

GenAI and the Purposes of Education: Educators' Perceptions Through Biesta's Model of Qualification, Socialisation, and Subjectification

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Abstract: The integration of generative artificial intelligence into education calls for re-thinking how knowledge is produced and taught in increasingly algorithmic environments. Using Biesta's framework of *qualification*, *socialisation*, and *subjectification*, this study offers an epistemological reading of educators' perceptions in higher and adult education. We analyse 115 open-ended survey responses from Italy (65) and the UK (50) collected within the ASEM Hub (RN3) initiative. Across both contexts, early adoption concentrates on *qualification*, while effects related to *socialisation* and *subjectification* are rarer and more ambivalent. UK respondents – supported by institutional guidance and training – show greater confidence but also concern for integrity and workload. Italian participants highlight fragmented support, ethical caution, and risks to professional agency and students' independent judgement. Meaningful GenAI integration requires *rituals of verification* – traceability, evidence, and public justifiability – that preserve disciplinary norms and learners' ownership of judgement. The study situates efficiency gains within a broader educational responsibility: ensuring AI-assisted work remains accountable to communities of inquiry and sustains, rather than displaces, socialisation and subjectification.

Keywords: artificial intelligence; generative AI; adult education; higher education; epistemology of education.

1. Introduction

The accelerated diffusion of generative artificial intelligence (GenAI) into educational spaces is often narrated through the language of innovation, efficiency, and personalisation. Yet such narratives can obscure the epistemic and pedagogical stakes of delegating portions of meaning-making to algorithmic systems. If education is more than instructional optimisation, the arrival of GenAI entails a reconfiguration of how knowledge is produced and warranted, reshaping how claims are generated, validated, and taken up by subjects.

This contribution responds to that challenge by bringing Gert Biesta's tripartite account of the purposes of education – qualification, socialisation, and subjectification (Biesta, 2009, 2020)—to bear on educators' experiences with GenAI in higher and adult education. Biesta's framework is particularly apt in the current climate of what he terms the learnification of education (Biesta, 2010), where teaching risks



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collapse into service provision for measurable outcomes. When learning is instrumentalised, technologies that accelerate or automate instruction are readily valorised, while the less quantifiable aims of education – ethical formation, autonomy, judgement, and the cultivation of a durable relationship to the world – become harder to name and protect.

The stakes are heightened by the epistemic ambiguity of GenAI. Foundation models trained on vast corpora can generate text and images that appear to exhibit knowledge and creativity (Epstein et al., 2023), even though outputs remain probabilistic aggregations of the already said. Some commentators warn that GenAI can homogenise discourse (Bauer, 2025), while others highlight broader epistemic shifts in AI-mediated knowledge (Bentley, 2025). Others emphasise the co-constitutive role of human prompting, where originality and intentionality move from the model's parameters to the human capacity to pose better questions (Bozkurt & Sharma, 2023). Either way, the educator's task is not simply to use GenAI but to establish epistemic conditions under which learners become answerable for what they know and who they are becoming through practices with and against the machine.

This contribution is based on a qualitative analysis within an international research initiative involving 32 researchers from 22 countries¹, coordinated by the Institute for Adult Learning at the Singapore University of Social Sciences. It draws on the International Survey on Artificial Intelligence promoted by Research Network 3 of the ASEM Education and Research Hub for Lifelong Learning². Focusing on higher (HEIs) and adult education in the UK and Italy, we examine educators' perceptions and uses of AI, addressing both attitudinal dimensions and practical applications in teaching and learning³.

2. Theoretical and Epistemological Framework

Biesta distinguishes three interdependent functions of education (Biesta, 2009, 2020): qualification – the acquisition of knowledge, skills, and dispositions for vocational, academic, or civic participation; socialisation – initiation into traditions, norms, and forms of belonging, including disciplinary ways of knowing; and subjectification – the emergence of the learner as a responsible subject capable of judgement and oriented toward a shared world (Biesta, 2013, 2021).

While policy discourse tends to privilege qualification because it is easiest to measure, Biesta warns that such emphasis narrows education to technique and performance. Socialisation reminds us that knowing is situated in histories and communities; subjectification preserves the space of freedom, risk, and answerability – the “beautiful risk” wherein the student is not produced but addressed (Biesta, 2013).

¹ Austria, Australia, Bangladesh, Brunei, China, Germany, India, Italy, Laos, Latvia, Malaysia, Philippines, Romania, Singapore, Slovenia, Switzerland, Thailand, United Kingdom, United States of America, Jamaica, Saudi Arabia.

² ASEM is a network of Asian and European HEIs promoting lifelong learning research to inform policy and mutual understanding. Research Network 3 (RN3) focuses on adult educators' professionalisation <https://asemllhub.org/aboutus/> (last access: 04 october 2025).

³ This chapter further explores and develops some of the findings published in the volume edited by Chen, Z., Cordie, L., Schröter, H. and Zeng, X. D. (eds.). (forthcoming). *Navigating the AI Frontier in Adult Education: International Practices and Perspectives from Adult Learning, Training and Higher Education*. Routledge.

GenAI blurs distinctions between knowing and appearing to know. Its outputs may be syntactically plausible yet epistemically shallow, raising questions about originality, authorship, credibility, and agency.

From an educational epistemology, three tensions are salient:

- originality and authorship: when surface novelty is simulated, originality shifts from the artefact to the inquiry process – problem-finding, reframing, and explicit task rationales (Bozkurt & Sharma, 2023);
- credibility and accountability: without transparent provenance, credibility depends on disciplinary norms, argumentation, and ethical review – central to socialisation (Selwyn, 2019; Owen et al., 2013);
- agency and subjectivity: the key question is not whether GenAI produces correct answers but whether learners can claim ownership of judgements and act responsibly (Archer, 2003; Guillemin, 2025).

GenAI is neither neutral nor corrosive. It redistributes cognitive labour and must be pedagogically curated. The issue is not “What can GenAI do?” but “What kinds of subjects and relations to knowledge does its use invite or foreclose?”

In both higher and adult education, these tensions are acute: the former faces integrity and assessment redesign (Cotton et al., 2024; Kofinas et al., 2025); the latter, biographical and experiential challenges (Knowles, 1980; Milana et al., 2024). Across both, digital literacies – crafting prompts, evaluating outputs, and sustaining ethical commitments – are becoming core to disciplinary practice (Miao & Cukurova, 2024; Miao & Shiohira, 2024).

3. Research Design and Data Collection

This study is part of an international initiative coordinated by the Institute for Adult Learning at the Singapore University of Social Sciences, within the ASEM Hub (RN3). The questionnaire was developed by IAL team with inputs from the collaborators (faculty members from HEIs, public and private educational bodies, consultancy organisations, EdTech companies, and partner representatives).

It comprised 42 questions in seven sections investigating:

1. participants’ background (gender, education, role, nationality; Q32–40);
2. current use of AI in adult education (Q2–10);
3. attitudes and confidence in using AI (Q11–16);
4. perceived impact on educators’ work (Q17–21, Q30–31);
5. perceived impact on learners’ outcomes and well-being (Q22_1–22_9);
6. training needs and training received (Q23–24, Q27–29);
7. ethical issues related to AI use (Q25–26).

The questionnaire combined multiple-choice and open-ended items, collecting both quantitative indicators and qualitative insights. The survey targeted professionals in HEIs – teachers, researchers, consultants, and technicians – in public or private institutions. Participants were recruited via social media and snowball sampling through international collaborators. Data were collected between June and October 2024, yielding 1,947 responses from 22 countries.

3.1. Comparative Focus on the United Kingdom and Italy

We focus on two national cases – the United Kingdom (n=50) and Italy (n=65) – selected for their contrasting educational traditions: the UK’s constructivist and strategic orientation, and Italy’s more transmissive, teacher-centred tradition (Mariotti et al., 2019).

The analysis draws on selected Likert-scale questions (Q11_2, Q12_1, Q13_1, Q14_1, Q15_1, Q16_2, Q22) and open-ended responses (Q30-31).

The 5-point Likert items (1=Strongly disagree, 5=Strongly agree) explored:

- familiarity with AI (Q11_2);
- perceived impact on work (Q12_1);
- intention to use (Q13_1);
- perceived pleasantness (Q14_1);
- perceived importance (Q15_1);
- perceived competence (Q16_2);
- perceived impact on student learning (Q22) – covering creative thinking, decision making, problem solving, meaning-making, mental health, and learning outcomes.

Open-ended questions (Q30, Q31) explored practices, perceived benefits and risks, and anticipated role changes. Responses were analysed thematically using Biesta’s functions as deductive categories, clustering themes of alignment, tension, or contradiction (Table 1).

Table 1. Example of categorization of responses by Biesta’s framework.

Biesta’s Function	Country	Quote
Qualification	Italy	They make it more effective and efficient.
	UK	I personally feel that AI significantly reduces time for me to focus on other important works... My productivity has significantly improved...
	Italy	It can help with time-consuming tasks not ‘useful’ for educational purposes... In the design phase, it helps correct structural or methodological flaws.
	UK	AI can create individualised learning paths; provide immediate feedback on assignments; answer questions about materials; assist teachers in material and content design.
Socialisation	Italy	[AI can be used if] presented as a tool, accompanied by critical reflection, framed within ethical responsibilities and the implications of personal neuropsychological development.

	UK	My main concerns are ethical, attribution of work, and bias... we need to educate staff and students on effective use....
	Italy	Targeted training is needed for various professional roles.
	UK	Learners need guidance on ethical use of AI especially in relation to assessment.
Subjectification	Italy	[We need] targeted training courses on problem-solving skills. Questions are important for using AI effectively.
	UK	Teaching learners AI and its use I think should be context specific or discipline related. The younger generation is more aware than their teachers. We need to think like students and their expectations. Adults are in a situation where they are forced to catch up even if they have established careers prior to the AI hype.
	Italy	Certainly, some tools help with work, while others make it more creative.
	UK	Huge change: helps me write with Creative Writing GPT... for improving my thoughts and processes, it has been amazing.

These excerpts show educators' narratives map differently onto Biesta's functions, reflecting shared patterns and contextual nuances in interpreting GenAI's educational role. While not statistically generalisable, the analysis highlights how educators frame GenAI's purposes and the institutional and cultural factors shaping those framings.

4. Findings and Interpretive Analysis

The demographic profile of Italian and UK respondents is summarised in Table 2.

Table 2. Demographic profile of respondents (summary)⁴.

Profile	Total n. (%)	Italy n. (%)	UK n. (%)
Gender	Male 39 (34)	Male 19 (29)	Male 20 (40)

⁴ Table 2 summarises respondents' profiles: mainly university staff (85%) with postgraduate degrees (89%), mostly in social sciences (54%). Italians were older and more often on fixed-term contracts; UK participants mostly permanent.

	Female 72 (63) Other/NA 4 (3)	Female 44 (68)	Female 28 (56)
Age	<40: 35 (31) 40–59: 60 (52) >60: 20 (17)	<40: 23 (35) 40–59: 32 (49) >60: 10 (15)	<40: 12 (24) 40–59: 28 (56) >60: 10 (20)
Highest Qualification	PhD 61 (53) Master's 41 (36)	PhD 43 (66) Master's 19 (29)	PhD 18 (36) Master's 22 (44)
Discipline	Social Sciences 62 (54)	41 (63)	21 (42)
Role	Professors/Teaching Staff 70 (61)	37 (57)	36 (72)

Most educators (91%) are above 30 and hold a tertiary qualification, with similar distribution in both countries. Among Italian respondents, 52% have a permanent contract versus 86% in the UK; 37% hold fixed-term contracts compared to 8% in the UK. Most work in universities (85% overall; 80% Italy; 92% UK), mainly as professors or teaching staff (61% overall; 52% Italy; 72% UK).

Regarding quantitative questions (Table 3), mean scores on the 1–5 Likert scale are generally above the midpoint in both samples. The highest values relate to positive attitudes toward AI (Q14_1 = 3.80) and intention to use it (Q13_1: Italy 3.89; UK 3.96). Main cross-national differences appear in perceived ease of use (Q11_2: Italy 3.31; UK 3.82) and self-assessed confidence (Q16_2: 3.17 vs 3.42). The UK shows slightly higher performance expectancy (Q12_1: 3.56 vs 3.48), while Italy rates current importance marginally higher (Q15_1: 3.38 vs 3.24). These small differences should be read cautiously, given the lack of dispersion measures and statistical tests⁵.

Table 3. Perception on using AI.

Item	Q11_2 <i>Easy to use</i>	Q12_1 <i>Improves performance</i>	Q13_1 <i>Intend to use it</i>	Q14_1 <i>Like using it</i>	Q15_1 <i>Important in my work</i>	Q16_2 <i>Feel competent</i>
Italy (n = 65)	3.31	3.48	3.89	3.80	3.38	3.17
United Kingdom (n = 50)	3.82	3.56	3.96	3.80	3.24	3.42

Open-ended responses were grouped according to Biesta's categories (Table 4).

⁵ Given the non-probabilistic sampling strategy and the modest size of the subsamples, we did not perform inferential statistical tests.

Table 4. Distribution of open-ended responses by Biesta's categories.

Country	Qualification	Socialisation	Subjectification	Unclassified
Italy	44	10	11	1
United Kingdom	43	3	2	1

Across both contexts, respondents most often associated GenAI with *qualification* – creating syllabi, quizzes, exemplars, or feedback; adapting tasks to student profiles; and streamlining administrative work. Mentions of *socialisation* and *subjectification* were rarer and more ambivalent. The next section structures findings by these three functions, highlighting convergences and divergences.

4.1. *Qualification*

Both UK and Italian educators report efficiency gains consistent with positive performance expectancy (Q12_1) and strong intentions to use GenAI (Q13_1). Common uses include generating or adapting teaching materials (case prompts, reading lists, exemplars, formative feedback), tailoring activities to student profiles, and streamlining workflows. A UK respondent noted: “AI can create individualised learning paths; provide immediate feedback; answer questions; assist teachers in content design.” The UK’s higher ease-of-use (Q11_2) and comfort (Q16_2) likely help translate positive attitudes (Q14_1) into course design, supported by institutional resources (guidelines, workshops, tool integrations). Italian respondents recognise the same affordances and similarly endorse intention (Q13_1) and importance (Q15_1) but more often express uncertainty about effective and ethical use, citing lack of targeted training – consistent with lower ease-of-use and comfort scores.

4.2. *Socialisation*

Socialisation concerns how learners are inducted into disciplinary and civic practices, including shared norms for AI use. In the UK, guidelines, MOOCs⁶, and dedicated roles appear to bolster staff confidence; such scaffolding may explain higher ease-of-use (Q11_2) and comfort (Q16_2), despite modest differences in perceived importance (Q15_1). Italian participants more often report fragmented or absent support and warn that without shared norms, GenAI may drive a technocratic turn in pedagogy. One respondent (our translation) observed: “[AI can be used if] presented as a tool, accompanied by critical reflection, framed within ethical responsibilities and personal neuropsychological development.” This view links socialisation (norms, competencies) with subjectification (responsible agency). The closed-item set on anticipated effects (Q22) reinforces this: educators must decide how learners engage with GenAI in meaning-making and judgement, not merely whether they use it.

4.3. *Subjectification*

Subjectification – the learner’s emergence as a responsible agent – elicits the sharpest tensions. Italian educators often fear students’ uncritical reliance on auto-

⁶ For example, the Coursera MOOC Generative AI in Education, led by one of the authors of this paper, available at <https://www.coursera.org/learn/generative-ai-in-education>

mated outputs, weakening independent judgement and relational depth. One noted (our translation): “the educational relationship comes before any tool. If the tool lends itself to critical use, it can be tried, but without great expectations.” UK responses also warn of integrity and workload (“huge increase in tracing AI use for assignments”) yet describe pedagogies of critique: tasks requiring bias analysis, deconstruction of outputs, and dialogic reflection. These relate to Q22 domains (creative thinking, decision-making, problem-solving, meaning-making, mental health, outcomes): rather than assuming fixed effects, educators define conditions under which GenAI supports or hinders subjectification. Some Italian testimonies depict educators as more capable of critical use than students; others contest this, highlighting younger learners’ digital fluency – an internal dissonance clarifying the challenge of designing agency-oriented assessment.

5. Discussion

Findings confirm a predictable yet significant tendency: the earliest and most visible uses of GenAI cluster around qualification, consistent with high intention (Q13_1) and positive attitudes (Q14_1). Efficiency in design and feedback (Q12_1) can free time for higher-order work but risks drifting toward practices that marginalise socialisation and subjectification.

An epistemology of education can counter this drift by reaffirming three commitments:

- from product to practice: originality is a virtue of inquiry, not of outputs. Tasks should require judgement – problem framing, evidence scrutiny, triangulation, and reasoning (Biesta, 2017; Hoskins & Deakin Crick, 2010);
- from automation to answerability: when GenAI is used, evaluation should foreground process visibility, making thinking traceable and accountable (Kofinas et al., 2025; Cotton et al., 2024);
- from private skill to public world: subjectification is world-centred (Biesta, 2021); tasks should involve real others – community partners, professional codes, historical debates – so that knowledge becomes responsive and responsible (Marginson, 2024; Owen et al., 2013).

Memory-based written tasks are most vulnerable to automation. A composite approach is therefore needed: competence-based assessment values transferable capabilities (Holmes & Henri, 2024); performance-based tasks situate learners in complex, novel scenarios where they must act, justify, and revise (Kofinas et al., 2025); social-experiential modalities foster negotiation of norms, strengthening socialisation while enabling subjectification.

Since GenAI depends on human prompts, prompting becomes a literacy – a form of epistemic design embedding values and frames (Bozkurt & Sharma, 2023). Digital literacies should thus extend beyond operational fluency to include prompt hermeneutics, bias and fairness analysis (Ananya, 2024), and citation practices suited to AI-mediated work. Institutional frameworks – guidelines, transparent policies, staff development – are essential. The UK case suggests that structured support encourages thoughtful adoption, whereas the Italian case warns that lack of infrastructure breeds hesitation and fragmented practice.

Italian testimonies often view GenAI as subordinate to pedagogical relationships, while UK accounts emphasise enablement within institutional scaffolds. The educa-

tor's role, across contexts, is not diminished but intensified: to curate tasks, model inquiry, safeguard integrity, and foster subjectification. Where hierarchy dominates, the risk is paternalism; where technocratic optimism prevails, complacency. A world-centred pedagogy (Biesta, 2021) balances authority and invitation: induct learners into a practice, demand accountable claims, and orient judgement toward others and the world.

6. Conclusions

GenAI confronts education with a twofold test: the technical one – integrating tools safely and effectively – and the educational one – deciding to what ends and what kinds of subjects we cultivate through their use. The former can be met with training and safeguards; the latter demands an epistemology and a shared vocabulary of purpose.

Biesta's framework clarifies these purposes. Our analysis shows that qualification gains are tangible, while socialisation and subjectification require intentional design, institutional support, and an ethic of answerability. The most promising practices treat GenAI not as a substitute for judgement but as a provocation to it – a partner through which learners refine questions, justify claims, recognise bias, and orient themselves toward a common world.

Ultimately, the issue is not whether GenAI can teach but whether we will continue to do so – risking ourselves, as Biesta reminds, in relationships where learners become authors of their learning. Amid algorithmic abundance, education must remain an encounter with reality that no system can automate and a practice of freedom that no model can prewrite.

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