Frontline Workforce Development Practitioner Perspectives on Generative AI

An initiative of Harvard's Next Level Lab By Jacob Hale, Mari Longmire, and Tessa Forshaw

INTRODUCTION

OpenAI's ChatGPT ushered in a new era of technological advancement. Generative artificial intelligence (AI) technology is transforming the way we work, learn, and live. There is an ever-growing list of generative AI-driven applications offering benefits such as increased productivity and efficiency, as well as a reduced skill gap between skilled and unskilled workers (Noy & Zhang, 2023; Brynjolfsson et al., 2023).

However, while a growing body of knowledge investigates the use of generative AI in education broadly, few studies focus on its use by workforce development practitioners who operate outside of four-year higher education institutions (Duan & Wu, 2024).

ChatGPT

Copilot

✳ Claude

...and more appearing every day

To understand the role of generative AI in workforce development, it is essential to gather data from frontline workforce development practitioners who use or plan to use this tool in their practice, often with limited guidance.

Research Questions

1. How do workforce development practitioners understand and make sense of Generative AI?

2. In what ways are practitioners integrating generative AI into their work?

3. What are the envisioned potentials and perceived challenges for generative AI that they see for their students?
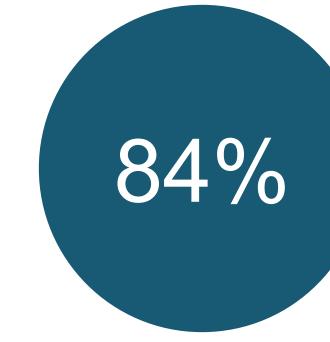
SURVEY AND RESPONSE RATES

This study involved deploying a survey to six participating organizations to capture how their frontline workforce development practitioners perceived generative AI, including how they apply it to their work, the advantages and challenges they encounter, the support they require, and their perspectives on how generative AI will impact future jobs and skill requirements.

7
Participating Organizations

181
Survey Responses

84%
Practitioners referencing use cases

TOP PRACTITIONER USE CASES

84% of practitioners referenced specific use cases. The top 3 use cases:

Learning & Instruction: 40%

Lesson plan development, personalization, code review, assessments, and visual aids

"To create new context/learning materials"

"It's a very efficient way to create step-by-step process customized to learners"

"To help brainstorm lesson plan ideas, simplify complex technical concepts for students, and even create interactive learning activities."

Communication & Design: 39%

Edit and refine email, memos, report drafts, PPT presentations, website design, and image generation

"Help me review my own writing to ensure I'm accurately explaining my points, and where I might need more clarification."

"To create PowerPoint presentations."

"Drafting letters or images through ChatGPT."
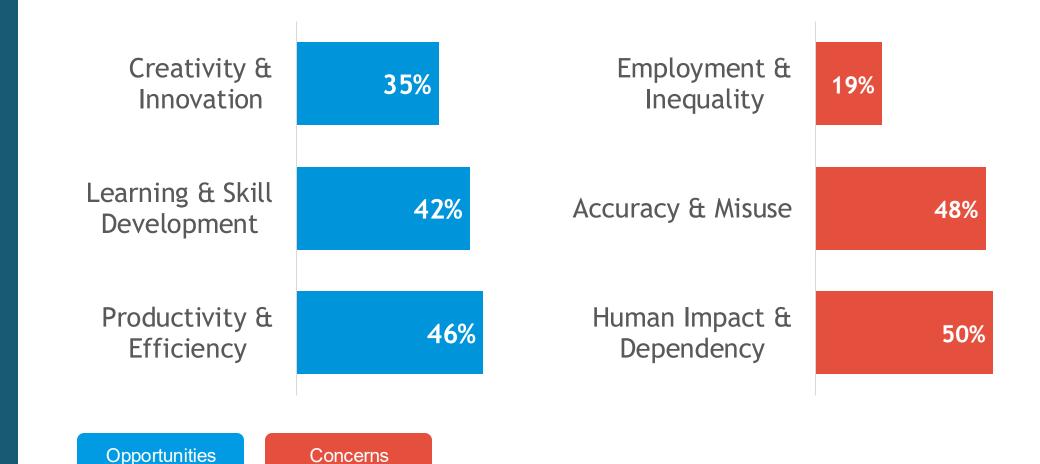
Research & Analysis: 36%

Gather new information, simplification of complex topics, refreshers, and Excel formulas

"Ask it [generative AI] questions if I want a quick answer instead of doing extensive research."

"I treat it like a more advanced Google search."

"Conduct initial literature review or topic knowledge to use as a starting point."

OPPORTUNITIES VS. CONCERNS

	Opportunities		Concerns
Creativity & Innovation	35%	Employment & Inequality	19%
Learning & Skill Development	42%	Accuracy & Misuse	48%
Productivity & Efficiency	46%	Human Impact & Dependency	50%

Opportunities   Concerns

LOOKING AHEAD

Continued investigation of survey findings to understand:

- Enablers and barriers for practitioners and their learners

- User archetypes and what organizations can do to best plan for each

- Toolkits and best practice playbooks for practitioners

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