

**Using Backward Design to Build a Training**

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## **Training Module: Leveraging Generative AI for Brainstorming**

### **Develop SMART Objectives**

The training module on using generative AI for brainstorming will include three SMART objectives to ensure that learning outcomes are met. The first objective states that learners will be able to explain the fundamental principles of generative AI and its applications in the brainstorming process. The second objective states that learners will be able to demonstrate the ability to generate and refine ideas using generative AI tools, producing at least three viable project concepts by the end of a guided practice session. The third objective will include that learners will be able to evaluate AI generated outputs, identify strengths and limitations of generative AI and ethical considerations, by participating in a peer discussion and submitting a written reflection within 24 hours of completing the training. These objectives are specific, measurable, achievable, relevant, and time bound, ensuring that learners acquire both theoretical understanding and practical skills in using generative AI for brainstorming.

### **Design Instructional Content**

The instructional content for this training module will be designed using the backward design framework to align with the defined SMART objectives. The module will begin with an introduction to generative AI, including its role in creative problem solving and brainstorming. Interactive elements like videos and articles will illustrate AI functionality and real world applications. Following this foundational knowledge, learners will engage in hands on activities where they interact with AI powered brainstorming tools, input prompts, and evaluate AI generated responses. Guided exercises will lead learners through the iterative refinement of ideas, encouraging active participation. The module will conclude with a structured assessment,

requiring learners to generate project ideas, refine them based on feedback, and analyze ethical implications.

### **Determine Training Delivery**

The training will be delivered as a self paced online module through Articulate Rise, allowing learners the flexibility to complete the course at their own convenience. The training will be structured into three main units: Introduction to Generative AI for Brainstorming, Practical Application and Idea Generation, and Evaluating AI Generated Ideas. Each unit will incorporate a mix of instructional text from online articles, interactive exercises, and youtube video tutorials. Learners will be required to complete guided activities within AI tools, submit reflections, and participate in written online discussions.

### **Plan Assessment Methods**

Assessment methods will be used to evaluate both knowledge acquisition and practical application of generative AI in brainstorming. Assessments will include interactive knowledge checks embedded throughout the module, prompting learners to recall key concepts and apply them in guided exercises. Learners will complete a final project where they generate three project ideas using generative AI, refine them based on peer and instructor feedback, and submit a brief analysis of the strengths and limitations of AI-generated content. Additional assessments will include quizzes on AI principles and ethical considerations, as well as discussion board participation where learners reflect on their experiences using AI for brainstorming. Peer interactions will play a key role in reinforcing learning. Learners will be required to provide constructive feedback on at least three of their classmate's project ideas.

## **Create an Evaluation Plan**

Success will be measured by learner performance on assessments, with an expectation that at least 80% of participants achieve a score of 80% or higher on quizzes and project submissions. Learner engagement will be tracked through module completion rates, peer interactions, and discussion participation. Post training surveys will collect feedback on course effectiveness, clarity, and applicability to brainstorming scenarios. Learners who struggle to meet the objectives will have access to additional support, including additional resources, coaching sessions, and extended deadlines for project completion. Data collected from assessments and feedback will be used to refine and improve future iterations of the training. A follow up survey will be conducted one month after training completion to assess long term application of skills.

## **Integrate Ethical Considerations**

Ethical considerations will be integrated throughout the training to encourage responsible use of generative AI in brainstorming. The module will include discussions on bias in AI-generated content, the importance of verifying AI-generated ideas for accuracy, and the ethical implications of over reliance on AI for creative processes. Learners will explore case studies highlighting both the benefits and potential risks of AI assisted brainstorming. A dedicated section will prompt learners to critically analyze AI outputs, identifying potential biases and ethical concerns. Learners will be encouraged to develop best practices for using AI responsibly, ensuring that AI serves as a tool for enhancement rather than replacement of human creativity. These discussions will foster ethical awareness and critical thinking.

## **Iterate and Refine**

Suggested improvements and refinements to the training will be gathered through learner feedback, performance data, and ongoing evaluation. Feedback will be collected through post training surveys and discussion board reflections. Learners can share their insights and opinions on the course structure, content clarity, and overall experience. Improvements will be made based on this feedback including refining instructional materials and adjusting assessment criteria.