploring the use of an AI tool which supported these tasks. The college selected TeacherMatic, an online tool that claims to reduce teacher workload. At the time of the trial, it used GPT-3.5 with a graphical user interface to assist in prompt generation, to automate content creation and assist with production of teaching materials such as PowerPoint presentations, quizzes, additional questions, and schemes of work. LCB selected this tool to pilot, as it was affordable, was being trialled by other organisations (JISC, 2023), and was specifically marketed at the college sector.

## 2. Problem to be addressed

This case study evaluates the acceptability, and effectiveness of a generative AI tool within LCB. In considering the acceptability of the tool, the case study examines the feelings of, and impact on teachers, and whether the tool achieves its aims, of reducing teacher workload. The adoption of new technology in educational settings is not always straightforward. UNESCO have stated that the acceptance and integration of digital technologies within teaching can enhance both student outcomes whilst transforming pedagogy (UNESCO, 2018). However, this relies on teachers having a satisfactory level of digital literacy together with institutions having sufficient technical resources to enable the effective use of digital technology. Digital competence has only recently been included in the qualification framework for teachers in Further Education (ETF, 2023), and many teachers digital competence has not developed beyond the tools they used during their own training (Bećirović, 2023). The level of digital competence of the individual practitioner is often determined by their own enthusiasm for digital technologies (Beetham & Sharpe, 2023). However, the COVID-19 pandemic and the necessity to transition to online teaching accelerated the development of teachers' digital competencies, requiring some level of digital literacy to enable online delivery (Ng et al., 2023). Since the pandemic teachers have either reverted to the norm of classroom-based teaching, whilst others have continued to use technology to enhance their teaching. There is still a digital skills divide (van Deursen & van Dijk, 2011) which is likely to hinder the introduction of new digital tools (Bećirović, 2023).

There are risks with the adoption of a generative AI tool in a specialist vocational college such as LCB. As has been widely reported (Ji et al., 2023) older large language models such as GPT-3.5 are particularly prone to hallucinations. However, accuracy of materials is important within the context of a specialist college. The courses align to professional standards, regulations, and laws that govern the subject specialisms that are being taught. A potential problem with the acceptance of TeacherMatic as a tool for staff in a specialist college would be the accuracy of the generated output. While staff will be well equipped to identify inaccurate content, it which may reduce its usefulness and thus the acceptability of the tool.

In this evaluation TeacherMatic was acquired by the college and offered to educators. Surveys were conducted before and after implementation of the tool. Additionally, we captured reflections around the training offered by TeacherMatic to the educators.

## 3. Theoretical/pedagogical perspective

In evaluating the effectiveness and acceptability of TeacherMatic, the Technology Acceptance Model (TAM) has been employed. This considers the factors which impact technology acceptance and is derived from both the theory of reasoned action and the theory of planned behaviour. Granić & Marangunić, (2019) reviewed the evidence for TAM in education, and report that perceived usefulness is the most key factor underlying technology acceptance, and that this in turn is affected by the perceived ease of use.

The impact of TeacherMatic on teacher professionalism and identity is also considered in the analysis. As outlined above, teacher professionalism in FE has been subject of considerable discussion, and there have been substantial efforts to professionalise the sector (Tummons, 2016). Teacher professionalism and identity is essential for delivering quality educational experiences to the diverse learners in FE (James, 2017).

## 4. Method

### 4.1. Participants

47 staff at LCB enrolled on the TeacherMatic pilot were invited to participate in the research. Participants were provided with information about the research and each user of TeacherMatic was invited by emails from senior leaders to be a part of the research project. Demographic information of participants is shown in table 1. Participants were offered the chance to win £50 of shopping vouchers for each questionnaire they completed. Ethical approval for the research was granted by the School of Psychology, University of Leeds ethics committee Ref: PSCETHS-693 Date 24/08/23.

**Table 1**

*Demographic Information*

|                                           | Survey 1      | Survey 2       |
|-------------------------------------------|---------------|----------------|
| <b>N</b>                                  | 22            | 9              |
| <b>N female</b>                           | 9             | 2              |
| <b>Mean age (range)</b>                   | 36.6 (22 -58) | 37.6 (22 – 27) |
| <b>Mean number of years working in FE</b> | 6.4 (0 – 22)  | 6.4 (0-22)     |

### 4.2. Materials & procedure

The timeline for the evaluation is shown in figure 1. Questionnaires were hosted on the online survey platform Qualtrics.

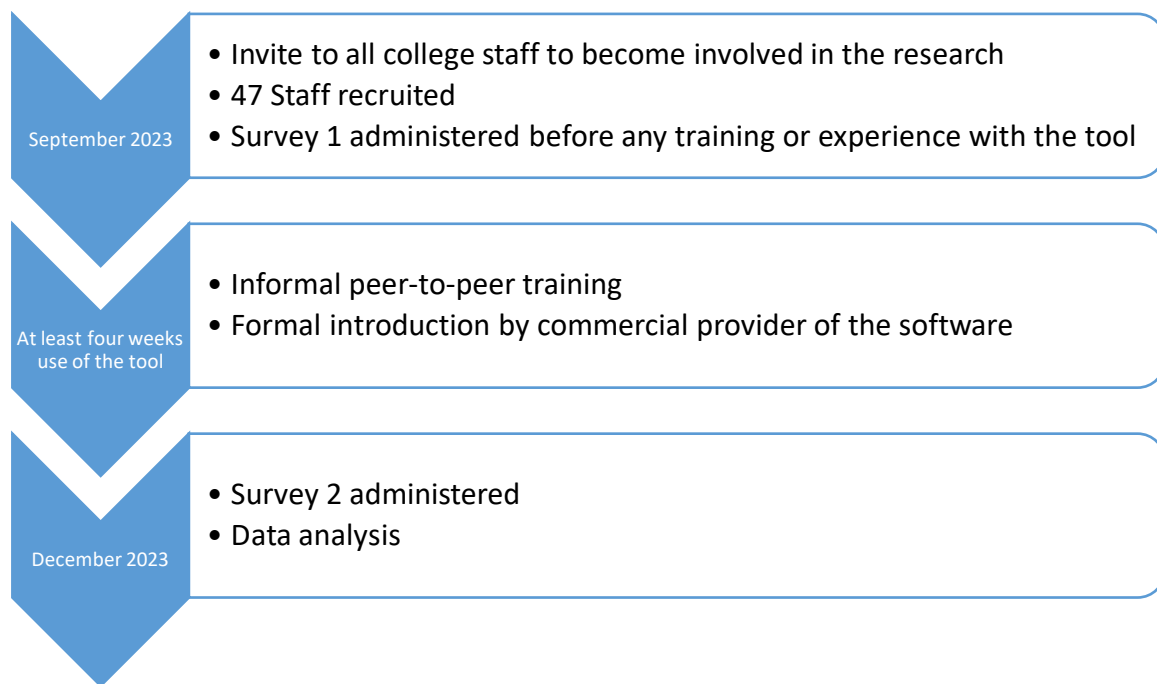


Figure 1. Timeline of the pilot and evaluation

#### Survey 1

Participants first gave consent for participating in the survey. They were then asked for their age, gender, and how long they had been teaching. They were asked open ended questions about their previous experience of using computer teaching aids, and their experience and knowledge of generative AI tools. They were directed to read information about TeacherMatic <https://teachermatic.com/about/>. Finally, they were asked five open ended questions about TeacherMatic. These questions were designed to assess participants preconceptions about using AI in their teaching.

1. From reading the information on the webpage, what do you hope that TeacherMatic will be able to help you with?
2. How do you feel about using a tool such as TeacherMatic to support your work? Please include both positive and negative feelings where relevant.
3. How do you think the student experience will be affected by your use of TeacherMatic? Please be as specific as possible.
4. What do you think students will think of teachers using tools such as TeacherMatic?
5. What concerns do you have about using TeacherMatic? Please be as specific as you can.

#### Training and free use of the tool

Participants were then given access and training on the use of TeacherMatic. Initial training was delivered to college staff by enthusiasts within the college, who had experience in generating other educational materials in genAI. The aim of this training was to demonstrate the ease of use, and the variety of different resources that could be generated. As part of the purchased package, then an hour of online training was provided by the company to all users within college. The aims of the session were to demonstrate the usefulness of TeacherMatic in a number of different contexts, including creation of quizzes, PowerPoint slides and rubrics.

## Survey 2

The second survey asked for age and gender. Participants were asked how many weeks they had been using the tool for, and how often they had used it. They were then asked a series of open-ended questions that were informed by the technology acceptance model. These indirectly addressed the ease of use, usefulness and acceptability of the tool. The questions also specifically questioned the claims about the tool's impact on productivity and worklife balance.

1. What have you used the tool for? Please be as specific and detailed as possible.
2. How would you describe your experience navigating and using TeacherMatic?
3. What has been the impact of TeacherMatic on your workload?
4. What has been the impact of TeacherMatic on your productivity?
5. Has TeacherMatic had any impact on your work-life balance?
6. Please comment on the quality of the resources produced by TeacherMatic
7. Having used TeacherMatic, how do you feel about using AI tools to support your work, and has this changed?
8. What might the impact of tools like TeacherMatic be on teachers in the future?
9. What concerns do you have about using AI tools? Please be as specific as you can.
10. Is there anything else you would like to tell us about your experience with TeacherMatic?

### 4.3. Analysis

We chose to analyse the data using reflexive thematic analysis (RTA, Braun & Clarke, 2021). RTA is an appropriate analytical approach as it can help understand educators' thoughts and feelings in depth. This method considers that the researcher brings their own perspective to the process, acknowledging the role of bias. It is flexible, allowing both inductive and deductive approaches. This was important as we wanted to capture themes relevant to TAM, but also allow educators experiences to be reflected in the analysis. It allows the researcher to identify important themes in the data, showing us not just what educators think, but also why they think that way.

Two reflexive thematic analyses were employed to analyse the before and after survey data (Braun & Clarke, 2021). Each survey was analysed in turn by the senior author. The survey responses were read several times, and the authors discussed potential codes and themes. The responses then underwent initial coding. Codes were both inductive and deductive. Deductive codes were specifically around issues that were identified as important in the TAM – perceived ease of use and usefulness of TeacherMatic. Inductive codes around teacher identity and workload were employed. Themes were identified in both surveys, and then checked back against the quotes. The themes were refined, defined, and named. This was a cyclical, iterative journey rather than a linear progression through the stages. The analysis focuses on the findings from the survey, while the discussion will employ the lens of the TAM to explore the implications for use of generative AI in vocational education.

### 4.4. Reflexivity

In reflexive thematic analysis, the positionality of the authors is important (Braun & Clarke, 2021). The first author is an educator in LCB, who has completed a Cert Ed qualification and is studying MSc in digital pedagogy. He has an insider position, as an educator within the college. He is enthusiastic about the possibilities that digital tools can provide for both teaching and the wider administrative tasks in education. The senior author is a psychology academic who has been teaching for over 20 years, in a research-intensive university. She leads strategic work around assessment and is curious about the ways that generative AI may support academics' work in the future and has some experience of using ChatGPT. Due to our differing levels of experience with research, the senior

author conducted much of the analysis, in discussion with the first author. During analysis, our initial enthusiasm for the tool was tempered by the mixed experiences articulated by participants. Our contrasting positions allowed us to be critically reflective throughout the analysis. Relevant educator perspectives were contributed by the first author.

## 5. Findings

### 5.1. Survey 1: Before using TeacherMatic

Of those that completed the first questionnaire, most (91%) had heard of genAI tools, and 70% had previous experience with AI tools. Of those who had heard of the genAI tools, but not used them, participants were aware of the basic abilities of the tools, and that prompts would need refining.

### 5.2. Analysis

In the analysis of the qualitative responses, three themes were identified – positive attitudes to technology, can we trust genAI, and AI's impact on teacher identity and workload.

#### 5.2.1. Theme one: positive attitudes to technology

This theme concerned participants experiences with technology, and their hopes that digital tools could improve both their work and their workload. Most participants had previous experience of using technology to aid their teaching, ranging from virtual learning environments such as MS Teams and Moodle through to more creative tools such as Thinglink, Kahoot, and Socrative. Those who had previously experimented with ChatGPT were enthusiastic, for example:

*"I find it to be an extremely versatile and user-friendly tool. Its ability to generate customized content has enhanced my teaching methods, particularly in creating personalized math questions that increase student engagement and understanding."*

When asked what participants hoped that TeacherMatic would be able to help them with, participant responses could be grouped into two subthemes. Some participants referred to lists of resources they are asked to produce (77%), such as lesson plans, quizzes, and PowerPoint slides. For example *"Creating activities for the students and creating lesson plans"*, while others (27%) discussed how by reducing workload, the tool might enable them to spend more time on student focused activities *"This could allow me to dedicate more time to direct teaching and individualized instruction"*, and improve teaching by providing ideas and resources that they could use *"I hope it can help me to plan more interesting exercises and demonstrations"*

Most educators were very positive about the potential impact of TeacherMatic on the student experience. For example, *"...i feel the material will improve which will improve student experience."* *"I think the student experience will be improved massively, as this will give me more ways of teaching and different ways of explaining and presenting information."* They also thought that students would be pleased that their teachers were using the most cutting edge technology *"students will be happy that their tutors are using the latest technology to make their learning experience as good as it can be."*, and that so long as the student learning experience was good, students would be happy *"most will not be bothered either way providing their own learning experiences are positive"*.

#### 5.2.2. Theme two: can we trust genAI?

This theme reflected participants previous experiences with ChatGPT and similar tools, and that the materials produced are not always accurate and reliable, and their hopes that TeacherMatic would be better than the tools they have previously experimented with. For example, one participant commented about ChatGPT

*"I found the interface very accessible but found that some of the content I had requested was not current legislation."*

Another commented that *"Information can sometimes be incorrect and it is important to remember this."* A mathematics teacher commented *"The mathematics was particularly troublesome as many mistakes in logic and sometimes even calculation in trigonometry would be incorrect."*

One participant stated that they hoped the tool would *"help me answer my own questions on the learning material to fill in my own gaps in knowledge."* However, this participant had also noted following use of ChatGPT that *"answers [...] produced were sometimes questionable in their accuracy."* Similarly, the mathematics teacher hoped that TeacherMatic would *"Produce more relevant material for teaching that is relatively free of errors."* It is interesting to note that participants are expecting TeacherMatic to have more accuracy than ChatGPT. This suggests that the 'legitimacy' of the TeacherMatic tool may reduce the critical evaluation educators employ when using targeted genAI tools, highlighting the importance of appropriate training in their use.

One educator was cautious about the source of information that the tools would use *"I am still unsure of where the information these platforms have is gained from and is it correct?"*

There were also some concerns around whether the resources generated by the tool would be appropriate for the specific needs of the qualifications delivered within this college *"Content created isn't really relevant to the qualification or isn't pitched at the correct level."*

#### *5.2.3. Theme three: AI's Impact on Teacher Identity and Workload*

This theme reflected educators concerns around AI undermining their identity as teachers – both the role of their relationship with students, and the role that teachers would have in the future, and the ways that the impact of workload might manifest within the environment of vocational education.

Educators were concerned that the tool would be *"a little bit soulless,"* reflecting on the importance of their personal connection with learners. Several concerns were articulated about the lack of personalisation *"miss those personal touches which make up a fulfilling experience at college"* *"the tool might make my teaching less personal."* *"it takes away from the human element of teaching."*

Some people identified TeacherMatic as a threat – they worried *"if the computer-made lessons will be as good as my own."* Other were concerned that *"managers will use this as a way of reducing time given to plan."* Some were worried that *"I won't be given the time to properly understand it"* while others hoped that *"the time I save on thinking and planning translates into more energy in classes."*

Another common concern was around the role of teachers in the future *"The only concern I have is if the AI is replacing the need for teachers"* *"Teachers feeling like they are being replaced."* There were also worries that AI might lead to teachers being reliant on the technology, and not developing their own understanding fully *"Grow lazy and complacent"* *"It could [...] make tutors do less research as the information would be at their fingertips."* *"I worry that overuse of AI could dumb down the learning experience, and the knowledge that a teacher feels they need to commit to memory."*

Views were more mixed when considering what students may think of teachers' use of these tools. Some were concerned that students would think that they were lazy, and cheating *"if they find out that we use AI for lesson plans, resources etc. we run the risk of students complaining that they can't use it even though we can";* *"That we are lazy, get too many holidays and so should have lots of time for planning".*

In summary, when anticipating their use of genAI to support their teaching, educators were generally optimistic and positive about the potential affordances of TeacherMatic, they were concerned about accuracy, workload, and the possible consequences on teachers and their professionalism, of availability of this type of tool. In terms of TAM, these issues are relevant to the ease of use and perceived usefulness of the tool, and are likely to reduce the intention to use and thus the technologies acceptance.

### 5.3. Reflections of training in use of TeacherMatic

Issues were identified with the training provided by TeacherMatic. The trainer stated that the tool would not give false or misleading results relating to legislation, in the specific case of the Health and Safety at Work Act 1974, however, he later clarified that the answers produced must be checked against the relevant regulation or rules. For implementation of generative AI to be effective, limits on the accuracy should be included in training. It is concerning that inaccurate information may be given by commercial providers of AI solutions for educators, and quality of training should be considered when designing future implementations of AI tools.

### 5.4. Survey 2: after using TeacherMatic

In the second survey, there were 10 complete responses, with nine from participants who had used the tool. This was a disappointing response rate, however it reflects the busy nature of FE. The responses were thoughtful and varied, and so we continued with the reflexive thematic analysis. Participants reported they had been using the tool for an average of 4.25 weeks (range 3 – 8). The modal frequency of use was once a week, with two participants reporting using it more frequently. Participants mostly used the tool to create resources for teaching sessions, including PowerPoint slides (67%), quizzes (44%) and lesson planning.

### 5.5. Analysis

Two themes were identified from the responses, flawed but user-friendly, and not much help.

#### *5.5.1. Theme one: Flawed but user-friendly*

Generally, participants reported finding the interface easy to use (89%) but struggled to get the tool to create accurate enough resources. For example:

*“Some of the answers to the quiz it generated were wrong. I ended up spending more time checking things.”*

Participants reported it to be tricky to get appropriate material out of the tool for the specific trade related skills they teach.

*“... you have to be very direct in what you want TeacherMatic to generate when it comes to building trade related skills.”*

Participants expressed concern about the accuracy and currency of the tool (67%), for example: *“how often are rules updated? new equipment new technologies available.”*

Participants were positive about the future of using AI tools (67%). For example

*“I still feel that AI tools are going to be beneficial but at present more work is still required to improve the resources created.”* They persisted in their hopes that it would reduce time spent on preparation and increase the time available to spend with students.

### 5.5.2. Theme two: Not much help

Contrary to expectations, participants reported that the tool generally had little to no impact on their workload. 44% of participants reported it had made some things quicker *"slight reduction in the low-level prep work."* Others reported that *"it wasn't giving me anything I haven't already thought of myself."* And that workload had increased as they had spent time trying to get the tool to produce good quality resources, and then *"have to go away and write the worksheet or the quiz anyway"*

Similarly, participants reported that the tool had little impact on their productivity or work life balance. *"Slight increase [in my productivity] overall, but it is taking some time away to second check output"*

Participants were mostly disappointed with the quality of resources produced. For example, *"The content is minimal and pictures are not relevant."* Other participants thought the resources were good but noted *"however for me I don't feel like they're detailed enough for FE/HE yet."*

Participants showed good levels of awareness of the need to check the accuracy of the information produced by the tools, and one participant expressed caution about the collection of data. *"What data are they collecting? Is there anything running in the background of them? Who is profiting from them?"*

## 6. Discussion

This case study contributes to our understanding of the acceptability of AI tools in a specialist college in many important ways. Educators are enthusiastic and keen to engage with tools which may improve their workload and confidence in delivering education. There is an appetite for AI-tools to help with the creation of teaching aids such as PowerPoint presentations, quizzes, and planning documents. However, there are important considerations in the affordances of these tools in this unique context. The principal concern is around accuracy and applicability of the materials generated. Construction is a highly technical, complex subject, requiring understanding of mathematics, national standards of health and safety, and national considerations (for example, the electrical distribution system varies across countries, Pedro, et al., 2010). Relevant regulations are updated regularly and the curricula that are delivered are detailed and require accuracy. However, the reality of using the tools is that they are not yet sufficiently reliable for widespread adoption. There is confusion in the training provided around the reliability and accuracy of the resources that were generated.

As previously outlined, perceived usefulness and perceived ease of use are the primary determinants of whether a technology will be accepted by users (Marangunić & Granić, 2015), and this evaluation suggests that TeacherMatic currently falls short of this. Educators identified that although the tool was, for the most part, easy to use, its usefulness was limited by poor quality and unreliable accuracy of the outputs.

Park, Lee, and Cheong, (2007) discuss the factors influencing educators' adoption of technological tools using the TAM. They highlight the importance of educators' motivation in their perceptions of usefulness and ease of use, where those educators who are more motivated are more likely to rate tools as useful and easy to use. In this evaluation, the educators involved were mostly very positive about the possibilities of AI, suggesting that motivation is not a limiting factor in the acceptability of the tool. However, maintaining this level of enthusiasm will be a challenge unless the accuracy of the resources generated is improved.

The educators delivering these qualifications are dual professionals, with both a teacher and a trade identity (Esmond & Wood, 2017). Their teacher identity is formed after their trade identity, and educators considered the risk of AI undermining the development of teaching skills, while being enthusiastic about the ability of the tool to improve their own teaching.

While this evaluation of the tool has clearly demonstrated the potential for genAI assistance in this context, the evaluation is limited in several ways. Although the pilot and evaluation were supported by senior leaders, most staff did not engage in the evaluation, despite it being made as accessible and straightforward as possible. This resulted in a smaller number of responses than ideal. The use of online survey methods was chosen to reduce the effort required to participate, but it does not promote as rich a dataset as other qualitative methods such as interviews or focus groups. Additionally, the second stage of the evaluation occurred only a short time after the tool was made available, making this a preliminary evaluation. However, in this context, and with the rapid development of genAI assistance in FE this is still a valuable contribution.

## 7. Conclusion

This evaluation set out to investigate the effectiveness and acceptability of generative AI tools within specialist vocational education in the UK. Within the sector there are structural issues of inadequate funding, poor quality teacher training, and high workloads. The promise of this tool was to mitigate some of these problems. However, the tool fell short in several important ways. Although participants in the research were optimistic about the affordances of technology to assist in their work, the actual experience of the tool was poor, as it lacked accuracy. In part, this reflects that much of the relevant content of technical vocational qualifications are not openly available. For example, current British Standards are not freely downloadable. The most recent iteration of chatGPT 4 allows the creation of specific GPTs, which respond to uploaded documents and specific information. However, uploading relevant standards would violate copyright. If generative AI is to support educators in vocational settings, this will need to be addressed. Professional and awarding bodies need to consider how to support educators and practitioners in an AI-enabled world.

Future efforts to employ generative AI tools in Further Education should consider the specific educational context. It is unlikely that generic tools such as TeacherMatic will be effective in supporting educators with creating resources in specialist technical curriculum areas.

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