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REVIEW ARTICLE

Section: *Literature, Linguistics & Criticism***The discursive construction of educational identity in AI-generated texts: A critical discourse analysis of ChatGPT conversations in learning contexts toward advancing quality education (SDG 4)**Ali Lamouchi¹, Mohammad A. Tashtoush^{2 & 3*}, Mohamad A. Khasawneh⁴, Mohamed Sayed Abdellatif⁵, Safar Bakheet Almudara⁶ & Mohamed Ebrahim Khalf⁷¹Department of English Language and Literature, College of Science and Humanities, Prince Sattam bin Abdulaziz University, Saudi Arabia²Department of Basic Sciences, AL-Huson University College, AL-Balqa Applied University, Jordan³Faculty of Education and Arts, Sohar University, Oman⁴Special Education Department, King Khalid University, Saudi Arabia⁵Department of Psychology, College of Education, Prince Sattam Bin Abdulaziz University, Saudi Arabia⁶Department of Curriculum and Instruction, College of Education in Al-Kharj, Prince Sattam Bin Abdulaziz University, Saudi Arabia⁷Department of Libraries, Information, and Educational Technology, Faculty of Education, Al-Azhar University, Egypt*Correspondence: tashtoushzz@su.edu.om**ABSTRACT**

With the rapid integration of AI into educational settings, language models such as ChatGPT (an advanced AI language model that can understand and generate human-like text to assist with writing, learning, problem-solving, and conversation) have transformed how students learn, teachers communicate, and knowledge is produced and negotiated in digital environments. This study explores how identity is discursively constructed in AI-generated texts, particularly in ChatGPT conversations, from an educational perspective using the Critical Discourse Analysis framework. In this study, “educational identity” refers to the discursive positioning of roles such as expert, tutor, peer, advisor, and learner that emerge through linguistic choices in AI-mediated interactions. Employing a qualitative, interpretivist approach, this research investigates how ChatGPT’s language use shapes the roles of authority, expertise, and learner identity within digital learning interactions. The dataset consists of 30 purposively generated ChatGPT conversations simulating common educational scenarios, which were analyzed using Fairclough’s three-dimensional CDA model (textual, discursive practice, and social practice). The analysis is further informed by positioning theory and social identity theory in order to examine how AI-generated language assigns educational roles, negotiates authority, and reproduces or softens expert–novice relations. The findings revealed that ChatGPT’s discourse reflects patterns of representation and power that influence how students

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perceive knowledge, feedback, and educational values. Although ChatGPT can simulate pedagogical roles, such as tutors or peers, its responses are shaped by training data that may reproduce existing cultural and educational biases. This study highlights the need to critically evaluate AI as a communicative and pedagogical agent whose language practices contribute to the evolving landscape of teaching and learning. By situating AI discourse within educational contexts, this study underscores the importance of developing responsible and equitable AI-mediated learning environments.

KEYWORDS: ChatGPT, education, students, learning, teaching, critical discourse analysis, AI-mediated communication, educational identity, positioning theory, sustainable development, Quality Education, SDG 4

1. Introduction

The emergence of artificial intelligence (AI) in educational communication, particularly through advanced language models such as ChatGPT, has transformed how learners seek explanations, receive feedback, and negotiate knowledge in digital learning environments [1, 2]. These systems increasingly participate in everyday academic interaction, not only by providing information but also by using language that can position users as novices, collaborators, autonomous learners, or recipients of expert guidance. For this reason, AI-generated educational discourse requires analysis not only for accuracy but also for the identities and power relations it may construct.

In this study, educational identity refers to the discursively constructed roles that emerge in AI-mediated learning interactions, including the roles of expert, tutor, peer, adviser, supporter, and learner. Discursive positioning refers to the way language assigns, negotiates, or limits these roles, rights, responsibilities, and expectations within interaction. In ChatGPT conversations, such positioning is visible through modality, imperatives, pronoun use, evaluative language, hedging, and affective expressions. These linguistic choices can make the system appear authoritative, collaborative, supportive, or evaluative, even though ChatGPT is not treated here as a human agent with intention or consciousness.

Critical Discourse Analysis (CDA) provides an appropriate framework for examining these patterns because it connects textual choices with discursive practice and broader social practice [3, 4]. From this perspective, ChatGPT outputs are not neutral strings of text; they are produced within technological and cultural conditions that may reproduce dominant academic norms, expert-novice relations, and assumptions about legitimate learning [5, 6]. The study therefore shifts attention from the general use of AI in education to the more specific question of how AI-mediated discourse constructs educational roles and identities.

The aim of this study is to analyze how educational identity is constructed in AI-generated texts, particularly in ChatGPT conversations, using a CDA approach. More specifically, the study examines the linguistic features through which ChatGPT positions authority, expertise, collaboration, and learner subjectivity; evaluates patterns of representation and power in AI-generated educational conversations; and identifies the implications of these patterns for digital learning, AI literacy, and human-AI interaction.

Guided by a qualitative interpretivist design, the study addresses three research questions: (1) How is educational identity discursively constructed in ChatGPT-generated texts during educational conversations? (2) How do ChatGPT responses reflect, reinforce, or challenge social power structures and identity norms? (3) How do ChatGPT responses position authority, expertise, collaboration, and learner subjectivity across different educational prompt framings? The article first reviews the literature on language models, discourse, power, and identity; then explains the CDA-based methodology; and finally presents the recurrent positioning patterns identified across the corpus.

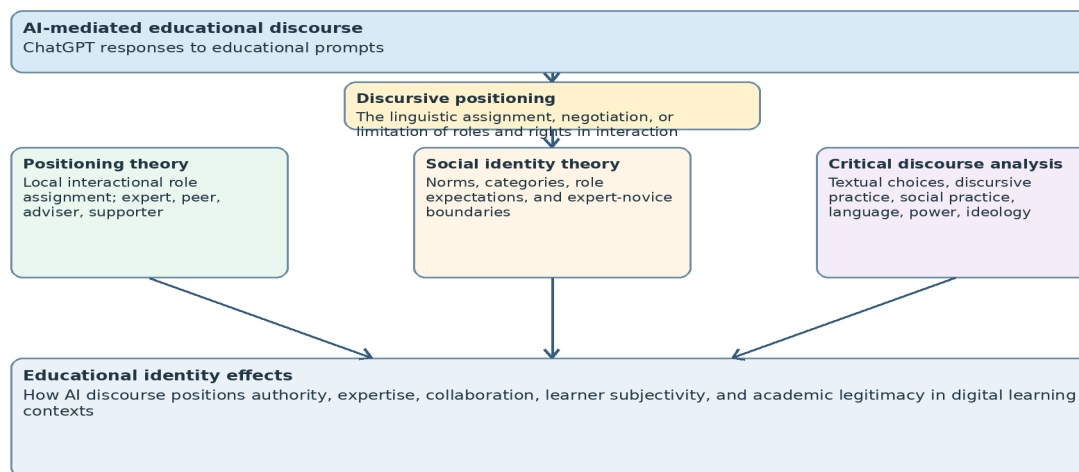


Figure 1. Integrated conceptual framework for analyzing educational identity in AI-generated educational discourse.

2. Literature Review and Conceptual Framework

2.1 Language Models of AI and Identity Representation

In AI, a language model is a computer program trained on large quantities of data, such as books, conversations, and articles. Language models analyze patterns in words, phrases, and sentences in order to generate text. Large language models (LLMs), including ChatGPT, have gained global prominence and have potential applications in education, business, and healthcare [7]. Although LLMs can replicate some forms of human-like judgment in text generation, the interpretation of their outputs remains complex [8].

Using methods ranging from rule-based approaches to statistical models and deep learning, language models and other natural language processing approaches create systems that can process, analyze, and produce natural language text or speech [9]. Text completion, language translation, chatbots, virtual assistants, and speech recognition are among the most common applications of language models. Human semiotic cues influence AI algorithms, which in turn alter digital representations and influence how identity is perceived in the interaction between human inputs and AI outputs [10].

2.2 Discourse, Power, and Human-Centred Interactions

Discourse, power, and human-centred interaction are central to understanding AI-generated educational texts. In CDA, power is not limited to formal authority; it is also enacted through apparently ordinary linguistic choices, such as who gives instructions, who defines what counts as valid knowledge, and who is positioned as needing correction or support. In educational settings, these choices shape the relationship between the source of knowledge and the learner who receives, questions, or applies it.

Large language models complicate this relationship because they generate responses that often resemble human explanation, feedback, or mentoring while remaining non-human computational systems. A ChatGPT response may use a confident academic register, provide procedural steps, or soften advice through hedging and reassurance. Each of these features can produce a different educational stance: expert authority, peer collaboration, pastoral support, or academic gatekeeping. The issue, therefore, is not whether ChatGPT possesses authority, but how its discourse may be interpreted as authoritative by learners.

From a human-centred perspective, the design and use of AI in education should account for how users experience these discursive roles. Learners may treat AI-generated feedback as neutral guidance even when it carries implicit assumptions about academic writing, critical evaluation, appropriate learning behavior, or emotional response. This is particularly important because AI-mediated communication can influence perceived agency, trust, responsibility, and dependence in online learning [11, 22].

The present study therefore approaches ChatGPT as a discourse-producing system whose outputs can organize educational interaction symbolically. This framing does not anthropomorphize the model; rather, it examines how textual patterns may have social effects when learners interpret them as advice, evaluation,

collaboration, or reassurance. Such an approach allows the analysis to connect micro-level language features with wider questions of educational identity, power, and AI literacy.

2.3 Identity Construction in Digital and Mediated Communication

In the digital age, identity is not constructed solely through face-to-face interaction; it is continuously shaped and negotiated through mediated communication. AI-generated texts in digital communication influence identity construction by shaping how individuals present themselves and how others perceive them.

In educational communication specifically, AI-mediated discourse may influence how learners perceive academic authority, feedback credibility, and knowledge legitimacy. For instance, when an AI system uses directive language such as “you should revise this section,” it may position itself as an expert evaluator, thereby shaping learner identity as subordinate or novice. Conversely, collaborative language such as “let’s explore this idea together” constructs a peer-like identity.

AI-mediated communication is characterized as mediated communication in which a computational agent functions as a communicator by creating, enhancing, or modifying messages to achieve interpersonal or communication goals. Studies of AI-mediated communication have shown that AI-enhanced text can affect perceived agency, responsibility, trustworthiness, and interpersonal dynamics [11]. These issues are directly relevant to educational discourse because students may interpret AI-generated messages as advice, evaluation, reassurance, or collaboration.

The reviewed literature demonstrates that while studies have examined algorithmic bias, technology acceptance, AI performance, and student perceptions, limited attention has been given to the socio-discursive construction of educational identity in AI-generated interactions. Although identity and representation have been explored in broader AI contexts [7, 11], the specific dynamics of identity positioning within educational ChatGPT conversations remain underexplored.

Table 1. Comparative synthesis of selected studies relevant to ChatGPT, AI-mediated communication, and educational identity.

Study	Context / focus	Methodology	Main contribution	Gap relevant to this study
[12]	AI in higher education	Conceptual discussion	Maps early implications of AI for teaching and learning	Does not analyze discourse or identity in interaction
[13]	Large language models in education	Commentary / position paper	Identifies educational opportunities and risks of LLMs	Does not examine concrete role construction in AI discourse
[14]	ChatGPT in education	Qualitative case study	Explores early educational uses and stakeholder reactions	Focuses on adoption and implications rather than identity work
[15]	University AI policy and pedagogy	Mixed-method study	Connects AI governance and pedagogy	Does not analyze micro-level identity positioning in AI text
[16]	ChatGPT in educational practice	SWOT analysis	Systematizes strengths, weaknesses, opportunities, and threats	Provides strategic framing but not discourse analysis
[17]	Early ChatGPT studies	Rapid review	Summarizes uses, benefits, and challenges	Limited attention to authority, role, and identity construction
[18]	ChatGPT and learning outcomes	Systematic review and meta-analysis	Synthesizes evidence on learning performance	Focuses on effects rather than discursive processes

2.4 Theoretical Integration: CDA, Positioning Theory, and Social Identity Theory

This study integrates CDA with positioning theory and social identity theory. CDA remains the primary framework because the study examines how linguistic choices are connected to educational authority, legitimacy, and power. Fairclough’s three-dimensional model is used to move from textual choices, to discursive practice, and then to broader social practice.

Positioning theory supports the analysis of local role assignment in interaction. It allows the study

to examine how ChatGPT is discursively positioned as an expert, peer, adviser, or supporter depending on the prompt. Social identity theory provides a broader interpretive lens for understanding how educational categories, expert–novice relations, and norms of academic legitimacy are activated in AI-generated discourse. This combination does not treat ChatGPT as a human subject with intentions. Instead, it treats ChatGPT as a non-human discourse producer whose outputs can have educational consequences because users may respond to them as guidance, evaluation, or reassurance.

2.5 Literature Gap

Despite different studies on AI-generated texts and language model performance [19-26], there is a significant gap in analyzing how these systems help construct identity through discourse. Existing studies are mainly focused on algorithmic bias, output accuracy, adoption, or pedagogical utility rather than examining the socio-discursive functions of AI in shaping educational identity. The role of AI in mediating power, representation, and identity through text remains underexplored; therefore, this study addresses this gap through Critical Discourse Analysis and complementary identity frameworks.

3. Methodology

3.1 Research Methods

The research method selected for this study involves the application of an interpretivist research philosophy alongside an inductive research approach and a descriptive research design [27-32]. Interpretivism is appropriate because the study is concerned with meaning, role construction, and educational positioning rather than with testing causal effects or measuring learning gains. The inductive approach enables the analysis to move from observed linguistic patterns to broader interpretive claims about identity construction in AI-mediated educational interaction.

3.2 Data Collection Techniques and Procedures

In addition to reviewing relevant secondary literature, the primary dataset for discourse analysis consisted of 30 AI-generated conversations produced using ChatGPT (GPT-4 architecture) between January and March 2025. Prompts were purposively designed to simulate authentic educational contexts, including academic writing support, concept clarification, collaborative brainstorming, and emotional-academic reassurance.

- Academic writing support (e.g., “Help me structure my literature review.”)
- Concept clarification (e.g., “Explain this theory in simple terms.”)
- Collaborative brainstorming (e.g., “Can we develop ideas together?”)
- Emotional-academic reassurance (e.g., “I feel anxious about my exam.”)

Prompts varied in tone (formal/informal), relational framing (authority-seeking/collaborative), and emotional intensity. All responses were archived verbatim. Conversations were selected purposively to ensure variation in identity positioning rather than statistical representation.

3.3 Dataset and Sampling Strategy

The corpus was treated as analytically sufficient because it was focused, bounded, and designed around a clearly specified theoretical concern: the discursive construction of educational identity. The study does not claim statistical representativeness or universal generalizability across all AI systems.

The data-generation protocol was organized around common educational situations that students may encounter when using ChatGPT for learning. Each category was designed to place a different interactional pressure on the model and thereby elicit different forms of positioning.

Table 2. Dataset structure and analytical dimensions.

Prompt category	Illustrative prompt	Analytical purpose	Primary identity pressure
Academic writing support	Help me structure my literature review.	Examine directive guidance, academic normativity, and evaluative stance	Expert / tutor positioning

Prompt category	Illustrative prompt	Analytical purpose	Primary identity pressure
Concept clarification	Explain this theory in simple terms.	Examine explanation, simplification, and epistemic authority	Expert-but-accessible positioning
Collaborative brainstorming	Can we develop ideas together?	Examine inclusivity, co-construction, and dialogic stance	Peer / collaborative positioning
Emotional-academic reassurance	I feel anxious about my exam.	Examine empathy, normalization, and affective support	Supportive mentor positioning

3.4 Analytical Procedure

The analytical procedure followed Fairclough's three-dimensional CDA model. At the textual level, the study examined lexical choices, modality, pronouns, tone, hedging, imperatives, and evaluative expressions. At the level of discursive practice, the analysis examined how user prompts shaped the role adopted by ChatGPT. At the level of social practice, the analysis considered how the responses reproduced, softened, or challenged educational power relations.

The analysis proceeded through repeated close reading, first-cycle descriptive coding of observable discourse features, second-cycle pattern coding of recurrent positioning patterns, and cross-case comparison across prompt categories. This process made it possible to move from isolated excerpts to a more systematic thematic interpretation.

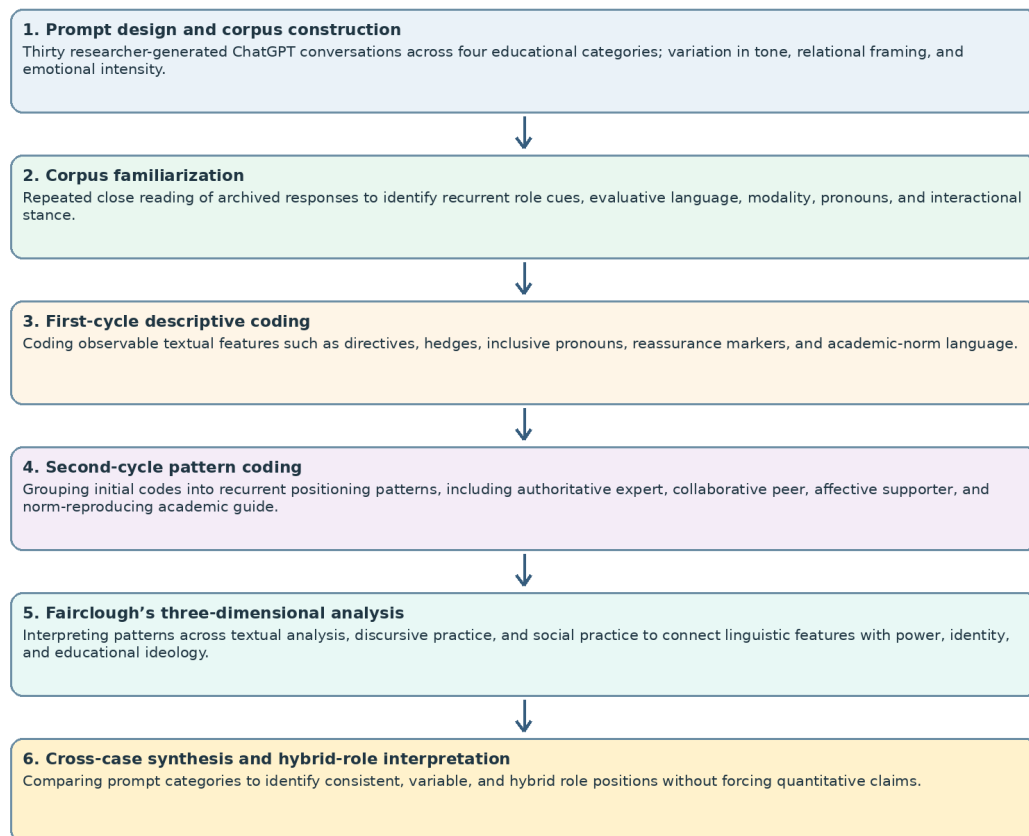


Figure 2. Analytical procedure used in the revised study.

Table 3. Coding framework used to move from textual features to identity interpretation.

Discursive feature	Illustrative markers	Analytical question	Possible identity implication / CDA level
Modality	should; must; might	How certain or directive is the response?	Authority / epistemic control

Discursive feature	Illustrative markers	Analytical question	Possible identity implication / CDA level
Pronouns	I; you; we	How is the relationship framed?	Distance, alignment, or collaboration
Imperatives / procedural sequencing	begin by; make sure; first	Is the system directing action?	Tutor / evaluator role
Hedging / mitigation	might; may; perhaps	How is certainty softened?	Reduced authority or caution
Affective alignment	It is normal; you are not alone	How is emotion recognized?	Supportive / pastoral positioning
Normative academic language	critical evaluation; key themes; coherence	What academic values are normalized?	Legitimate academic discourse and ideology

3.5 Trustworthiness and Researcher Reflexivity

Researcher reflexivity was central to the study because the corpus was generated intentionally by the researcher rather than collected from naturally occurring classroom interactions. The researcher selected the prompt categories, determined the wording of the prompts, and interpreted the resulting texts. These decisions inevitably shaped the type of discourse produced and therefore represent a potential source of analytic bias.

To reduce this risk, the prompt protocol was designed to include different educational situations, including academic writing support, concept clarification, collaborative brainstorming, and emotional-academic reassurance. The prompts also varied in tone, relational framing, and emotional intensity so that the analysis would not depend on a single interactional pattern. The analysis focused on observable textual evidence, such as modality, pronouns, hedging, imperatives, and evaluative language, rather than on presumed machine intention. The study also avoids treating ChatGPT as a human participant. The model is analyzed as a non-human discourse producer whose outputs may nevertheless be interpreted by users as guidance, evaluation, collaboration, or support. This distinction was important for preventing anthropomorphic claims while still allowing the study to examine the social and educational consequences of AI-generated language.

Trustworthiness was strengthened through preservation of the verbatim corpus, explicit coding logic, systematic linking of interpretations to examples and tables, and theoretical triangulation across CDA, positioning theory, and social identity theory. Because the project was conducted by a single primary analyst, no formal intercoder reliability coefficient is claimed; instead, rigor is supported through transparency, coherence, and an auditable movement from textual features to interpretive claims.

3.6 Ethical Considerations

The study did not involve human participants, personal data, or institutional records. The corpus consisted of researcher-generated prompts and AI-generated responses. Accordingly, the primary ethical issues were interpretive rather than human-subject related. These included avoiding anthropomorphic overclaiming, avoiding fabricated empirical detail, and representing the limits of platform-based AI research transparently.

4. Results

4.1 Analysis

The results are organized according to Fairclough's three-dimensional CDA model. At the textual level, the analysis examined modality, imperatives, pronoun use, hedging, tone, evaluative language, and affective expressions in the ChatGPT responses. At the level of discursive practice, the analysis examined how different prompt framings invited different roles from the system. At the level of social practice, the analysis interpreted how these roles may reproduce, soften, or challenge educational hierarchies and expectations about legitimate knowledge.

The findings are presented as recurrent positioning patterns rather than as statistical claims. Because

the corpus was qualitative and purposively constructed, the analysis does not treat frequencies as evidence of population-level prevalence. Instead, the tables use qualitative pattern indicators to show whether a positioning pattern was recurrent, common, occasional, or prompt-specific across the analyzed conversations. This approach provides greater transparency while remaining consistent with the interpretivist design of the study.

Across the corpus, four major patterns were identified: authoritative expert guidance, collaborative peer alignment, affective reassurance, and norm-reproducing academic discourse. These patterns were not mutually exclusive. In several responses, ChatGPT shifted between roles within the same answer, for example by beginning as an expert tutor, then adopting a peer-like collaborative tone, and finally returning to an evaluator role through academic norms and procedural advice.

4.2 Illustrative Textual Excerpts

Extract 1 – Academic Authority Positioning

Prompt: “I am struggling with structuring my literature review. What should I do?”

ChatGPT Response (excerpt): “You should begin by identifying key themes in the literature and organize your review accordingly. Make sure to critically evaluate each source.”

The modal verb “should” and the imperative “Make sure” construct a directive and authoritative stance, positioning the AI as an academic expert and the user as a learner requiring guidance.

Extract 2 – Peer Collaboration Positioning

Prompt: “Can we brainstorm ideas together?”

Response (excerpt): “Absolutely! Let’s explore some possible directions. What interests you most?”

The inclusive pronoun “we” and enthusiastic tone shift the identity construction toward a collaborative peer role rather than an authoritative instructor.

Extract 3 – Emotional Support Positioning

Prompt: “I feel anxious about failing my exams.”

Response (excerpt): “It’s completely normal to feel anxious before exams. You’re not alone in this.”

Here, affective alignment constructs a supportive mentor identity rather than an evaluator, demonstrating adaptive discursive positioning.

Table 4. Recurrent themes, discursive features, and representative evidence.

Theme	Core discursive features	Identity role	Representative evidence	Qualitative pattern indication
Authoritative expert guidance	Directive modality, imperatives, procedural sequencing, evaluative wording	Expert tutor / evaluator	“You should begin...” / “Make sure...”	Frequent in authority-seeking and writing-support prompts; strongly associated with directive guidance.
Collaborative peer alignment	Inclusive pronouns, invitations, exploratory questions	Peer collaborator / facilitator	“Let’s explore some possible directions.”	Common in collaborative brainstorming prompts; often co-occurs with subtle steering by the system.
Affective reassurance	Normalization, second-person support, emotionally affirming language	Supportive mentor / pastoral guide	“It’s completely normal...” / “You’re not alone...”	Common in emotionally framed prompts; typically appears through normalization and reassurance.
Norm-reproducing academic discourse	Preference for structure, critical evaluation, formal academic register	Guardian of mainstream academic legitimacy	Repeated emphasis on thematic organization, clarity, critique, and procedural correctness	Recurrent across several prompt categories, especially writing support and concept clarification.

4.3 Cross-Case Variation and Prompt Sensitivity

The cross-case synthesis showed that identity positioning was prompt-sensitive and relational rather than fixed. Authority-seeking prompts consistently elicited directive expert discourse, while collaboration prompts elicited more inclusive peer-like language. Emotionally framed prompts tended to produce supportive mentor discourse. These differences indicate that educational identity in AI-generated text emerges through the interaction between user framing and model-generated linguistic patterns.

The results also showed that identity roles often appeared in hybrid form. For example, a response could use inclusive phrases such as “let’s explore” while still directing the learner through ordered steps and academic expectations. Similarly, reassurance responses could acknowledge emotion while implicitly positioning the model as a source of stable judgment. These hybrid roles complicate a simple distinction between expert, peer, and supporter.

Table 5. Cross-case variation in identity positioning across prompt framings.

Prompt framing	Dominant stance	Typical linguistic realization	Observed variation / instability	Qualitative pattern indication
Authority-seeking	Directive expertise	should, imperative verbs, ordered steps	Sometimes softened by hedges, but hierarchy remains	Frequent; strongest where the user explicitly requests what to do or how to improve academic work.
Clarification-seeking	Explanatory authority	definition + simplification + example structure	Accessible tone may soften but not remove expertise	Common; appears when the user requests explanation, simplification, or definition.
Collaboration-seeking	Co-exploratory stance	we, let’s, follow-up questions	Collaboration coexists with subtle steering by the system	Common but mixed; collaborative pronouns appear alongside system-led topic steering.
Emotion-seeking	Pastoral reassurance	normalization, comfort, empathy markers	Supportive tone may still retain implicit evaluative asymmetry	Prompt-specific but salient; appears when emotional vulnerability is explicitly included.

4.4 Hybrid Identity Roles

A further result of the cross-case analysis is that ChatGPT did not consistently occupy one stable educational role. Instead, several responses combined expert, peer, and supportive positions within the same interaction. In academic writing prompts, for instance, the system often began with expert guidance, softened its authority through hedges or encouraging language, and then reasserted academic norms through procedural instructions. These hybrid roles are important because they may make AI-generated guidance appear both approachable and authoritative. Such hybridity can support learner engagement, but it may also obscure the power relation embedded in the response. A learner may experience the system as a peer because of inclusive language while still being guided by an expert-like structure that defines what counts as appropriate academic work.

The hybrid-role finding therefore strengthens the central claim of the study: educational identity in AI-mediated discourse is not a property of the system alone, nor of the user alone. It is produced relationally through prompt framing, linguistic choice, and the learner’s likely interpretation of the response.

4.5 Simulated Human Comparison Baseline (Guiding Example)

Because the study did not collect responses from human tutors, an empirical human-comparison corpus remains outside the scope of the present design. To respond to the baseline concern without overstating the evidence, the revised manuscript includes a limited simulated human comparison baseline as a guiding example. This baseline is not treated as data and is not used to make performance claims about humans versus AI; rather, it provides a transparent reference point for interpreting how ChatGPT’s discourse differs from a plausible situated human-tutor response.

Table 6. Simulated human comparison baseline used as a guiding interpretive example.

Prompt focus	ChatGPT pattern	Simulated human-tutor baseline	Interpretive value and pattern indication
Writing support	Directs the task through modality and ordered steps.	May ask about the brief, draft, and course expectations before advising.	Shows generic expert guidance. Pattern indication: heuristic comparison; highlights that ChatGPT guidance is generic and procedure-focused.
Brainstorming	Uses “we,” “let’s,” and follow-up questions.	May build on prior work and assessment context.	Shows partial collaboration with continued steering. Pattern indication: heuristic comparison; highlights partial collaboration but limited situated knowledge.
Reassurance	Normalizes anxiety through general encouragement.	May connect reassurance to the student’s history and support options.	Distinguishes formulaic from situated care. Pattern indication: heuristic comparison; highlights formulaic reassurance rather than personalized care.
Academic norms	Treats clarity, organization, and critical evaluation as default standards.	May calibrate expectations to course, disciplinary, or cultural norms.	Reveals dominant academic conventions. Pattern indication: heuristic comparison; highlights the dominance of conventional academic norms.

Accordingly, the simulated baseline is used only as a heuristic comparator. It does not replace empirical human data and does not support claims about the superiority or inferiority of AI-generated discourse relative to human teaching. Its purpose is to sharpen the interpretation of role positioning and to indicate how future studies could operationalize a matched human–AI comparative corpus.

In line with the qualitative design, the baseline is not interpreted as a measurement of human tutor behavior. Its function is to clarify what is distinctive about the AI-generated responses: they are coherent, supportive, and often pedagogically useful, but they remain generalized, decontextualized, and shaped by the prompt rather than by knowledge of a learner’s history or institutional setting.

5. Discussion

Study findings indicate the complex and layered ways in which identity is constructed in AI-generated texts, mainly using the lens of the Critical Discourse Analysis framework. ChatGPT, although not a sentient agent, functions discursively by simulating roles, relational dynamics, and pedagogical stances in response to user prompts and the patterns available in its training corpus. Using Fairclough’s CDA model, this study identified linguistic features such as register, lexical choice, modality, and voice that reflect the adaptive performance of educational roles.

The revised analysis clarifies the epistemological status of ChatGPT in this study. ChatGPT is not treated as a human interlocutor with intention, consciousness, or lived experience. Rather, it is analyzed as a non-human discursive actor whose outputs can be socially interpreted and educationally consequential. This distinction helps avoid anthropomorphism while still recognizing that AI-generated text may function as advice, assessment, collaboration, or reassurance for users.

At the level of discursive practice, user prompts act as powerful cues that trigger specific identity constructions. Prompts that create relational, emotional, or professional frames tend to elicit responses aligned with those frames. At the social practice level, the responses may reinforce dominant academic narratives while presenting themselves as neutral and helpful.

However, ChatGPT frequently defaulted to dominant cultural norms by using Western, professionalized language structures, such as emphasizing individual productivity, structured argumentation, and “critical evaluation” as universal academic standards. While this does not demonstrate explicit bias within this limited dataset, it suggests the reproduction of dominant academic discourse conventions embedded in training data.

These findings have implications for AI literacy and educational governance. Students and teachers need to evaluate not only whether an AI response is factually adequate but also what kind of educational relationship it stages. A response that sounds supportive or authoritative may still carry hidden assumptions about expertise, dependence, normality, and academic legitimacy.

The findings should also be interpreted in light of possible boundary conditions. Because the corpus was generated through purposive prompts, some role patterns may reflect the researcher's selected scenarios as much as the model's default discourse. In addition, the analysis is limited to generated textual responses and does not examine how actual students interpret or act on those responses. These limitations do not weaken the relevance of the findings, but they indicate that claims should be understood as discourse-analytic interpretations rather than as evidence of learner outcomes.

6. Conclusion

6.1 Research Findings

The analysis of ChatGPT conversations using the CDA framework revealed how educational identities are discursively constructed in AI-generated texts. Textual analysis showed that ChatGPT adapts tone, lexical choices, and modality in response to prompt structure, often assuming roles such as expert, adviser, peer collaborator, or supportive mentor. This adaptability highlights the linguistic flexibility of the model, but it also raises questions about how educational role expectations are algorithmically reproduced.

6.2 Conclusion

This study explored how identity is developed in AI-generated discourse using ChatGPT as a case study. The findings suggest that ChatGPT should not be viewed simply as a neutral assistant; it can operate as a discursive actor capable of shaping perceptions of authority, knowledge, and learner subjectivity. For educational institutions, these findings underscore the importance of integrating AI literacy into curricula so that students can critically engage with AI-generated feedback rather than passively accepting it.

6.3 Limitations and Future Research

This study is limited by its purposive corpus of 30 conversations and by the contextual specificity of educational prompts. Findings cannot be generalized across all AI systems or all versions of ChatGPT. Although the revised manuscript now includes a simulated human comparison baseline as a guiding example, this baseline is heuristic rather than empirical and should not be read as evidence of actual human tutor discourse. The study also does not include a collected human comparison corpus or quantitative triangulation, as those would require a different research design. Future research should collect matched human and AI responses to the same prompts, incorporate naturalistic classroom data, and extend the analysis through longitudinal and cross-cultural designs.

Appendix A. Prompt Protocol and Replication Note

The prompt protocol included four educational scenarios: academic writing support, concept clarification, collaborative brainstorming, and emotional-academic reassurance. Prompts were written in ordinary student-facing language and varied by tone, relational framing, and emotional intensity. Responses were archived verbatim immediately after generation.

Exact computational reproducibility cannot be guaranteed because public ChatGPT interfaces may change over time and system-level parameters are not fully transparent to users. The corpus should therefore be understood as a documented qualitative interactional sample rather than a computational benchmark dataset.

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Author Contributions Statement

Mohammad A. Tashtoush: contributed to the conceptualization, design, data collection, statistical analysis, interpretation of results, and drafting of the manuscript. Ali Lamouchi and Mohamed Sayed Abdellatif: contributed to methodology refinement, supervision, critical review of analyses, and substantial revision of the manuscript. Mohammed Ahmed Elhossiny Mohammed and Safar Bakheet Almudara: assisted in data collection, organization, and manuscript preparation. Mohamad A. Khasawneh: contributed to the literature review, data interpretation, and editing of the manuscript. Mohamed Sayed Abdellatif: provided methodological support, validated the results, and reviewed the final manuscript. All authors approved the final version of the manuscript.

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