Report

From curiosity to competency: AI's place in counselor education and supervision

ACES AI Task Force

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Generative artificial intelligence (AI), such as ChatGPT and Claude, has become a readily available venue for students, educators, and supervisors to access information and resources for learning, teaching, and supervising. These AI applications based on large language models (LLMs) proliferate rapidly as computational power and algorithmic advances grow. Throughout the last ACES conference, AI captured our collective attention like few topics in recent memory; sessions on AI drew standing-room-only crowds, with some sessions turning away conference-goers at the door. Enthusiasm and anxiety were palpable, and it became clear that what was once a peripheral concern has emerged as a key topic of discussion in the field of counselor education and supervision. The remarkable level of interest speaks to both the urgency and uncertainty that AI brings to the conversation about preparing the next generation of counselors.

Our profession has reached a crossroads. From exploring AI-enhanced pedagogy to investigating algorithmic bias in mental health applications, journal articles and conference sessions captured a wide range of perspectives and considerations regarding AI technologies. Some scholars offered conceptual frameworks and ethical considerations about AI's role in counseling (C. Sheperis et al., 2025), while others shared practical applications, such as AI-simulated role-playing and AI tutors (Beeson et al., 2025), among other AI-powered tools, to enrich our ways of teaching and supervising trainees. The volume of AI-related scholarship is increasing, and the content ranges from the discovery of available tools to the active construction of new applications for counselor education. This diversity mirrors the broader reality of our field: we are all at different points on the AI literacy spectrum, and we need to determine how to navigate this rapidly evolving terrain together.

As current and emerging counselor educators and supervisors, we face a fundamental question: how can we responsibly use AI and prepare the next generation of practitioners,

educators, and researchers to navigate AI effectively and ethically? The answer matters not merely for our classrooms and supervision sessions but ultimately for the clients whom our students will serve. Here, we explore emerging themes from the current literature in the hope of offering a foundation for moving from curiosity to competency in our engagement with AI.

AI in Teaching and Supervision

The teaching and supervision of counselors-in-training has become a testing ground for AI exploration, raising practical questions about curriculum integration, skill development, and ethical modeling. Journal articles and conference sessions spotlighted considerations from basic curriculum integration questions to sophisticated explorations of AI's role in clinical training environments. The overarching theme was clear: faculty and supervisors must model thoughtful, ethical AI use if we expect our students to do the same.

Curriculum Integration and Pedagogical Innovation

The question of where AI belongs in counselor education curricula generated considerable discussion in conference sessions. Some instructors are beginning to incorporate AI literacy into their coursework, though audience members at the conference expressed that many are simply adding AI policies to course syllabi without integration into their courses. This gap reflects the novelty of AI technology and the varying levels of faculty comfort and expertise with AI tools. Recommendations from the ACA AI Work Group (American Counseling Association [ACA], 2024) for faculty emphasize the importance of adhering to university-specific guidelines while also incorporating regular discussions on ethical implications informed by the ACA Code of Ethics. The dual focus on compliance with institutional policy and ethical decision-making emerged repeatedly at the conference. Recent research in counselor education supports this integrated approach. Campbell et al. (2025) noted considerable variation in how counselor education programs institute AI policies, with many programs defaulting to university policies. Their work highlights the need for more clarity in the field about the different types of AI and suggests that counselor education programs develop their own specific AI policies, given our profession's ethical responsibility to clients.

Concerns About AI and Critical Thinking

Perhaps one of the most fundamental concerns for counselor education is AI's potential impact on students' critical thinking skills. Research has identified a phenomenon known as "cognitive offloading," in which individuals who rely heavily on AI tools demonstrate declines in analytical reasoning and independent problem-solving (Gerlich, 2025). A recent study found a significant negative correlation between frequent AI use and critical thinking abilities, with younger participants (ages 17–25) exhibiting higher dependence on AI and

lower critical thinking scores (Gerlich, 2025). One other study also documented that students using LLMs experienced lower cognitive load but produced weaker reasoning and argumentation compared to students using traditional search engines, suggesting that the ease of AI-generated answers may come at the cost of deeper intellectual engagement (Stadler et al., 2024). Jose et al. (2025) described this as a condition in which students who rely heavily on AI may accept information passively without critical scrutiny or internalization, leading to reduced capability in decision-making tasks. For a profession in which clinical judgment, ethical reasoning, and reflective practice are foundational competencies, the erosion of critical thinking and the loss of scaffolding from overreliance on AI pose a serious threat. Thus, counselor educators must consider the role and students' potential use of AI in training and tailor learning experiences that foster deeper engagement, ensuring that students develop the analytical skills essential for competent and ethical practice.

Modeling Ethical and Reflective AI Use Across the Curriculum

As counselor educators, we have an obligation to model a reflective, ethically grounded engagement with AI technologies. We need to demonstrate ways we can think critically about AI's benefits and limitations. Instructors may create structured opportunities for such reflection by weaving discussions of AI ethics and professional responsibility, framed by the ACA Code of Ethics and recommendations for AI use, into regular class dialogue. This helps signal that ethical discernment is not optional; just as a counseling technique requires debriefing to unpack its impact, an AI tool requires collective processing of its implications. One practical pedagogical approach is to let students analyze the accuracy and bias of AI-generated content (Shoemaker et al., 2025). For instance, a class might critique an AI-generated client conceptualization for cultural assumptions or factual errors. These exercises cultivate ethical vigilance and critical literacy, reminding students that these systems are not neutral or infallible but contingent upon the data and design choices that shape them.

AI in Supervision: Finding the Balance

Applications of AI have implications for supervision. Emerging AI tools are beginning to assist supervisors and trainees in meaningful ways. Some clinics utilize AI-powered platforms to analyze counseling transcripts and highlight moments suggesting a missed empathy cue or a possible risk concern, offering supervisors additional insights to guide discussion with trainees. A recent study indicated that a telemental health clinic used an AI-powered platform to deliver client progress measures and draft notes, allowing interns to devote more attention to direct client care, which suggests a supportive role for AI in supervision in promoting learning outcomes (D. Sheperis & Sharvit, 2025). That said, the quality and accuracy of the feedback from various AI platforms warrant rigorous evaluation;

meanwhile, effective supervision rests on human connections, encompassing modeling, attunement, and the safety to make and learn from mistakes.

No algorithm can reproduce the sense of being known and encouraged by a human supervisor or the subtle mentorship that shapes professional identity. Considering this, AI use in supervision should not only uphold ethical standards but also privilege human judgment. Although an AI system might analyze session data, summarize session exchanges, and offer feedback, it is the supervisor's responsibility to interpret the results from AI and determine how they will incorporate this feedback when communicating with trainees because there has been very limited empirical evidence of the quality of AI-generated feedback. Without human judgment and evaluation, overreliance on automated insights risks missing the educational moments that supervision often sparks, as well as weakening the independence that supervisors seek to foster in their trainees. We believe that AI can enhance efficiency, but it should never displace the relational core of counseling or training. Namely, supervisors can use AI to analyze session data and gain additional understanding of their trainees' performance, and then bring that data into a reflective, person-centered discussion, reinforcing that growth in counseling depends as much on human connection as on technological advancement.

Broad Societal and Ethical Considerations

Environmental Impact of AI

As we embrace AI technologies, it is important to consider the broader societal and environmental implications of these tools. The computational infrastructure required to train and operate large language models consumes substantial energy resources. The International Energy Agency (IEA, 2025) estimated that global data centers consumed approximately 415 terawatt-hours (TWh) of electricity in 2024 (i.e., roughly 1.5% of global electricity use) and projected that this figure could more than double to 945 TWh by 2030, with AI identified as the primary driver of that growth. AI server deployment across the United States could generate annual water consumption of 731 to 1,125 million cubic meters and additional carbon emissions of 24 to 44 million tons of CO_2-equivalent between 2024 and 2030 (Xiao et al., 2025). Furthermore, the carbon footprint of AI systems alone could reach between 32.6 and 79.7 million tons of CO_2 emissions globally in 2025, comparable to the emissions of a major metropolitan area (de Vries-Gao, 2025). These environmental costs lead to ethical questions that are relevant to our profession's commitment to social justice and advocacy. As we adopt AI tools in counselor education, we should remain mindful that the energy demands of AI disproportionately affect communities near data center hubs and contribute to environmental challenges. Encouraging critical awareness of these impacts among our students aligns with the profession's ethical obligation to consider the welfare of all people and communities.

Ethical Concerns: AI's Errors ("Hallucinations") and Misinformation

Generative AI chatbots make mistakes, and their responses may contain errors. Researchers tend to refer to this issue as "hallucinations," in which AI chatbots generate content that appears authoritative and fluent but is factually incorrect, fabricated, or unsupported by evidence (Huang et al., 2025). Hallucinations can manifest as fabricated citations with nonexistent authors, false historical claims, invented statistics, or flawed explanations presented with apparent confidence. In counselor education and supervision, these errors carry heightened risk. If a student relies on AI-generated clinical information or research references without verification, it could lead to misinformed case conceptualizations, inappropriate treatment approaches, or compromised client care. Research has suggested that AI-generated outputs in medical and clinical domains are susceptible to domain-specific hallucinations, often arising from reasoning failures rather than simple knowledge gaps (Kim et al., 2025). The blurring of fact and fiction in AI-generated content threatens to erode trust, amplify misinformation, and undermine the evidence-based foundations of our profession. Together, counselor educators and supervisors have the onus to model responsible use of AI and teach students to approach AI-generated content with the same critical scrutiny they would apply to any other information source.

Keeping Humanity at the Center of Innovation

As counselor educators and supervisors, we now face an inflection point. AI will continue to expand into our classrooms and clinics, but it cannot carry the responsibility, discernment, or duty of care that define our work (Zhai, 2026). The stakes are too high to treat this as a passing trend. Our charge is to make sure these tools strengthen the human capacities our profession depends on. That means teaching students to question AI's limitations, to understand when technology helps and when it harms, and to anchor every decision in the ethical commitments that guide us (Lemberger-Truelove, 2026). When we can do this, we prepare future counselors to navigate AI wisely; we help build a future in which innovation supports human connection instead of replacing it (Lemberger-Truelove, 2026; Zhai, 2026). The integrity of our field depends on it.

Content Summary

Focus Area	Key Insights	Implications
Curriculum Integration Must Be Intentional	Some instructors add AI policies without incorporating AI into assignments or instruction.	Policy alone is insufficient. Students need structured, ethical, and pedagogically sound AI engagement.
Ethical Modeling Is Essential	Educators must model reflective, ethically grounded AI use and foster discussions tied to the ACA Code of Ethics.	Students learn both ethical reasoning and critical evaluation skills by watching how educators navigate AI.
Bias & Accuracy Audits Build Critical Literacy	Students analyzing AI-generated content for errors, assumptions, or bias increases ethical vigilance.	Reinforces that AI is fallible, shaped by training data, and must be used with caution and scrutiny.
AI's Expanding Role in Supervision	AI tools can analyze transcripts, flag empathy or risk issues, or help automate documentation.	Shows promise for efficiency and training support but requires human oversight and validation.
Human Judgment Remains Central	Supervisors must interpret AI-generated insights; empirical evidence of AI feedback quality is still limited.	Prevents overreliance and protects the educational and developmental aspects of supervision.
Risks of Overreliance on AI	Excessive dependence on automated analysis can weaken trainee independence and miss teachable moments.	Guards against erosion of clinical judgment, relationship attunement, and professional identity formation.
AI and Critical Thinking	Research links frequent AI use to cognitive offloading and diminished analytical reasoning, especially among younger users.	Design learning experiences for deeper engagement with the consideration of AI's role.
Relational Core of Counseling Must Be Preserved	No AI system can replicate empathy, attunement, or the "sense of being known" in supervision and counseling.	Reaffirms the unique, irreplaceable role of human connection as the foundation of counseling practice.
Educators Have a Responsibility to Lead Thoughtfully	Counselor educators and supervisors should guide AI development to strengthen the human capacities central to the profession.	Aligns innovation with ethics, protecting clients and advancing counselor identity in a digital era.
Environmental Impact of AI	AI training and deployment demand enormous energy and water resources; data center electricity use could more than double by 2030.	Counselor educators should cultivate awareness of AI's environmental footprint as part of the profession's commitment to social justice and advocacy.
AI Hallucinations and Misinformation	AI can generate fabricated citations, false clinical information, and invented statistics with apparent confidence, posing risks in counseling contexts.	Educators must model responsible AI use and critical scrutiny of all AI-generated content to protect evidence-based practice.

Practical Implications for Instructors & Supervisors

Practice Dimension	Implications for Instructor	Implications for Supervisors
Ethical Modeling	Integrate explicit, ongoing discussions of AI ethics aligned with the ACA Code of Ethics; demonstrate reflective reasoning about when and how to use AI tools.	Make transparent how you evaluate AI-generated insights; narrate your clinical reasoning when deciding what feedback or intervention to prioritize.
Curriculum & Training Design	Move beyond policy statements by embedding AI literacy into assignments, discussions, and learning activities that highlight limitations, biases, and appropriate use.	Maintain a structured process for reviewing and contextualizing AI feedback when using AI-based tools as supplementary aids for analyzing session performance.
Cultivating Critical Literacy	Engage students in bias and accuracy audits of AI-generated content; teach them to identify assumptions and limitations in AI outputs.	Use AI-generated summaries or flagging systems as prompts to help trainees think critically about their own choices and assumptions in session work.
Balancing Innovation and Caution	Encourage exploratory use of AI while emphasizing its fallibility; frame technology as a tool for inquiry, not authority.	Carefully vet AI platforms and ensure their output is treated as one data point rather than a replacement for human judgment or clinical interpretation.
Maintaining Human Connection	Reinforce humanistic principles by showing students how relational skills and ethical frameworks guide decisions about when to rely on technology.	Prioritize relational attunement and reflective dialogue in supervision sessions.
Professional Responsibility	Stay informed about emerging AI guidance from ACA, ACES, and institutional policies; help students navigate inconsistencies across programs or platforms.	Protect client welfare by monitoring AI accuracy, ensuring confidentiality, and maintaining clear boundaries around acceptable use in clinical settings.
Fostering Independence	Use AI exercises to help students strengthen analytic and ethical decision-making skills rather than outsource them.	Avoid trainee overreliance on AI; encourage independent formulation, risk assessment, and reflection before reviewing AI insights.
Supporting Relational Identity Formation	Help students understand how AI fits within the foundational values of counseling and counselor identity.	Use supervision conversations to explore how supervisees make sense of AI's presence while cultivating professional identity rooted in empathy and human connection.
Environmental and Social Awareness	Incorporate discussions of AI's environmental and societal costs into coursework; connect to social justice and advocacy competencies.	Consider the environmental footprint of AI tools used in supervision; model awareness of broader systemic impacts.
Addressing AI's Errors (Hallucinations)	Teach students to verify AI outputs against primary sources; design	Verify any AI-generated clinical feedback or summaries before using them in

	assignments that require cross-referencing AI-generated content.	supervision discussions; model fact-checking practices.
Protecting Critical Thinking	Include assignments completed without AI to build independent reasoning; use AI exercises to strengthen analytical skills.	Encourage independent case formulation before reviewing AI-generated analysis; foster reflective thinking and clinical judgment.
AI Syllabus Statements	Adopt a tiered approach to AI policies (AI-Permitted, Some AI, No AI) based on course learning objectives; include rationale for AI policy choices.	Communicate clear expectations about AI use in supervision; align AI policies with clinical training goals and ethical standards.

Appendix: Suggested AI Statements for Faculty Syllabi

As AI becomes increasingly prevalent in higher education, clear syllabus language is essential for setting expectations about appropriate AI use in counselor education courses. The following three-tiered framework, adapted from the University of Florida's *AI Technologies in Education* guidelines (McCallister et al., 2024), offers counselor educators a starting point for crafting syllabus statements that reflect their pedagogical goals and the level of AI integration appropriate for each course.

AI-Permitted

This level is appropriate for courses where AI engagement is a learning objective, such as courses exploring technology in counseling or research methods courses that teach students to critically evaluate AI-generated literature reviews:

> *"AI tools may be necessary for this course. The use of generative AI is encouraged in certain assignments and will be detailed in the assignment instructions. Any work completed with the assistance of generative AI must be cited in your submission."*

Some AI

This level suits courses where some assignments benefit from AI assistance (e.g., brainstorming case study topics or organizing literature) while other assignments require unassisted student work to develop clinical reasoning:

> *"AI tools may be used to enhance certain assignments in this course. Assignment instructions will clearly distinguish between human and AI tasks. Any work completed using AI must be properly cited in your submission."*

No AI

This level is appropriate for practicum, internship, or other clinical courses where the development of personal reflection, empathic attunement, and independent clinical judgment is paramount:

> *"The learning that occurs in this course relies on your individual perspectives and personal experiences. Using AI tools would make it more challenging to assess your work. Therefore, the use of any generative AI tools is not allowed in this course, and if used, it will be considered a violation of academic integrity."*

In adopting any of these levels, counselor educators should also include a brief rationale explaining why a particular AI policy was chosen, how it connects to course learning objectives, and what the professional and ethical implications of AI use are for counseling practice. Transparent, well-communicated expectations help prevent academic integrity concerns and support students in developing responsible AI use that will carry into their professional lives.

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