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Exploring Educators' Attitudes towards Artificial Intelligence in Maltese Higher Education

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Abstract: Current research about AI in higher education is often quantitative in nature and emphasises student perspectives. This qualitative study aims to explore the attitudes of educators in Malta towards AI in higher education. We utilise one-on-one semi-structured interviews with eight educators across various institutions. Data is analysed using Reflexive Thematic Analysis which follows a six-phase recursive process through thick descriptions. We generated two themes in our analyses: (1) AI is here to stay, so use it responsibly and morally; and (2) AI is a fast-moving train, and institutions should tend to educators' needs lest they be left behind. Participants acknowledge the inevitability of AI in the academic landscape, but their acceptance of it is cautious and conditional. This hesitation stems from their empathy towards students and an understanding that, while AI can help ease academic workloads, it also carries significant risks of misuse. Therefore, educators are calling for a responsible and moral use of AI and a change in the way assessments are done. Participants also perceive AI technologies as fast-developing and express a need for proper training, supportive communities, and recognition of their experiences to be able to "catch up". We also highlight the emotions and experiences educators associate with AI and how Maltese culture influences these experiences. Lastly, in our final considerations, we suggest ways to increase educators' confidence in using AI and its better integration in higher education practices.

Keywords: Artificial intelligence, higher education, educators, attitudes, reflexive thematic analysis, AIHE, teachers, post-secondary education

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INTRODUCTION

Artificial Intelligence (AI) is defined as "computing systems that can engage in human-like processes such as learning, adapting, synthesising, self-correction and use of data for complex processing tasks" (Popenici & Kerr, 2017, p.2). Most innovations associated with these systems are aimed at simplifying human lives. AI became a game-changer when OpenAI introduced ChatGPT in 2022 – a chatbot system that is empowered to generate comprehensive answers to various questions; hence, ChatGPT became students' best friends and educators' worst enemy (Tritscher et al., 2023).

Artificial Intelligence in Higher Education

In a meta-systematic review of 66 studies on AI in higher education (HE), Bond et al. (2024) found that most research highlights positive educational outcomes, including personalised learning (Crompton & Song, 2021; Huang et al., 2021; Crompton & Burke, 2023), student learning support (Holmes et al., 2023), and AI as a teacher assistant (Tuomi, 2018; Crompton & Song, 2021; Kuleto et al., 2021). However, key gaps remain: ethical concerns in AI adoption (40.9%), limited engagement with specific stakeholder groups (21.2%), and a narrow geographic spread of studies (15.2%). Notably, 78% of this research focuses on students, with minimal attention to educators.

Similarly, Chu et al. (2022) reported that the fifty most cited AI studies centre on student profiling, while overlooking AI literacy among both students and staff, as well as user perceptions. Much of this literature remains quantitative (Zawacki-Richter et al., 2019), lacking depth in contextual understanding. This oversight risks creating confusion, fear, cultural bias, and resistance toward AI in education (Samuel et al., 2023).

Trust in AI also varies between students and educators. Karran et al. (2024) show clear differences in how each group views AI's usefulness and reliability. Shah (2024) stresses the importance of AI literacy and maintaining the human element in teaching. As Kizilcec (2024) notes, educator perceptions are crucial—ultimately, it is they who determine whether AI is embraced or rejected in practice.

The Maltese Higher Education Context

Education in Malta is shaped by the island's complex social, cultural, and economic history (Sultana et al., 2019). The system aspires to equip future generations with the skills needed to thrive in a rapidly evolving world (MEYR, 2024a). However, Camilleri (2022) argues that fast-paced technological and economic developments are outpacing the education system's capacity to integrate them effectively. This mismatch places growing pressure on Malta's traditional model of mainstream education, which some portray as outdated (Rosenstock, 2014).

Historically, Malta's education system was modelled on the British system during colonial rule, aiming both to anglicise the population (Frendo, 1979) and offer social mobility to the working classes (Sultana, 1992). Although structural reforms have since adapted teacher training and educational policy to Malta's evolving socio-political context (Sultana et al., 2019), the system remains marked by centralised governance and entrenched bureaucratic processes.

Despite granting professional status to the teaching workforce in 1988, educational decision-making still largely follows a top-down approach (Wain, 1992; Cutajar et al., 2013).

The 2006 Education (Amendment) Act (XIII of 2006) attempted to decentralise governance through the creation of school colleges. While intended to foster collegiality and autonomy, in practice, these reforms reinforced existing hierarchies. Educators and school leaders report limited involvement in policy decisions, with innovation constrained by administrative compliance and a culture of control (Cutajar et al., 2013). Other reforms have focused on reducing early school leaving and promoting lifelong learning to meet the demands of Malta's service-based economy (MEYR, 2024b).

This rigid governance can slow the effective integration of technology in education. Although there has been significant investment in digital tools, implementation has often been reactive and inconsistent, leaving many educators underprepared for a digitised learning environment (Camilleri & Camilleri, 2021). A new shift is underway, with policy discourse turning toward AI. The National AI Strategy (2019) identifies AI as a transformative force and positions education as a key enabler of Malta's ambition to become a global AI leader (Malta AI. Towards a National Strategy, 2019). This is echoed in the National Education Strategy 2024–2030, which aims to align the system with future challenges (MEYR, 2024b).

The most recent initiative, the Digital Education Strategy 2025–2030 (2025), developed by the Directorate for Digital Literacy and Transversal Skills (DDLTS), outlines four strategic pillars for digital transformation in education. The strategy acknowledges educators' concerns about the pace of change and the risk of reform fatigue, but it remains vague on how support—especially around AI integration in teaching—will be meaningfully delivered.

Notably, these policy documents largely focus on compulsory education. Although the Digital Education Strategy (2025) refers to HE in areas such as teacher training and digital competencies, it does not offer a targeted plan to address the sector's specific needs. This may reflect a longer-standing trend of intensifying individual accountability without providing educators with genuine professional agency (Farrugia, 1992; Cutajar et al., 2013). As a result, educators are often expected to implement top-down decisions without sufficient input or support. While HE institutions in Malta may have autonomy in shaping their own approaches to AI, it remains unclear how these decisions impact daily teaching practice.

This policy gap is significant. Educators play a vital role in preparing students for an AI-integrated world and in training future educators for this evolving landscape. Their perspectives are critical in shaping how AI is understood and implemented in education (Kizilcec, 2024; Amado-Salvatierra, 2024). As agents of transformation, educators translate policy into practice (McGrath et al., 2017). Their insights are vital for developing new pedagogies that support critical skill acquisition in the age of AI (Luckin & Holmes, 2016; George, 2023). Given Malta's goal to build an AI-competent workforce as part of its global economic positioning (Malta AI. Towards a National Strategy, 2019), understanding how educators in HE engage with AI is both timely and essential. This study focuses specifically on these educators.

Attitudes from a social constructionist perspective

In this study, attitudes are understood from a social constructionist perspective, which holds that knowledge and meaning are shaped through social interactions and cultural contexts (Berger & Luckmann, 1996). This view challenges conventional understandings of attitudes by exploring the multiple realities individuals construct through their experiences and interpretations. Reality, from this standpoint, is seen as a product of the interplay between personal, social, historical, and cultural influences at a given moment in time (Burr, 2015). This perspective offers a more robust framework for understanding attitudes as part of a "profoundly socialised notion of the self" (Dlamini et al., 2017, p. 3). In line with this, we assume that educators' attitudes toward AI are shaped by their interactions with peers, institutional policies, subjective experiences with AI tools and students, and broader narratives surrounding AI in society (Samuel et al., 2023). We also recognise that both formal discussions and informal conversations contribute to the development of these attitudes.

Previous research has found that educators often resist new technologies due to negative emotional responses, even when they acknowledge the potential benefits (Rienties, 2014). Amado-Salvatierra et al. (2024) note that although many educators are curious about using AI, they often lack adequate training. Leoste et al. (2021) highlight that positive experiences with emerging technologies, including AI, are associated with more favourable attitudes and a greater willingness to integrate them. Conversely, Humble and Mozelius (2022) suggest that perceiving AI as politically biased can increase resistance.

Understanding how these social and cultural discourses shape educators' attitudes is essential to grasp their openness to integrating AI in HE. This study seeks to explore how educators in Maltese HE interpret and experience AI, and how these perceptions influence their professional roles. A qualitative methodology enables us to examine these dynamics in depth.

MATERIALS AND METHODS

Recruitment, participants, and data generation

Participation in our study was open to educators working full-time in HE institutions in Malta. Some of the participants who matched the inclusion criteria were recruited through online volunteer sampling. A social media blurb was posted on LinkedIn, Facebook and WhatsApp to reach our professional networks in HE institutions. The blurb contained information about our study with a Google form link where interested participants could leave their contact details. The rest of the participants were recruited through referral sampling since we all have professional links to various educational institutions in Malta. An invitation to participate in our study was sent to the professional email addresses of the educators who expressed interest online and through referrals. The invitation included the information sheet, consent form and solicitation of their availability for a one-on-one interview.

Based on our preliminary readings and our experiences in education, we created an interview guide with ten questions aimed at exploring the different facets of attitudes — mainly cognition, emotions, and behaviour (Zanna & Rempel, 1988). Eight educators from various HE institutions participated in our study. Four participants opted for a face-to-face interview while

the others were interviewed via Zoom. Semi-structured interviews were conducted following a set of open-ended questions about AI in HE. We chose this method to allow our participants to express their attitudes towards the topic freely. This also allowed us to delve into individual thinking processes by exploring and probing our participants' unique responses, enabling the participants to guide our questioning (Bariball & White, 1994; Galletta, 2013). Furthermore, individual interviews facilitated an in-depth exploration of the interviewee's worldview, focusing on the dyadic social interaction where the dialogue on ideas and meanings is further explored and developed (Gaskell, 2000).

Each interview lasted 40 to 60 minutes and was audio-recorded with the participants' consent. We started each interview with opening questions about the participants' experiences and interest in the profession to build trust and rapport (Tracy, 2020). Trust and rapport compelled participants to be more expansive in their worldview (Gaskell, 2000). We were mindful in striking a balance in rapport building which strove for "formality rather than familiarity" (Seidman, 2019, p. 103). The recordings were transcribed verbatim. Four interviews were transcribed manually, while the others were transcribed using AI transcription tools. The written transcripts generated by AI were then checked manually to ensure accuracy. We assigned a pseudonym to each participant and omitted any identifying information that could compromise anonymity. Finally, this research conformed with the University of Malta's Research Code of Practice and Research Ethics Review Procedures.

Data Analysis

Data was analysed using Reflexive Thematic Analysis (RTA) (Braun & Clarke, 2022). Unlike other forms of thematic analysis, RTA enables us to actively generate themes from the data and its intersection with our analytical skills and theoretical assumptions about AI in HE (Braun & Clarke, 2019). We utilised both deductive and inductive approaches in our study. We developed our interview guide using a deductive approach by parsing extant literature for relevant issues during the interview. We used an inductive approach for data analysis to allow a more nuanced interpretation of the data.

We followed the six-phase recursive process of RTA: (1) familiarisation, (2) coding, (3) generating initial themes, (4) developing and reviewing themes, (5) refining, defining, and naming themes; and (6) writing up (Braun & Clarke, 2022). To familiarise ourselves with the dataset, we engaged in individual and group listening sessions and re-reading transcripts. We made memos and discussed our initial reflections informally. We started coding using NVivo to aid us in data management and peer coding. We opted for peer coding instead of individual coding to welcome different meanings and analyses from each researcher. The goal was not to reach a consensus but to provide an opportunity for richer immersion and higher defensibility of codes. The codes generated were done both semantically and latently. Due to the hierarchical nature of NVivo in code clustering, we opted for a traditional approach of print and paper as we found it practical and adaptable to our analytic process. We examined the final list of codes individually and as a group to develop broader patterns of meaning. We generated two main themes through a recursive process of clustering codes, generation of initial themes, review of

the themes in relation to code extracts and code labels and further refinement. The writing was executed in a group setting following the guidelines outlined by Braun & Clarke (2024).

Reflexivity

Each researcher kept a reflexive journal to track personal worldviews, beliefs, and practices throughout the research process. This helped us focus on relationships and meaning making, deepening our understanding of the process (Etherington, 2004). We worked within a social constructionist paradigm, viewing reality as socially and culturally constructed through discourse and language (Burr, 2015). We acknowledge that educators in Malta experience and interpret AI differently. Their meaning-making—and our interpretation of it—shapes the foundation of this study.

Taking a critical stance, we used reflexivity to challenge our assumptions and expand our thinking beyond individual limitations (Lazard & McAvoy, 2020). We engaged in regular peer-group discussions to reflect on positionality (Dean et al., 2018), beliefs, participant interactions, and how our experiences influenced the research. Reflexive Thematic Analysis (RTA) was conducted as a group to draw on our varied perspectives, strengthen the defensibility of our process (Braun & Clarke, 2022), and practise crystallisation (Tracy, 2010).

We followed a Big Q qualitative approach (Kidder & Fine, 1987), which aligned with RTA. Semi-structured interviews allowed for both consistent and participant-guided questioning, enabling researchers to explore participants' subjective worldviews. Our analysis followed the six phases of RTA in a non-linear, recursive manner—revisiting codes and themes throughout. This inductive, interpretive approach aimed for depth and flexibility (Finlay, 2021).

We spent considerable time in the familiarisation phase, sharing insights to maintain transparency (Levitt et al., 2017). Our coding process was complex, with multiple layers of meaning often requiring multiple codes. We prioritised latent meaning and valued reflexivity as both a strength (Finlay, 2021) and a resource that enriched our interpretations (Braun & Clarke, 2023).

The research team brought diverse perspectives shaped by differences in age, background, and roles. One member, a HE educator, contributed an insider's view. All researchers were also students, offering perspectives that complemented those of our participants. While most team members were Maltese, one was not, which added an outsider's lens to uncover cultural nuances others might miss. Our reflective meetings created a respectful space for dialogue, resulting in a richer, more comprehensive understanding of educators' attitudes toward AI.

RESULTS AND DISCUSSIONS

Theme 1 - AI is here to stay, so use it responsibly and morally.

This theme explores the participants' acknowledgement that AI has become part of the education system. George mentioned that AI is already affecting education:

George: It is directly affecting the pedagogy that is going on in the classroom. [...] eventually [it] would seep into classroom practices. Definitely, this is going to have an impact."

All participants express empathy towards their students. They recognise that AI could potentially alleviate educational pressures, acknowledging that students' work can be improved with AI's functionality. Their empathic response showcases educators' complex and sometimes latent affective roles towards their students (Hargreaves, 1998). Educators draw from their own experiences when they were students to understand their students' perspectives. Some educators even mention the introduction of electronic calculators or the internet search engine in their own academic journey.

Carmen: And I cannot blame them [...] why would you spend hours trying to work out [...] if you can get AI to do it for you in five minutes? So, I cannot blame them for using AI [...] I was in the same position. And I chose to use calculators [...] and I choose to use AI myself.

Empathy has been discussed to have powerful effects on the quality of learning (Cooper, 2004). Empathy is a phenomenon that develops over time and is dependent on the social context and the actor (Cooper, 2002). With all its historical, political and economic influences, Malta's educational system can be seen to provide what Cooper (2004) argues as a constrained system in which educators' conditions degrade their impact as moral models, leaving students' needs for guidance and personalised learning unmet. We think that in such a challenging and novel era of teaching with AI, educators are relying on their affective role to navigate this phase and provide guidance on how to use this technology responsibly. Fried (1995) contends that teaching is a passionate vocation; and in an era of ever-changing pedagogical challenges, being passionate about learning and giving importance to the relationship between students and teachers can transform students' educational experience. This helps educators manage educational reform (Hargreaves, 1998).

Daniela: And the truth is, when students are young, they have other priorities: going out, enjoying life, socialising... And we have a number of students here who have two jobs or three even. So, they do not really dedicate any time to assignments, so then popping an answer from ChatGPT is a lot more efficient. So why should I bother if I can get the answer from there anyway?

AI can provide personalised assistance to each student's learning journey (Holmes et al., 2023). It has the potential to further supplement the affective role of the educator and enable them to meet their students' needs better. However, it is important to note that participants seem to only hold a conditional acceptance of AI, meaning that AI can be used as assistance as long as it does not defeat the purpose of education. Due to AI's accessibility and fast process in generating information (Tritscher et al., 2023), it comes with a high propensity to be misused in the educational setting. Some participants are only open to its integration based on their subjective understanding of its appropriate use.

Bernard: It can help them in their education and learning if used well.

Different participants had different conditions; for instance, it is acceptable to ameliorate writing or simplify concepts, but it is condemned if used to do all the work for students.

Anthony: It helps you when it comes to grammar, when it comes to academic writing, etc., those are fine [...] It is the other tools that create things for you which I do not like; they create everything for you, and they tend to make the decisions lazy.

Emma: I am fully supportive of that. If the students feel that AI can help them in generating concepts and simplifying concepts, so be it, you know? So, I am happy with that.

This conditional acceptance is linked to how educators make sense of the educational process and what it means to be a responsible student. A moral undercurrent emerged from the participants' transcripts, accentuating a good and bad way of learning.

Bernard: If you are intrinsically motivated, or extrinsically... if you just want to get homework out of the way, you are not really motivated to put your hundred percent and to learn from this experience, you are going to take a shortcut, and AI is perfect.

Our participants mention several instances where their students misused AI. Their experiences are reflected in existing literature which highlights that educators' concerns about AI misuse are associated with their resistance to its full integration in education (Shah, 2023). This creates a moral dilemma for them. They recognise the benefits of AI as it can potentially enhance students' knowledge and learning process. However, it can also contradict education's goals: to help students become independent, critical learners, and, eventually, good employees and citizens. Participants believe this issue can be potentially and partly addressed by teaching students to use AI responsibly.

Emma: the students must be told, educated... they must experience the fact that you should not use it as a substitute for your brain. And if they are told that, and they are educated in how to use an AI intelligently [...] I don't think it will have serious drawbacks [...] so if I create that positive environment, then they are using AI for the things that they can actually automate.

Daniela: Sometimes I think of technology as though it were [...] cigarettes or alcohol, so I'm not against them completely, but before you drink alcohol, you need to learn how to drink it responsibly. And if you allow a five-year-old child to drink alcohol, they're not ready for it yet, and sometimes I feel the same thing should happen with AI.

Participants describe how assessment needs to change to guide students in using AI responsibly. They recognise their responsibility to prepare students for a future where the use of AI will be necessary for future careers. They feel that developing critical thinking skills is essential in preparing students for this future reality.

Daniela: What I think will happen is, we're going to get a generation of students who used AI to compile or do all their assignments and we're going to have a generation of people who don't think, even more than before [...] 'cause I think the whole AI thing is being mismanaged from a very young age; it is comfortable, you have the answer, you finish quickly, you're done, but if we're not going to change the assessment we're going to have many unprepared students. Unprepared in the sense that they cannot think critically. And that worries me.

Educators are also striving to increase student engagement by making education relevant to them. However, they also feel trepidation about using gimmicks that only transform learning superficially, aligning temporarily with the current trend (Harrer, 2023). Nonetheless, even educators with a more negative outlook towards AI admit that AI has undeniable benefits, such as perceived reduction of cognitive load and freeing of time.

Emma: Now, I firmly believe that if you don't need to do something, you shouldn't be doing it. So, if you can outsource that task, then you should. From the simple case of a robot which hoovers my floor, to an AI which gives me a list of concepts. I do believe that [...] we should really make use of the best technology, or at least the technology we best afford to release time and effort and mental energy from ourselves, so that we can be using that mental energy elsewhere.

AI is a galvanising technology that will shape our education experience (Chu et al., 2022). It has already been incorporated into search engines and computer writing software tools. Educators are quickly realising that AI can help expedite certain mundane and tedious tasks while leaving room for more time to invest in things that AI cannot yet do.

George: I am the kind of person who thinks that if you have a resource which is ready for you. [...] Obviously, it would be absurd if you try to do something else because it's there and it's ready.

Educators recognise that AI has become an inevitable part of the education system—regardless of whether they support or oppose it. In HE, attempts to circumvent AI are increasingly seen as counterproductive, especially given its potential to support students in pursuing higher-order cognitive tasks (Samuel et al., 2023). As a result, many educators advocate for the responsible and ethical use of AI. This moral framing appears to fill a structural gap left by national strategies. While policies such as the Digital Education Strategy 2025–2030 promote digital competence, they primarily focus on compulsory education and lack clear guidance for ethical and pedagogical implementation in the HE sector. In the absence of detailed policy frameworks, educators rely on their personal ethics and professional experience to navigate AI use in their practice. This emphasis on moral responsibility aligns with earlier findings by Farrugia (1994) and Wain (1992), who noted that Maltese educators are often expected to implement broad reform initiatives without clear systemic direction. As a result, educators turn to their own judgment and moral reasoning in response to policy ambiguity.

Theme 2: AI is a fast-moving train and institutions should tend to educators' needs lest they be left behind.

Participants perceive AI technologies as fast-developing and this is pervasively felt in the Maltese HE system. Educators engage with AI in students' submitted work, conferences, seminars, and peer conversations. Some participants have expressed the opinion they cannot keep up with these developments and are concerned that some educators will be left behind.

Carmen: Sometimes it feels like you have just finished learning one system, and they've changed it all over again. And now you have a new system to learn. Which gets, let's face it, quite tiring [...] I can't keep up, you know? They have so many, so many developments.

Bernard: The educator needs to sort of catch up so they won't be left behind.

We used the moving train analogy to describe this phenomenon because AI innovations move at a certain speed and direction. It is an entirely new technology that operates differently from other technologies, and educators have little control over its infiltration into the education system. The participants' subjective experience of lack of control contrasts extant literature that holds that educators are the final decision makers in the incorporation or resistance of AI (Kizilcec, 2024). Their classroom is their domain; however, the participants' lack of empowerment in the AI realm can contribute to reform fatigue that the National Education Strategy 2024-2030 aims to address. This became more apparent to us as our participants expressed defeat over AI.

Emma: So it's [AI] here to stay. We have to deal with it [...] some of our roles will be redundant. That is something we have to accept [...] I don't like it, but I have to accept it.

Many participants share this new perception of reality which requires them to immediately learn AI, monitor its use in class and eventually integrate it into their pedagogies. All of this requires time, effort and an added role. Hargreaves (1998) argued that "the sheer cumulative impact of multiple, complex, non-negotiable innovations on teachers' time, energy, motivation, opportunities to reflect, and their very capacity to copy" (p. 6) can be problematic. The misalignment between ambitious national strategies and the realistic day-to-day implementation contributes to educators' uncertainty, reinforcing the idea that the integration of AI in their pedagogy is an individual burden rather than a systemic, supported transformation. Therefore, educational institutions must tend to educators' needs in a timely manner in this crucial period because their experiences and worldviews matter. Ultimately, educators are the conduits of change in HE and the translators of policies into practices (McGrath et al., 2017).

Our participants expressed the following needs to catch up with AI: proper and practical training, a supportive community and the opportunity to be seen and heard. Participants emphasise training specifically as a way to deal with the ambiguities they feel surrounding AI use.

Henry: I need good training. I need to understand what it is [...] how I can use it with my students, and [...] how I can incorporate it into my methods without compromising the integrity of the academic process.

Recent findings of Amado-Salvatierra et al. (2024) indicate how multifaceted training provided by institutions contributes to the overall preparedness of university educators to incorporate AI. These trainings are carried out via webinars, workshops and courses. Moreover, they found that supportive communities play a role in combating the challenges AI brings to HE. These communities occur in interdisciplinary forums and knowledge exchanges where educators share successful strategies and promote AI learning. Many of our participants expressed this need for a collaborative community or support groups where they can converse, share tips and gather resources about AI.

Francesca: imma nixtieq ħafna, u l-iktar li nieħu pjaċir meta nisma' lil ħaddieħor flistaff room li jkun użaha u jtuni dawn in-naqra ideat, u feedback, biex dan is-sajf ikolli naqra ċans u nagħmilha (I really would like to [use it], I really enjoy it when colleagues of mine in the staffroom share ways of how they used it as they give me some inspiration and feedback, so that I can find some time during the summer recess and do it).

Some educators with more productive experiences of AI in class can share it with those who are uncertain. For instance, Daniela encountered a student who was not taking notes for a crucial evaluation procedure being discussed. The student was confronted and admitted that ChatGPT had already given them the points which Daniela considered valid. She was faced with a dilemma of either reprimanding the student or welcoming this in class. Daniela decided to project ChatGPT's replies and asked the class to critically analyse and evaluate these responses to see what needed to be improved. In this approach, Daniela, an educator with an IT background, exemplified openness to creatively integrate AI and exercised good pedagogical practices by cultivating critical thinking skills. Daniela's practices can give ideas to other educators on how to approach AI in class which could also potentially influence their attitudes towards it (Samuel et al., 2023). These proactive and collaborative approaches from institutions and educators can create a learning environment that still upholds academic integrity and educational goals.

Emma: If it's a one-man band, if it's people doing things separately, it will take time to integrate it into the processes; but, if we do it collaboratively, I feel that that can be a much faster process.

Finally, institutions must also recognise the negative emotions and experiences educators encounter from AI. Rienties (2014) found that educators often resist new technological systems due to negative emotional responses despite recognising their usefulness. Carmen pointed out that AI can amplify educators' feelings of inadequacy. This can be seen in specific scenarios such as correcting written assignments. When students submit work with impeccable grammar and vocabulary, educators who are not confident in their literacy skills doubt themselves and the students' work as they have no proof of whether AI did the work. Some educators feel intimidated by AI and lose their confidence. This is particularly relevant in Malta. Although English is an official language, many educators feel more confident using their native language, Maltese.

Carmen: Especially when it comes to the English language. Many Maltese educators are not that confident in their English. And so when a student presents an essay in impeccable English... they want to say it's AI, on the other hand, they have no proof.

Additionally, since AI provides vast amounts of easily accessible information to students, it undermines the traditional role of educators. It places them in a potentially embarrassing position due to the cultural expectation of them being an "oracle" of knowledge, the traditional Maltese cultural and historical fount of knowledge, dating back to prehistoric times.

Some participants also feel alone and abandoned when evaluating students' work and determining whether AI generated it. Some use online software to check authenticity, while

others need institutions to back up their suspicions. However, educators feel that institutions take a passive approach which fosters an indifferent attitude towards AI, discouraging educators from raising valid concerns. These experiences reflect earlier critiques discussed about Malta's educational system, where accountability is often put on the individual and reform is top-down, without fostering a community of collaboration needed to support transformative change (Farrugia, 1992; Cutajar et al., 2013).

Henry: So, if authorities couldn't care less, then why should we try and resist it? Why should we try and raise our concerns? So, I think now, we're waving the white flag. We've given up.

Some participants perceive the Maltese educational system as relatively rigid, with a lack of support from administrative entities within the system. This might reflect cultural and historical undertones of how British colonists initially set up the Maltese education system to anglicise the population. Still heavily reliant on the British system, the current system often adopts reforms with little adaptation to the local context, leaving educators feeling that educational strategies are distant or do not address the concerns they face on a daily basis with their students. Gergen (1973) holds that knowledge is a product of a particular historical and cultural location and it is mostly shaped by the interactions between people and their underlying power relations. As a society, Malta is still struggling to find its voice in moulding an educational system that serves the country's needs while balancing European and international expectations. Although educational strategies are published and there is an effort to decentralise decision-making, educators still feel pressured to find ways to implement them in a changing era.

Participants also share their fear surrounding AI. They emphasise that this fear comes from not knowing enough about it or fearing the unknown. Fear of the unknown is recognised as an emotion and a perceived absence of information (Carleton, 2016), encompassing external uncertainties about environmental threats and internal uncertainties about one's resources to deal with such threats (Hong & Cheung, 2015). It is also noteworthy that the fear Maltese educators feel towards AI might be due to the collective cultural trait of not being open to change.

Bernard: I have experienced many educators being fearful of AI, or any form of change [...] their openness to change - Big Five - on the low side. So, there's gonna be a lot of obstacles.

Past research found that teachers need to cope in a rapidly changing society and flexible thinkers are less likely to resist change while being more likely to embrace new learning and working environments and initiate change (Hattie, 2012; Barak, 2016; Legris et al., 2003; Oreg et al., 2008). However, the fast-paced trajectory of AI developments still leaves educators with a tremendous amount of pressure brought about by technostress (Wang et al., 2021). Educators express the need to figuratively catch their breath as this could potentially contribute to the overall experience of fatigue.

Henry: we're expected to be pop psychologists [...] we're expected to know first aid mental health. We're expected to know how to deal with autism, ADHD, Asperger's syndrome

[...] On top of that, now we have to be AI experts! [...] I reached the end of the semester exhausted.

These disclosures have shed light on how educators experience the rise of AI in the Maltese HE system. Their overall needs must be met to continue their effective teaching while incorporating AI into their pedagogies. Ultimately, the participants expressed both negative and positive insights resulting in ambivalence as to how AI technology develops and impacts HE.

Conclusion

This study explored how educators perceive AI as an unavoidable part of their professional reality. While attitudes vary, there is clear concern about responsible and ethical use. Educators also recognise a broader shift in educational roles, expectations, and identities, and they express a strong need for institutional support and community to navigate these changes.

We argue that further psychological research is essential to understand educators' perceptions, experiences, and attitudes toward AI. By capturing their lived realities, we can generate practical, context-sensitive recommendations for educators, students, and institutions:

- More research is needed to identify local barriers to AI integration, especially as Malta positions itself as a hub for 21st-century skills and innovation. Globally, it is vital to include educators' voices in policymaking and reform processes—a lesson that applies beyond the Maltese context.
- Building educators' confidence and AI literacy requires flexible, tailored support. Interactive, hands-on training—delivered through small-group sessions and integrated into existing professional development—can better meet diverse needs. Specialised courses should also be available for those wishing to deepen their engagement with AI in education.
- Creating spaces for educators to share their experiences, locally and internationally, would foster supportive communities that help them process and apply AI knowledge in meaningful ways.
- National policies must include a dedicated AI strategy for HE. This should involve all relevant stakeholders, reflect institutional diversity, and provide a baseline for developing clear, context-specific ethical and pedagogical guidelines—ideally co-created with educators.
- HE institutions should prioritise bottom-up approaches, enabling grassroots innovation in AI pedagogy. Educators need time, resources, and funding to experiment, with successful practices feeding back into policy and training structures.

In summary, understanding educators' experiences is critical for integrating AI in ways that align with educational values and realities. Tailored support, collaborative communities, and inclusive policy development are essential for harnessing AI's potential in HE—while maintaining ethical integrity and human-centred learning.

REFERENCES

- Amado-Salvatierra, H. R., Morales-Chan, M., Hernandez-Rizzardini, R., & Rosales, M. (2024). Exploring Educators' Perceptions: Artificial Intelligence Integration in Higher Education. Paper presented at the 2024 IEEE World Engineering Education Conference (EDUNINE), 1-5. DOI: 10.1109/EDUNINE60625.2024.10500578
- Barak, M., & Levenberg, A. (2016). A model of flexible thinking in contemporary education. *Thinking Skills and Creativity*, 22, 74-85. DOI: 10.1016/j.tsc.2016.09.003
- Barriball, K. L., & While, A. (1994). Collecting data using a semi-structured interview: a discussion paper. *Journal of Advanced Nursing-Institutional Subscription*, 19(2), 328-335. DOI: 10.1111/j.1365-2648.1994.tb01088.x
- Berger, P., & Luckmann, T. (1966). The reality of everyday life. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, 33-42.
- Bond, M., Khosravi, H., De Laat, M., Bergdahl, N., Negrea, V., Oxley, E., Pham, P., Chong, S. W., & Siemens, G. (2024). A meta systematic review of artificial intelligence in higher education: a call for increased ethics, collaboration, and rigour. *International Journal of Educational Technology in Higher Education*, 21(1), 4. DOI: 10.1186/s41239-023-00436-z
- Burr, V. (2015). Social constructionism. Routledge.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. DOI: 10.1080/2159676X.2019.1628806
- Braun, V., & Clarke, V. (2022). *Thematic Analysis: A Practical Guide*. SAGE Publications.
- Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health*, 24(1), 1-6.DOI: 10.1080/26895269.2022.2129597
- Braun, V., & Clarke, V. (2024). Supporting best practice in reflexive thematic analysis reporting in Palliative Medicine: A review of published research and introduction to the Reflexive Thematic Analysis Reporting Guidelines (RTARG). *Palliative Medicine*, *38*(6), 608-616. DOI:10.1177/02692163241234800
- Camilleri, M.A., & Camilleri A. (2021). The Acceptance of Learning Management Systems and Video Conferencing Technologies: Lessons Learned from COVID-19. *SSRN Electronic Journal*. DOI: 10.2139/ssrn.3905093.
- Camilleri P. (2022). Planning at the edge of tomorrow: a structurational interpretation of Maltese AI-related policies and the necessity for a disruption in education. *In P. P. Churi, S. Joshi, M. Elhoseny, & A. Omrane (Eds.), Artificial Intelligence in Higher Education: A Practical Approach*. Milton Park: Taylor & Francis Limited.
- Carleton, R. N. (2016). Fear of the unknown: One fear to rule them all? *Journal of anxiety disorders*, 41, 5-21. DOI: 10.1016/j.janxdis.2016.03.011

- Chu, H., Hwang, G., Tu, Y., & Yang, K. (2022). Roles and research trends of artificial intelligence in higher education: A systematic review of the top 50 most-cited articles. Australasian Journal of Educational Technology, 38(3), 22-42. DOI: 10.14742/ajet.752
- Cooper, B. (2002). Teachers as moral models? The role of empathy in teacher/pupil relationships. *Unpublished PhD thesis, Leeds Metropolitan University*.
- Cooper, B. (2004). Empathy, interaction and caring: Teachers' roles in a constrained environment. *Pastoral Care in Education*, 22(3), 12-21. DOI: <u>10.1111/j.0264-3944.2004.00299.x</u>
- Crompton, H., & Burke, D. (2023). Artificial intelligence in higher education: the state of the field. *International Journal of Educational Technology in Higher Education*, 20(1), 22. DOI: 10.1186/s41239-023-00392-8
- Crompton, H., & Song, D. (2021). The potential of artificial intelligence in higher education. *Revista Virtual Universidad Catolica Del Norte*, 62. DOI: 10.35575/rvucn.n62a1
- Cutajar, M., Bezzina, C., & James, C. (2013). Educational reforms in Malta: A missed opportunity to establish distributed governance. *Management in Education*, 27(3), 118-124. DOI: 10.1177/0892020613490872
- Dean, J., Furness, P., Verrier, D., Lennon, H., Bennett, C., & Spencer, S. (2018). Desert island data: *An investigation into researcher positionality. Qualitative Research*, 18(3), 273-289. DOI: 10.1177/146879411771461
- Dlamini, T., Willmott, D., & Ryan, S. (2017). The basis and structure of attitudes: A critical evaluation of experimental, discursive, and social constructionist psychological perspectives. *Psychology and Behavioral Science: An International Journal*, *6*(1), 1-6. DOI: 10.19080/PBSIJ.2017.06.555680
- Etherington, K. (2004). *Becoming a reflexive researcher: Using Our Selves in Research*. Jessica Kingsley Publishers.
- Farrugia, C.J. Authority and control in the Maltese educational system. *Int Rev Educ 38*, 155–171 (1992). DOI: 10.1007/BF01098511
- Finlay, L. (2021). Thematic analysis: the 'good', the 'bad' and the 'ugly'. *European Journal for Qualitative Research in Psychotherapy*, 11, 103-116. https://ejqrp.org/index.php/ejqrp/article/view/136
- Fried, R. L. (1995). The Passionate Teacher: A Practical Guide. Beacon Press.
- Frendo, H. (1979). Party Politics in a Fortress Colony: The Maltese Experience. Midsea Publications.
- Galletta, A. (2013). Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication (Vol. 18). NYU press.
- Gaskell, G. (2000). Individual and Group Interviewing. *Qualitative Researching with Text, Image and Sound: A Practical Handbook for Social Research, 38.* DOI: 10.4135/9781849209731.n3

- George, A. S. (2023). Preparing Students for an AI-Driven World: Rethinking Curriculum and Pedagogy in the Age of Artificial Intelligence. *Partners Universal Innovative Research Publication*, *1*(2), 112-136. DOI: 10.5281/zenodo.10245675
- Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26(2), 309. DOI: 10.1037/h0034436
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835–854. DOI: 10.1016/80742-051x(98)00025-0
- Harrer, S. (2023). Attention is not all you need: the complicated case of ethically using large language models in healthcare and medicine. *EBioMedicine*, 90. DOI: 10.1016/j.ebiom.2023.104512
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Holmes, W., Bialik, M., & Fadel, C. (2023). *Artificial Intelligence in Education*. Globethics Publications. DOI: 10.58863/20.500.12424/4276068
- Hong, R. Y., & Cheung, M. W. L. (2015). The structure of cognitive vulnerabilities to depression and anxiety: evidence for a common core etiologic process based on a metaanalytic review. *Clinical Psychological Science*, 3, 892–912. DOI: 10.1177/2167702614553789
- Huang, S., Yang, J., Fong, S., & Zhao, Q. (2021). Artificial intelligence in the diagnosis of COVID-19: challenges and perspectives. *International Journal of Biological Sciences*, 17(6), 1581. DOI: 10.7150/ijbs.58855
- Humble N., & Mozelius, P. (2022). The threat, hype, and promise of artificial intelligence in education. *Discover Artificial Intelligence*, 2(1), 22. DOI: 10.1007/s44163-022-00039-z
- Karran, A.K., Charland, P., Martineau, J. T., de Guinea, A.O., Lesage, A.M., Senecal, S., & Leger, P.M. (2024). *Multi-stakeholder Perspective on Responsible Artificial Intelligence and Acceptability in Education*. DOI: 10.48550/arXiv.2402.15027
- Kidder, L.H., & Fine, M. (1987). Qualitative and quantitative methods: When stories converge.

 New Directions for Program Evaluation, 1987, 57-75. DOI: 10.1002/ev.1459
- Kizilcec, R. F. (2024). To advance AI use in education, focus on understanding educators. *International Journal of Artificial Intelligence in Education*, 34(1), 12-19. DOI: 10.1007/s40593-023-00351-4
- Kuleto, V., Ilić, M., Dumangiu, M., Ranković, M., Martins, O. M., Păun, D., & Mihoreanu, L. (2021). Exploring opportunities and challenges of artificial intelligence and machine learning in higher education institutions. *Sustainability*, *13*(18), 10424. DOI: 10.3390/su131810424
- Lazard, L., & McAvoy, J. (2020). Doing reflexivity in psychological research: What's the point? what's the practice? *Qualitative Research in Psychology*, 17(2), 159-177. DOI: 10.1080/14780887.2017.1400144

- Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information & Management*, 40(3), 191-204. DOI: 10.1016/S0378-7206(01)00143-4
- Leoste, J., Jõgi, L., Õun, T., Pastor, L., San Martín López, J., & Grauberg, I. (2021). Perceptions about the future of integrating emerging technologies into higher education—the case of robotics with artificial intelligence. *Computers*, 10(9), 110. DOI: 10.3390/computers10090110
- Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, *4*(1), 2–22. DOI: 10.1037/qup0000082
- Luckin, R., & Holmes, W. (2016). *Intelligence Unleashed: An Argument for AI in Education*. Pearson. https://static.googleusercontent.com/media/edu.google.com/en//pdfs/Intelligence-Unleashed-Publication.pdf
- Malta AI. Towards a National Strategy. (2019). Malta the ultimate AI launchpad. A strategy and vision of Artificial Intelligence in Malta 2030. *In Parliamentary secretariat for "financial services, digital economy and innovation. Office of the Prime Minister.* https://malta.ai/wp-content/uploads/2019/11/Malta_The_Ultimate_AI_Launchepad_vFinal.pdf
- McGrath, C. (2017). What we talk about when we talk about change: a study of change practice and change agency in higher education (Doctoral dissertation), Karolinska Institutet.
- Ministry for Education, Sport, Youth, Research and Innovation. (2025). *Digital education strategy* 2025–2030. https://education.gov.mt/wp-content/uploads/2025/03/NS_DDLTS-25_Eng-NOBLEED.pdf
- Oreg, S., Bayazit, M., Vakola, M., Arciniega, L., Armenakis, A., Barkauskiene, R., Bozionelos, N., Fujimoto, Y., González, L., Han, J., Hřebíčková, M., Jimmieson, N., Kordačová, J., Mitsuhashi, H., Mlačić, B., Ferić, I., Topić, M. K., Ohly, S., Saksvik, P. Ø., . . . van Dam, K. (2008). Dispositional resistance to change: Measurement equivalence and the link to personal values across 17 nations. *Journal of Applied Psychology*, *93*(4), 935–944. DOI: 10.1037/0021-9010.93.4.935
- Popenici, S. A., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22.
- Rosenstock, L. (2014). Fundamental change in education. *In A rich seam. How new pedagogies*"and deep learning.

 www.michaelfullan.ca/wpcontent/uploads/2014/01/3897.Rich_Seam_web.pdf
- Rienties, Bart and Alden, Bethany (2014). Emotions used in Learning Analytics: a state-of-the-art review. *LACE Review 2; In Measuring and Understanding Learner Emotions:*

- Evidence and Prospects LACE project. https://oro.open.ac.uk/72634/1/LACE_emotions_05_12_2014%20copy.pdf
- Samuel, Y., Brennan-Tonetta, M., Samuel, J., Kashyap, R., Kumar, V., Krishna Kaashyap, S., Chidipothu, N., Anand, I., & Jain, P. (2023). Cultivation of Human Centered Artificial Intelligence: Culturally Adaptive Thinking in Education (CATE) for AI. *Frontiers in Artificial Intelligence*, 6, 1198180. DOI: 10.3389/frai.2023.1198180
- Sciberras, M., & Dingli, A. (2023). *Investigating AI Readiness in the Maltese Public Administration (Vol. 568)*. Springer Nature.
- Seidman, S. (2019). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. Teachers College Press.
- Shah, P. (2023). AI and the Future of Education: Teaching in the Age of Artificial Intelligence. John Wiley & Sons.
- Sultana, R.G. (1992). Education and National Development: Historical and Critical Perspectives on Vocational Schooling in Malta. Mireva Publications.
- Sultana, R. G., Gellel, A. M., & Caruana, S., (2019). Teacher education in Malta. In K. G. Karras & C. C. Wolhuter (Eds), *International handbook of teacher education*, 397-414. H.M. Studies & Publishing.
- XIII of 2006 Education Act (Amendment) Act (2006). Retrieved from https://legislation.mt/eli/act/2006/13/eng
- The Ministry for Education, Sport, Youth, Research and Innovation; (MEYR). (2024a). *Missions and Responsibilities of our Ministry*. Government of Malta. Retrieved from https://education.gov.mt/ministry/
- The Ministry for Education, Sport, Youth, Research and Innovation; (MEYR) (2024b). *Visioning the future by Transforming Education: National Education Strategy 2024-2030.* Government of Malta. Retrieved from https://education.gov.mt/wp-content/uploads/2023/12/NATIONAL-EDUCATION-BOOKLET-DEC-2023-2030.pdf
- Tracy, S. J. (2019). Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact. John Wiley & Sons.
- Tritscher, R., Röck, J., & Schlögl, S. (2023). Educ-AI-ted–Investigating Educators' Perspectives Concerning the Use of AI in University Teaching and Learning. Paper presented at the *International Workshop on Learning Technology for Education Challenges*, 241-254. DOI: 10.1007/978-3-031-34754-2_20
- Tuomi, I. (2022). Artificial intelligence, 21st century competences, and socio-emotional learning in education: More than high-risk? *European Journal of Education*, 57(4), 601-619. DOI: 10.13140/RG.2.2.13681.15209

- Wain, K., (1994). Secondary Education and Research in Malta: An Overview. *In Heywood P., Wain K., & Calleja J (Eds), Research into Secondary School Curricula, 45-55.* CRC Press. ISBN 9781003077435. DOI: 10.1201/9781003077435
- Wang, H., Ding, H., & Kong, X. (2023). Understanding technostress and employee well-being in digital work: the roles of work exhaustion and workplace knowledge diversity. *International Journal of Manpower*, 44(2), 334-353. DOI: 10.1108/IJM-08-2021-0480
- Zanna, M. P., & Rempel, J. K. (1988). Attitudes: a new look at an old concept. *In D. Bartal & A. W. Kruglanski (Eds.), The Social Psychology of Knowledge*, 315-334. Cambridge University Press.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 1-27. DOI: 10.1186/s41239-019-0171-0