



# Non-negotiable Skills for Instructional Designers

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Q: What do you think of the AI tools that have emerged recently and their potential to support instructional designers?

A: If we ignore the hype and understand the risks involved with using AI tools, then we have the potential to make intelligent choices about which tools can best support an instructional design practice. AI tools can expedite many tasks when we use them as assistants rather than experts. In many cases, that means performing automated tasks or the initial work that we then modify and improve.

Some areas where learning experience designers and instructional designers are using AI tools for support include content generation, creating chatbots, editing, creating multimedia, programming, translation, and analyzing data. It's important to remember that although AI tools assist, the results may be inaccurate and must be checked.

In addition, we should be aware that some AI tools disregard artists' rights and use their work without consent or compensation by mixing the work of multiple artists or copying an artist's style. Also, AI text-to-speech takes jobs away from talented voice actors. I prefer to stay away from the AI apps that cause harm to those in the creative arts.

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Q: What cautions would you suggest to instructional designers who want to use these tools?

A: By now, most people are aware of the risks and disadvantages of Artificial Intelligence. But, perhaps a few people have been too busy to keep up. So, I'll reiterate four of the many reasons to be cautious.

First, AI tools don't understand in the sense that humans understand. Large Language Models are blazing fast at piecing together information from their datasets. So, the generative AI tools like ChatGPT and Bard appear to understand in a human way but they do not. This explains why content generated from AI chatbots may be inaccurate and why we must check the results.

Second, AI responses are based on datasets from particular locations and sources. The sources may contain the biases of the humans who wrote the content even after filtering for bias. Also, the datasets do not include data from all cultures or groups of people. Therefore, results are not necessarily appropriate in all cultures and instances. The responses from generative AI tools may be ethnocentric.

Third, the publishers of AI tools are not currently as transparent as experts would like. We often don't know how the tools are trained and where they get their data. AI companies are not sufficiently

transparent about the risks and limitations of their tools. I know governments worldwide are working to ensure the tools are trustworthy and I hope it improves.

Fourth, there are big privacy and security concerns around AI tools. There is no way to guarantee that your data is private. We can't be sure how the tools use the information we provide. AI tools have leaked huge amounts of private data in the past. A quick internet search will reveal many instances of privacy violations.

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**Q: How do you see AI and human-centered design intersecting in instructional designers' development of effective learning environments?**

A: On the positive side, many people are excited about using AI to improve human-centered design, if you mean personalized learning. Because AI can quickly analyze performance data, individual preferences, and a person's goals, we can use it to generate individualized learning plans and to support adaptive learning. The language app Duolingo provides personalized practices in a learner's weak areas (though I find it does have its flaws).

AI can analyze large data sets to find common attributes that signal when a student or employee is in trouble and needs help learning a particular skill. AI algorithms might also make recommendations to individuals for further

learning by engaging in content curation. There is enormous potential for improving personalized learning.

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**Q: Could you elaborate on the most critical writing skills (and types of writing) that instructional designers should develop and how they contribute to successful eLearning courses?**

A: So much of learning design relates to how we communicate with each other. As a new learning designer, I was surprised at the amount and variety of writing we do on the job. Writing is an essential skill for designers because we focus on learning and engagement. Our explanations, examples, and interactions must be clear and concise for learning. We need a relatable rhythm and flow to engage readers and listeners with our stories, scenarios, and case studies.

When instructional designers write audio scripts we are writing to be heard rather than read. The sound of every word and the cadence of sentences becomes more important. One more important writing skill to develop is scripting for video. The maxim for this type of writing is "show don't tell." We must demonstrate rather than just explain. Or in storytelling we show the action rather than describe it.

There are other types of writing for instructional design that you can read in my article: Ten Types of Writing for Instructional Design.

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Q: What essential skills and knowledge do you think are vital for someone starting a career as an instructional designer?

A: There are a few ways to organize what someone must learn to start a career in instructional design. You can organize it into two groups: what is required and what is optional.

Required skills include:

Knowing how people learn in the workplace, including learning science.

Applying a flexible instructional design process.

Guidelines for universal design.

Tools and technology, including multimedia creation and editing.

For those who don't like working with tech, then just get familiar with some of the most common tools used in the field. Not all instructional designers must be developers or graphic designers.

Following your interests and talents to stand out is important in the second and optional skills category. Finding one

person who excels in all optional skills is probably rare or impossible. But gaining competence in a few is important.

The optional skills include:

Business, including project management.

Consultative skills that demonstrate your ability to work well with clients.

Data and analytics to evaluate and measure human and business performance.

Development to create eLearning, learning portals, and to fulfill other technical needs.

Facilitation, to lead webinars, discussions, and classes.

Social learning with a focus on how learning happens through social interaction.

Perhaps it's not too soon to add one more area to this list: Artificial Intelligence. The skill would involve knowing how to use AI tools to expedite the design and development process.