

Using Gen AI in Training Design and Development

Enhancing Learning Experiences with Artificial Intelligence



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Objectives:

At the end of this session you will be able to:

- **Define and explain** the concept of **Generative Artificial Intelligence (GenAI)** and its core principles in training design and development.
- **Identify and list key benefits** of **GenAI** in enhancing training and development processes, including personalization and efficiency.
- **Evaluate and demonstrate** the **practical applications** of **GenAI** in various training scenarios related to design and development
- **Analyze and discuss** the **challenges** and ethical **considerations** when implementing **GenAI** in training environments.

Structure

- Understanding Gen AI
- Application and benefits of GenAI in the ADDIE
- Application of Gen AI in Design and Development
- Overcoming challenges and ethical consideration

Session 1

Understanding Gen AI

What is Generative Intelligence?

Objective

- **Define** Generative Intelligence and differentiate it from traditional AI based on functionality and application.
- **Identify** real-world examples of Generative Intelligence and analyze its use across different industries.
- **Evaluate** the key differences between Generative Intelligence and traditional AI, explaining their impact on AI-driven solutions.

Structure

- Key terminologies
- Definition and Basics of Generative AI
- Difference Between Gen AI and Traditional AI
- Examples of Gen AI (e.g., ChatGPT, DALL-E)

Some terminologies

- A. Artificial Intelligence (AI)
- B. Machine Learning (ML)
- C. Deep learning
- D. Generative AI
- E. Large Language Model (LLM)
- F. Neural networks

1. Computing systems inspired by the human brain, consisting of layers of interconnected nodes (neurons) to process data.
2. A subset of AI where machines learn from data to improve performance on tasks without explicit programming.
3. The simulation of human intelligence by machines to perform tasks like reasoning, learning, and decision-making.
4. AI systems that create new content (text, images, music) based on learned patterns from existing data.
5. A branch of ML using neural networks with many layers to model complex patterns in large datasets.
6. A type of AI model trained on vast amounts of text to understand, generate, and predict human language.

A. Artificial Intelligence (AI)

The simulation of human intelligence by machines to perform tasks like reasoning, learning, and decision-making.

B. Machine Learning (ML)

A subset of AI where machines learn from data to improve performance on tasks without explicit programming.

C. Deep learning

A branch of ML using neural networks with many layers to model complex patterns in large datasets.

D. Generative AI

AI systems that create new content (text, images, music) based on learned patterns from existing data.

E. Large Language Model (LLM)

A type of AI model trained on vast amounts of text to understand, generate, and predict human language.

F. Neural networks

Computing systems inspired by the human brain, consisting of layers of interconnected nodes (neurons) to process data.

Artificial intelligence (AI) and machine learning (ML) have long been transformative forces in business, revolutionizing operations and decision-making.

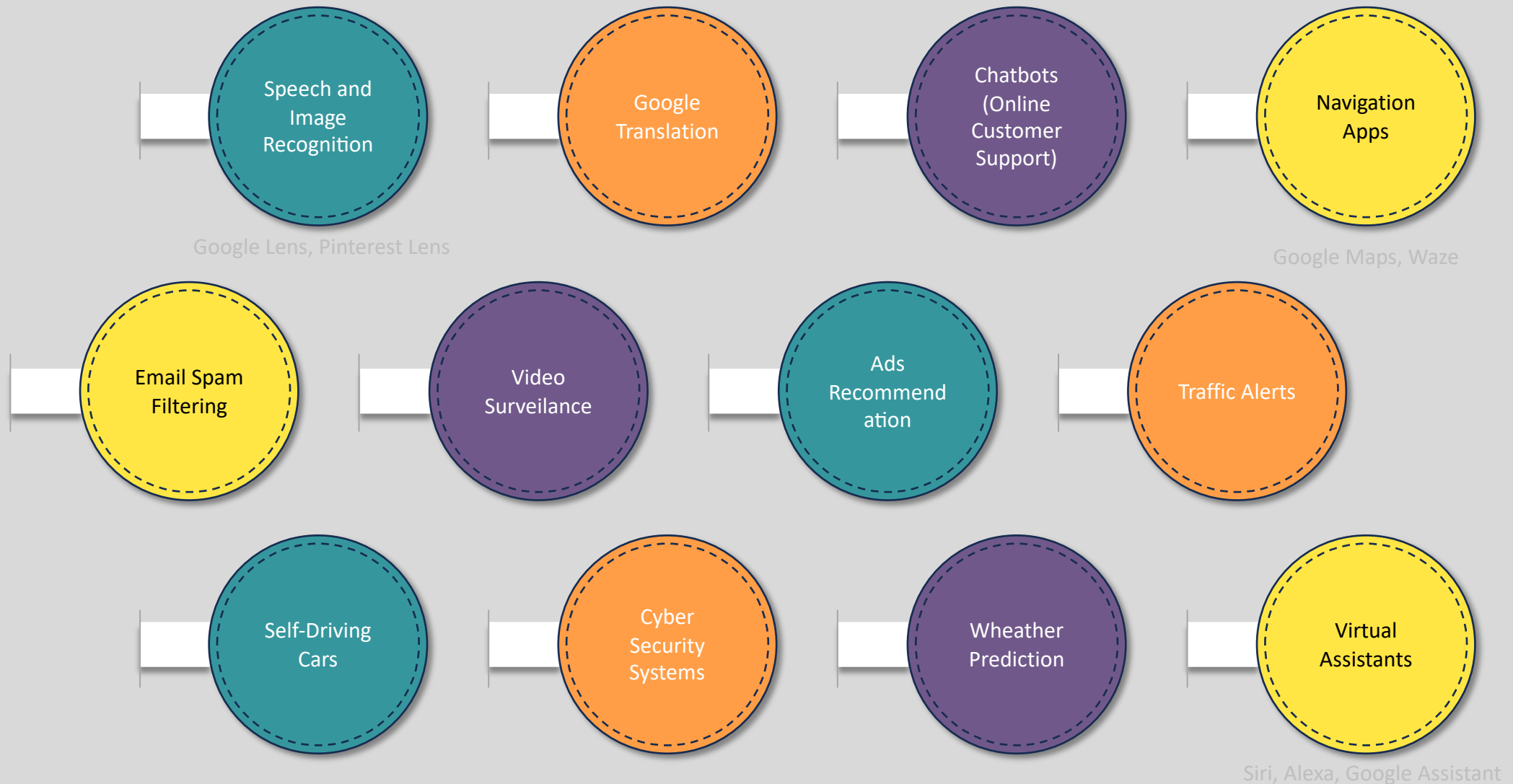


***THE ROBOTS
ARE COMING!***

**The Future of
Jobs in the
Age of
Automation**

**ANDRÉS
OPPENHEIMER**

Examples of GI in action



ARTIFICIAL INTELLIGENCE VS MACHINE LEARNING VS DEEP LEARNING

1 Artificial Intelligence

Development of smart systems and machines that can carry out tasks that typically require human intelligence

2 Machine Learning

Creates algorithms that can learn from data and make decisions based on patterns observed
Require human intervention when decision is incorrect

3 Deep Learning

Uses an artificial neural network to reach accurate conclusions without human intervention

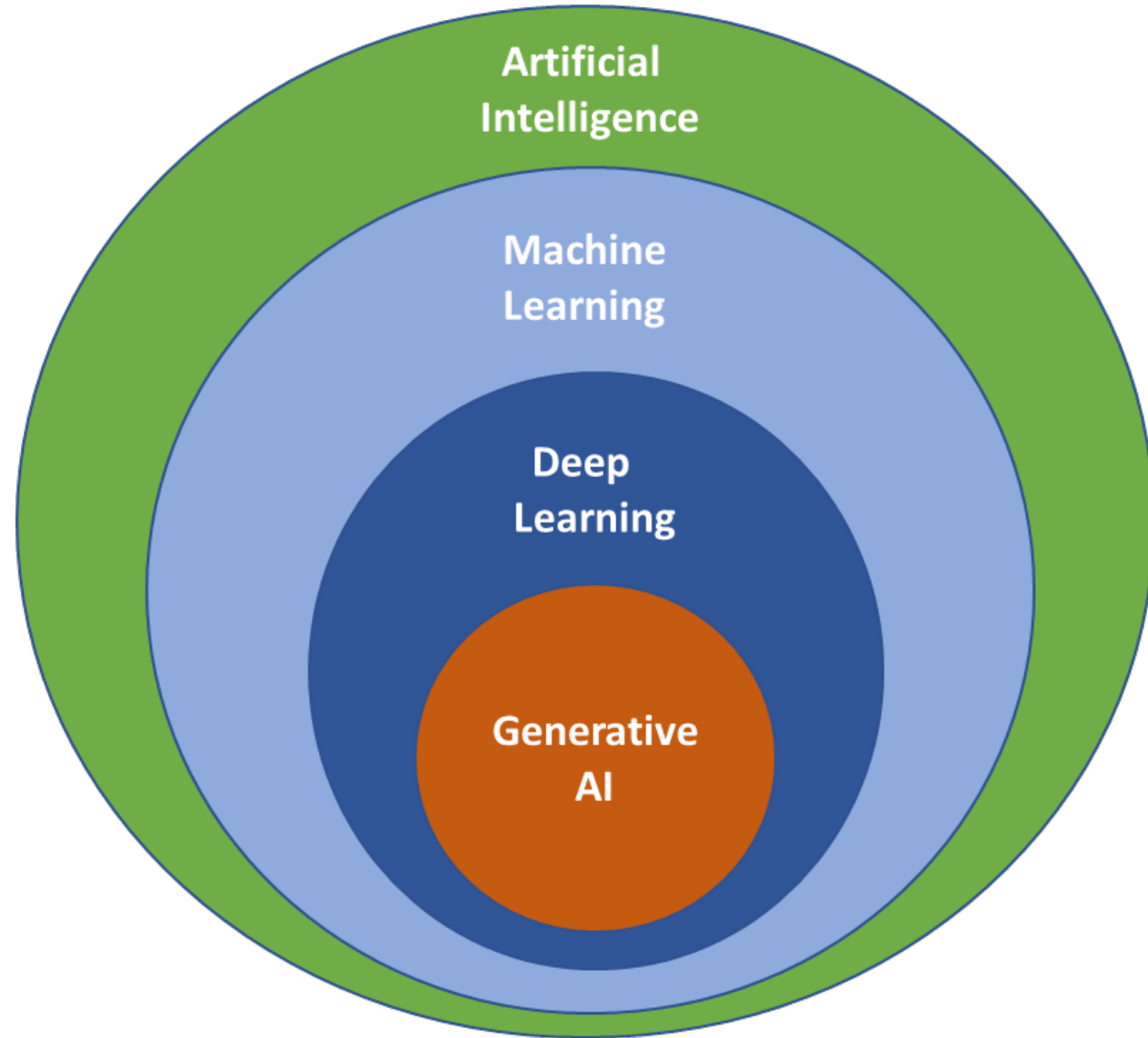
Generative Intelligence

What is Generative AI?

Generative AI (genAI) is a broad label describing any **artificial intelligence (AI)** that can produce new


- text
- images
- video, or
- audio clips

Technically, this type of AI learns patterns from training data and generates new, unique outputs with the same statistical properties



Artificial Intelligence vs. Traditional Machine Learning, Generative AI

Characteristic	AI	Traditional ML	Generative AI
Purpose	Develop computer systems that can perform tasks that typically require human intelligence.	Make predictions or decisions based on given data.	Generate new data samples that resemble a given set of training data.
Data Interaction	Models use various techniques and strategies designed to mimic human intelligence across a wide range of applications.	Models learn from data to make predictions or decisions on new unseen data.	Models produce new data that weren't part of the original dataset but share similar characteristics.



If you had access to all the experts in the world in any field, how would you leverage their knowledge and experience to enhance your training programs?

Activity: Answer in the chatbox



Session 2

The Role of Gen AI in ADDIE

The Role of Gen AI in ADDIE

Objective

- **Explain** the phases of the ADDIE model and apply Generative AI (GenAI) tools in each phase to enhance the training design and development process.
- **Evaluate** the key benefits of using GenAI in training and development and demonstrate its impact on improving efficiency and learner engagement.

Structure

- An overview of the ADDIE cycle and practical applications of GenAI
- Key benefits of using GenAI



Design

Analyze

Develop

Evaluate

Implement

What are some of the challenging activities related to each of these phases?

The background is a grayscale photograph of a workspace. It features a wooden desk with a white computer mouse on the left, a smartphone in the center, and various pens and markers scattered around. A person's hand is visible on the right side, holding a pen. The overall scene suggests a creative or design environment.

Analyze

Design

Develop

- Needs Assessment
- Learning Objectives
- Audience Analysis

Evaluate

Implement



Design

Analyze

Develop

- Training Plans
- Content Outline
- Material Selection

Evaluate

Implement



Design

Analyze

Develop

- Content Creation
- Learning Activities
- Assessment

Evaluate

Implement



Design

Analyze

Develop

- Facilitation tips
- Technical Support
- Participants Engagement

Evaluate

Implement



Design

Analyze

Develop

- Feedback Collection
- Performance Evaluation
- Training Improvement

Evaluate

Implement

Session 3

Application of GenAI in Design and Development

Application of GenAI in Design and Development

Objective

- **Apply** prompt engineering techniques to effectively generate training content and resources using GenAI tools, enhancing instructional design efficiency.
- **Evaluate** practical examples of GenAI applications in training design and development, and demonstrate their use to improve learning engagement and resource creation.

Structure

- Prompt Engineering Basics
- Application Examples
- Explore RP AT RP Tool

Design and Development

- Generate comprehensive **lesson plans** that outline session structure, activities, and materials for adult learners.
- Formulate clear, **measurable learning objectives** aligned with adult learning principles.
- Suggest experiential **learning methodologies** like simulations, role-playing, or peer learning for the learning environment.
- Create **anchoring ideas** that connect new content to learners' prior knowledge and experiences.
- Provide tailored **teaching tips for engaging** adult learners effectively.

Design and Development

- Generate **thought-provoking questions** that encourage critical thinking and discussion.
- Create **anchoring questions** to help learners relate personal experiences to the training content.
- Develop **multiple-choice questions to assess learners'** understanding and application.
- **Summarize key points** from discussions, activities, and presentations to reinforce learning.
- **Generate concise bullet point** summaries highlighting essential takeaways for easy reference.

Design and Development

- **Create comparison** charts or matrices to help learners evaluate different concepts, approaches, or case studies.
- **Organize information** into tables to make complex data easily understandable.
- Facilitate collaborative learning experiences by **suggesting group activities** and discussion prompts.
- Generate realistic **scenarios or case studies** for learners to analyze and discuss.
- Encourage **practical application of theories** through scenario planning and case studies.

Design and Development

- Provide **relevant examples** from the industry for learners to discuss and relate to during training.
- **Tailor examples** to learners' professional contexts to make training more applicable.
- Support learners in **applying concepts** through reflection and synthesis activities.
- Use **role-playing** to simulate real-world situations learners may encounter in their roles.
- Engage learners by **relating training content to their everyday work experiences**.



Prompt Engineering

Prompting

**There is no real magic to
writing prompts,**

but there are some general guidelines for '*prompting*' that seem to help the AI return more useful completions to you.

Simple Prompt...

I want to make an impressive presentation on branding. I want to ask all the geniuses to help me!

List 10 important books on branding published from 2010-2020. Summarize 7 salient concepts or ideas from these books

Creativity is an inherent
ability that cannot be
taught, only developed.

Pearl Zhu

“ quote fancy



10 Notable Branding Books (2010-2020)

1. **"Building a StoryBrand: Clarify Your Message So Customers Will Listen"** (2017) by Donald Miller
2. **"Branding In Five and a Half Steps"** (2015) by Michael Johnson
3. **"Hello, My Name Is Awesome: How to Create Brand Names That Stick"** (2014) by Alexandra Watkins
4. **"Branding for Dummies"** (2012) by Bill Chiaravalle and Barbara Findlay Schenck
5. **"Zag: The Number One Strategy of High-Performance Brands"** (2016) by Marty Neumeier
6. **"Obsessed: Building a Brand People Love from Day One"** (2020) by Emily Heyward

10 Notable Branding Books (2010-2020)

7. **"Killing Marketing: How Innovative Businesses Are Turning Marketing Cost into Profit"** (2017) by Joe Pulizzi and Robert Rose
8. **"The Brand Gap: How to Bridge the Distance Between Business Strategy and Design"** (2010) by Marty Neumeier
9. **"Emotion By Design: Creative Leadership Lessons from a Life at Nike"** (2017) by Greg Hoffman
10. **"Firms of Endearment: How World-Class Companies Profit from Passion and Purpose"** (2014) by Raj Sisodia, David B. Wolfe, and Jag Sheth

7 Salient Concepts from These Books:

1.The Power of Storytelling in Branding

("Building a StoryBrand" – Donald Miller)

Brands should position the customer as the hero of a story and themselves as the guide. By using a clear and compelling narrative, companies can connect with their audience on an emotional level, helping customers understand how the brand can solve their problems. Simplified, customer-centric messaging is critical to cutting through the noise.

7 Salient Concepts from These Books:

2. Differentiation Through Simplicity

("Zag" – Marty Neumeier)

In a crowded marketplace, the best way to stand out is by “zagging” when others “zig.” This means creating a brand strategy that focuses on radical differentiation. Instead of competing head-to-head with similar brands, aim to fill a unique niche by simplifying the brand's message and positioning it in a way that’s unmistakably different.

7 Salient Concepts from These Books:

3. Brand Naming as a Competitive Advantage

("Hello, My Name Is Awesome" – Alexandra Watkins)

A memorable and easy-to-pronounce brand name is a crucial asset. Names should be short, catchy, and distinctive enough to trigger word-of-mouth marketing. The book introduces the "SMILE" and "SCRATCH" test, guiding brands to choose names that evoke positivity (SMILE) and avoid those that may cause confusion or negative connotations (SCRATCH).

PROMPT ENGINEERING FOR NON-TECHIE TEACHERS



AN INTRODUCTION TO CHATGPT AND
GENERATIVE AI FOR THE CLASSROOM

ANTHONY D. NEELY, PH.D.

UNLOCKING CHATGPT:

Smart and Lucrative Side
Hustle Ideas with AI

The Ultimate Guide to ChatGPT

A beginner's handbook to understanding
prompt engineering, the future of artificial
intelligence and how to use it effectively



PERCIVAL C. VERENA

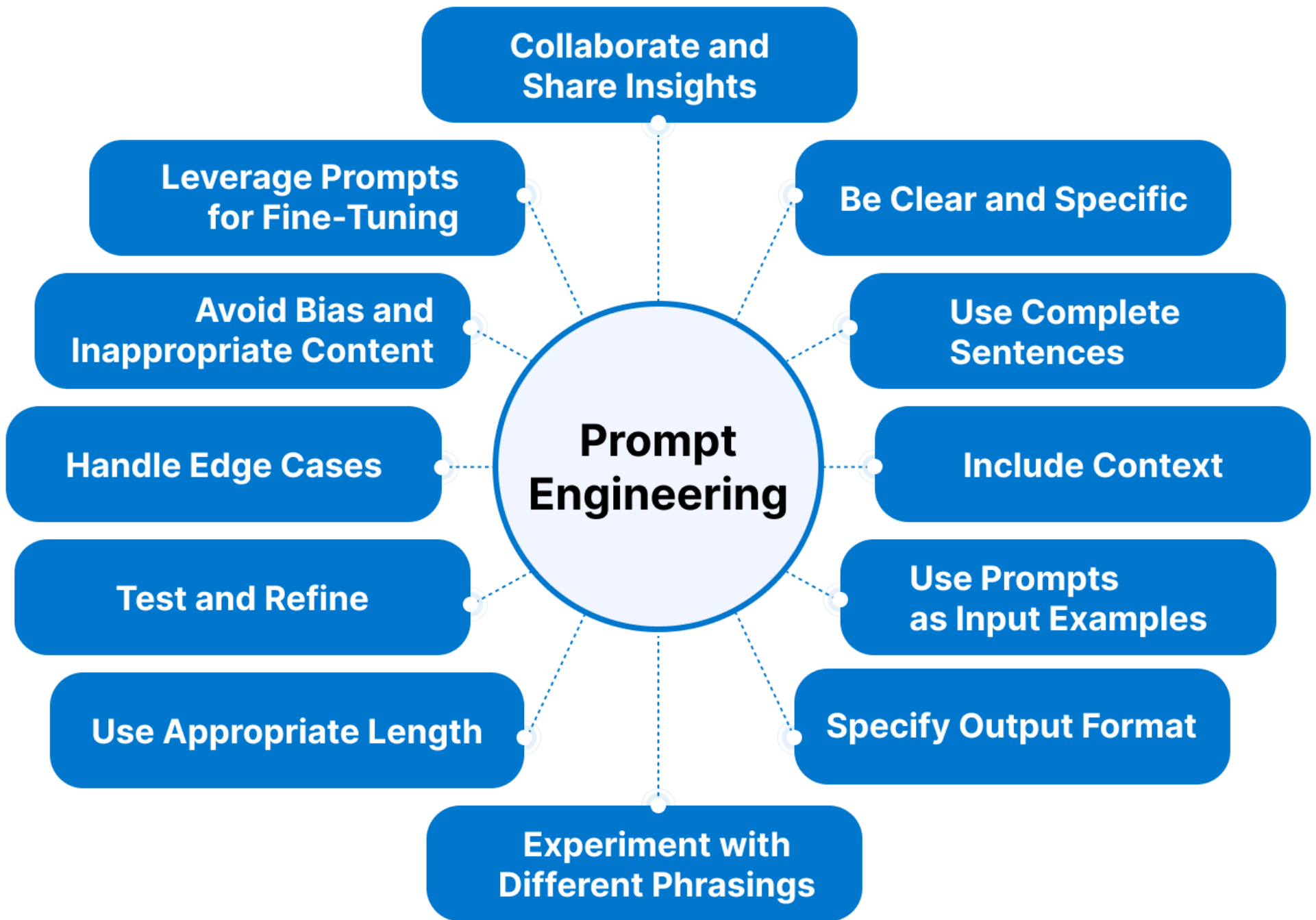
PROMPT ENGINEERING AND CHATGPT

HOW TO EASILY **10X YOUR PRODUCTIVITY**
CREATIVITY AND MAKE MORE MONEY
WITHOUT WORKING HARDER

— THE ONLY 3 —
CHATGPT
PROMPT TEMPLATES
YOU NEED TO
PRODUCE CONTENT FAST
THAT DOESN'T SUCK
FOR NONFICTION WRITERS



NICCI PRICE



Real

Role

Progress

Purpose

Always

Audience

Takes

Task

Reasonable

Requirements

Patience

Parameters

Prompt Engineering- RP AT RP

- **Role** (act as...)
- **Purpose** (Why do you need it)
- **Audience** (Who is the intended audience of the content)
- **Task** (summary of what the GenAI needs to do)
- **Requirements** (what the completion needs to include, contain, be, etc)
- **Parameters for output** (How do you want the output to be)

As an expert on Gen Z education

Role

suggest content for a one-hour presentation

Purpose

for teachers

Audience

on 'Effective Teaching for Generation Z Students'

Task

Structure the content suitable for a one-hour PowerPoint presentation. Suggest a starting activity and timeline for each slide.

Requirements

Parameters

- **1. Starting Activity (5 minutes)**
- **Activity: Gen Z Icebreaker**
- **Objective:** Get teachers to reflect on their interactions with Gen Z students.
- **Instructions:** Ask the audience to share one word they associate with Gen Z students using a polling app (e.g., Mentimeter or Slido).
- **Discussion:** Display results in real-time, highlighting common perceptions.

Slide 1: Introduction to Generation Z (5 minutes)

- **Key Points:**

- Who is Gen Z? (Born 1997-2012)
- Traits: Digital natives, short attention span, values-driven, and socially conscious.
- The importance of understanding their needs in the classroom.

Slide 2: Characteristics of Gen Z Learners (7 minutes)

- **Key Points:**

- Always connected: Dependence on technology and social media.
 - Visual and hands-on learners: Prefer videos, infographics, and interactive content.
 - Multitaskers: Easily distracted but can manage multiple inputs.
 - Prefer independence: Desire self-paced learning and autonomy.
- **Activity:** Quick reflection – Ask teachers how they currently adapt to these traits in their teaching

Setting Learning objectives....

- **Identify** key characteristics and learning preferences of Generation Z students.
- **Apply** appropriate instructional strategies and engagement techniques tailored to Generation Z's learning needs.
- **Evaluate** different teaching tools and technologies for their effectiveness in enhancing engagement and learning outcomes for Generation Z.

Prompting Eg. 1 (ChatGPT – You)

As an expert on Gen Z education suggest content for a one-hour presentation for teachers on 'Effective Teaching for Generation Z Students'. Structure the content suitable for a one-hour PowerPoint presentation. Suggest a starting activity and timeline for each slide.

Prompting Eg. 2(ChatGPT – You)

As the leadership author, 'The Leadership Challenge'

Role

suggest content coaching conversation session

Purpose

for Leadership Coaches

Audience

on 'Measuring Leadership Success'

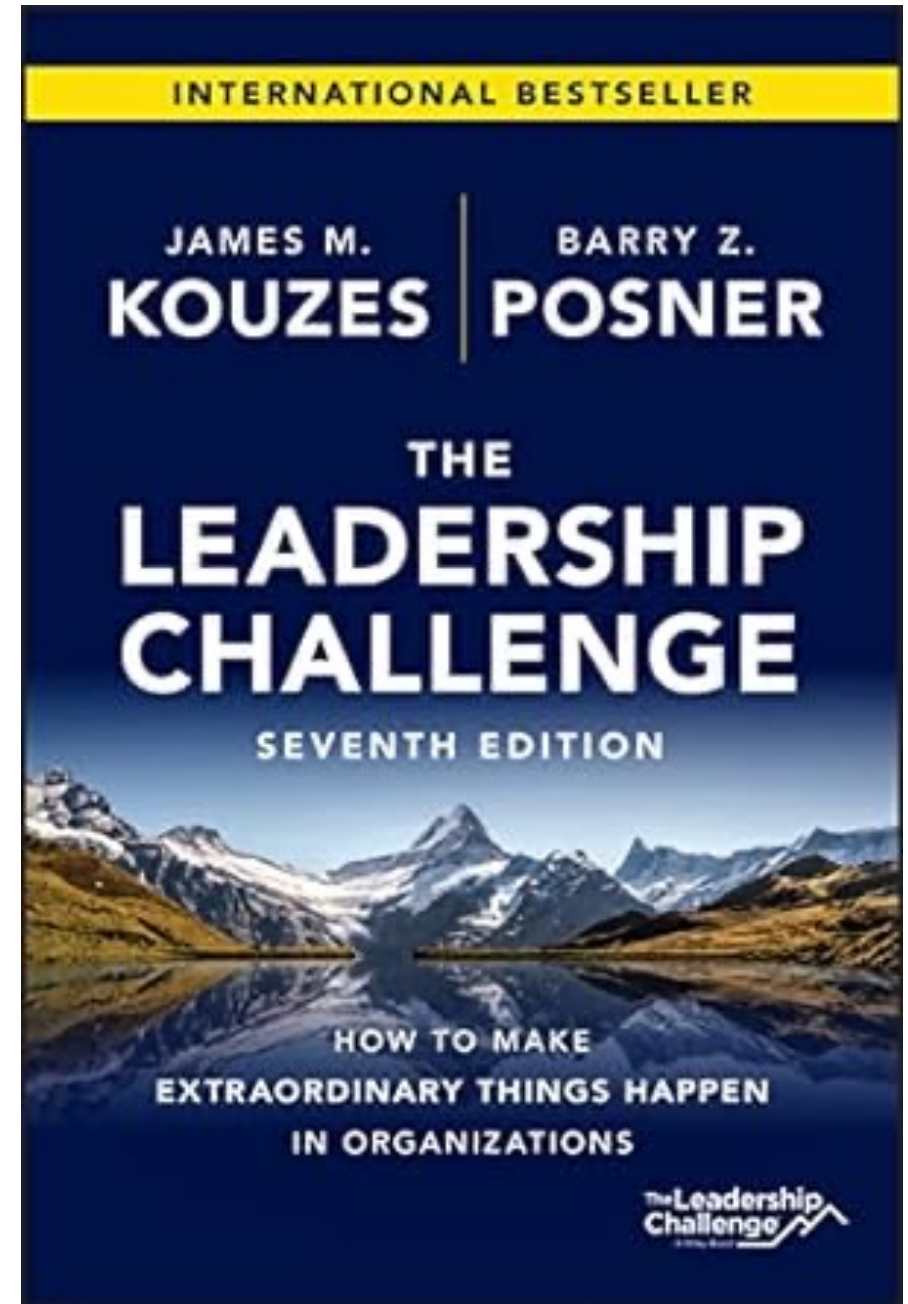
Task

Suggest 5 powerful questions that the leadership coach can use

Requirements

Parameters

As the leadership author of the book 'The Leadership Challenge' suggest content coaching conversation session for Leadership Coaches on 'Measuring Leadership Success' Suggest 5 powerful questions that the leadership coach can use



Coaching Conversation Session: Measuring Leadership Success

- **Session Goals**
- To provide leadership coaches with tools and insights for measuring leadership effectiveness.
- To facilitate discussions on best practices in assessing leadership success.

Coaching Conversation Session: Measuring Leadership Success

- **Session Structure (60 Minutes)**

1.Introduction (5 minutes)

1. Welcome and brief overview of the session's focus.
2. Share the significance of measuring leadership success in fostering growth and accountability.

2.Understanding Leadership Success (10 minutes)

1. Discuss how *The Leadership Challenge* defines leadership success as the ability to inspire and enable others to achieve a common goal.
2. Explore the various dimensions of leadership success (e.g., influence, impact, team performance, and organizational culture).

Coaching Conversation Session: Measuring Leadership Success

- **Five Powerful Questions for Leadership Coaches**

1. What are the most significant indicators of success you observe in your clients' leadership practices, and how do you measure them?

- *Purpose:* To help coaches identify specific success indicators relevant to their coaching context.

2. How do you ensure that the feedback you gather is constructive and leads to meaningful growth for your clients?

- *Purpose:* To encourage reflection on feedback processes and their effectiveness.

3. In what ways do you involve your clients' teams in the measurement of leadership success, and how does this impact the overall effectiveness of the leadership?

- *Purpose:* To explore the benefits of inclusivity and collaboration in measuring leadership.

4. How do you align your measurement strategies with the goals and values of the organizations you work with?

Prompting Eg. 3 (I take a role)

- I am a technology integration specialist.
- I am conducting a training session on ChatGPT for teachers.
- My audience consists of educators from various disciplines and grade levels.
- I want to demonstrate how teachers can effectively utilize ChatGPT in their teaching practices.
- Provide a brief overview of ChatGPT's capabilities and potential applications in education. Highlight specific examples and use cases tailored to different subject areas and grade levels. Offer practical tips and strategies for integrating ChatGPT into lesson planning, student engagement, and assessment. Encourage participants to brainstorm ideas for incorporating ChatGPT into their teaching practice and address any questions or concerns they may have.

Role

Purpose

Audience

Task

Requirements

Parameters

Session 4

Overcoming Challenges and Ethical Considerations

Overcoming Challenges and Ethical Considerations

Objective

List down

- Challenges
- Ethical considerations

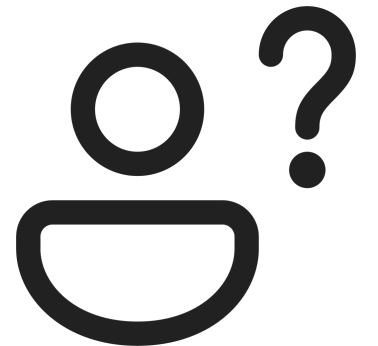
associated with the application of GenAI

Structure

- Challenges
- Ethics

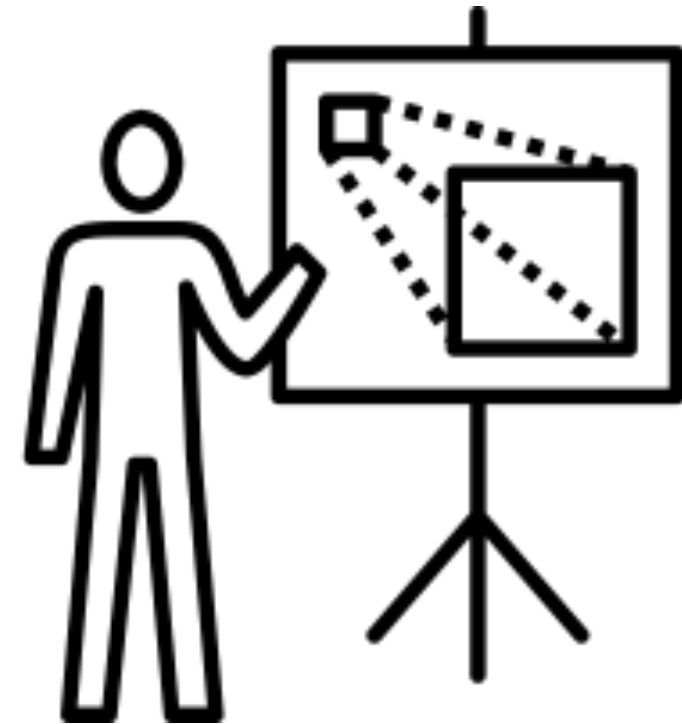
Ethical Guidelines for AI-Generated Content

- **Transparency:** Disclose when content is AI-generated to maintain trust and transparency with users.
- **Accountability:** Hold creators accountable for the quality and implications of AI-generated content.
- **Diversity and Inclusion:** Ensure diversity in training data and actively mitigate biases to promote fairness and inclusivity.



Mitigating Risks and Challenges

- **Continuous Monitoring:** Regularly assess AI-generated content for accuracy, bias, and ethical implications.
- **Human Oversight:** Incorporate human oversight to review and verify AI-generated content, reducing the risk of errors and biases.
- **Regulatory Frameworks:** Advocate for ethical guidelines and regulations governing the use of AI in content creation to safeguard against misuse.



*Thank
You!*



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