FGDLA

GOVERNMENT LEARNING TECHNOLOGY SYMPOSIUM®

Workshop, April 17, 2024

FGDLA.US

UPCOMING EVENTS

- 5/15/24   U.S. Treasury Instructional Design

- 6/12/24   U.S. Marines Instructional Strategies

- 7/17/24   Navy VR Submarine Training

ZOOM and MOODLE

TODAY'S AGENDA

Gamified Learning Design Using Generative Artificial Intelligence

Dr. Jenny Varrichio
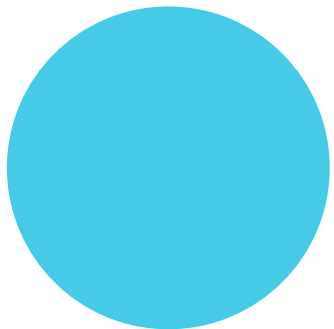
Identify ONE fact about yourself that is on the board in the chat.

Gone Skydiving	Know how to scuba	Know how to ride a unicycle	Went to a concert this year
Can juggle	Own a pet dog	Work from home	Has pet or fed a wild animal (safely)
Know how to surf	Work in an office	Hate sushi	Own a pet cat
Can knit/crochet	Retired	Favorite meal is breakfast	Know a magic trick

AGENDA

Gamified Learning

Generative AI for Learning

Construct a Gamified Learning Design Plan Using Generative AI

Ethical Considerations When Using AI

Optional Certification Assignment

Gamified Learning

GAMIFIED LEARNING

Gamification vs. Games Based

Game Elements and Game Mechanics

Identifying Gamification

Implementing Gamified Learning

WHAT'S THE DIFFERENCE BETWEEN GAMES AND GAMIFICATION?

GAMES BASED LEARNING IS THE APPLICATION OF GAME MECHANICS IN A NON-GAME ENVIRONMENT?

True

False

GAME ELEMENTS AND GAME MECHANICS

Game Elements

Game Mechanics

GAMIFICATION IS EVERYWHERE!

YOUR STRATEGIC APPROACH IS TIED TO THE SUCCESS OF THE IMPLEMENTATION

IMPLEMENTING GAMIFIED LEARNING

GENERATIVE AI FOR GAMIFIED LEARNING

AI vs. Generative AI

Gamification AI

Generative AI in Learning Design

ARTIFICIAL INTELLIGENCE

Computer systems that can perform tasks that require human intelligence.
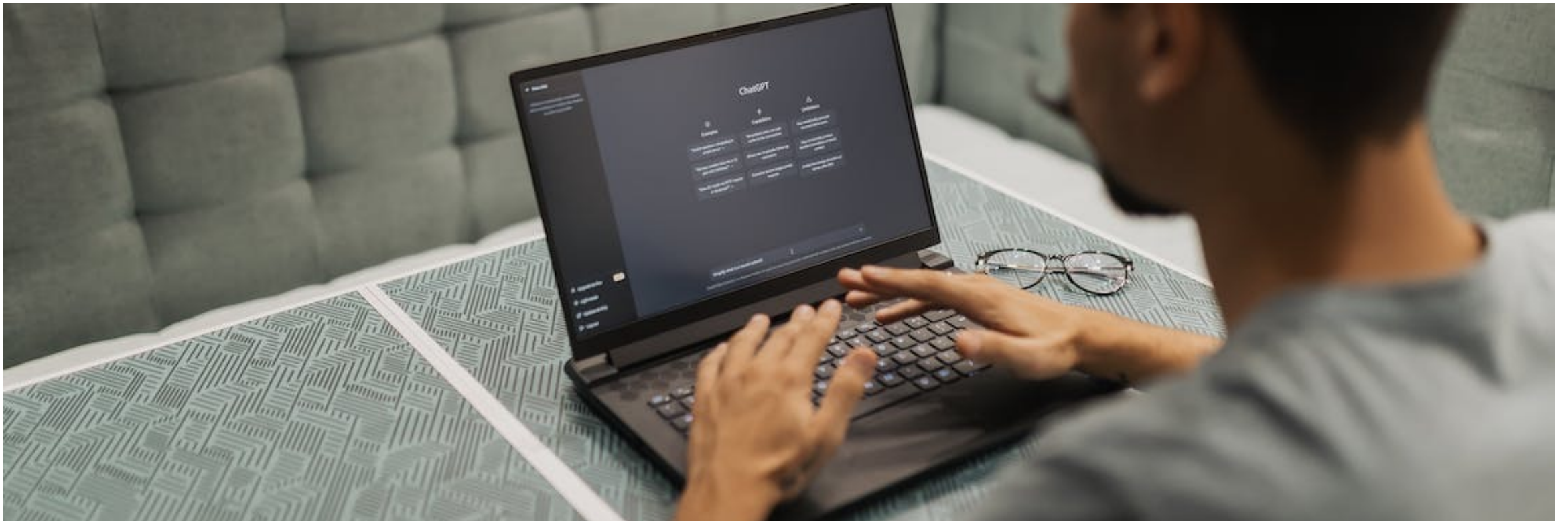
GENERATIVE ARTIFICIAL INTELLIGENCE

A subset of AI that focuses on creating models that generate new content.

ALL ARTIFICIAL INTELLIGENCE IS GENERATIVE

True

False

GAMIFICATION AI IS AN INTEGRATION OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES WITH GAMIFICATION STRATEGIES.

GENERATIVE AI IN LEARNING DESIGN

Quizzes, simulations and interactive modules

GENERATIVE AI IN LEARNING DESIGN

GENERATIVE AI IN LEARNING DESIGN

Construct a Gamified Learning Design Plan Using Generative AI

GAMIFIED LEARNING

Scenario

Strategic Design

Draft the Plan

Debrief

SCENARIO

Select Your Scenario

Cybersecurity issues at a government department's IT division

Workplace accidents at a government agency building

Nursing staff at a federal hospital is struggling to provide quality patient care

Long wait times, incorrect information and rudeness in a government agency

Improving project management at a government agency

SCENARIO: Cybersecurity issues at a government department IT division

- CHALLENGES:
  - DATA BREACHES
  - LOSS OF TRUST
  - **REGULATORY ISSUES**
  - PRODUCTIVITY LOSS
  - REPUTATION DAMAGE
  - EMPLOYEE MORALE
  - FINANCIAL IMPACT

SCENARIO: Workplace accidents at a government building

- CHALLENGES:
  - RISING INJURY RATES
  - DECREASED MORALE
  - DAMAGE TO EQUIPMENT
  - **REGULATORY COMPLIANCE ISSUES**
  - EMPLOYEE TURNOVER
  - IMPACT ON DELIVERABLE TIMELINES
  - REPUTATION DAMAGE

SCENARIO: NURSING STAFF AT A FEDERAL HOSPITAL IS STRUGGLING TO PROVIDE QUALITY PATIENT CARE

- CHALLENGES:
  - DECREASED PATIENT SATISFACTION
  - COMMUNICATION BREAKDOWNS
  - REDUCED QUALITY OF CARE
  - **STAFF BURNOUT**
  - COMPLIANCE ISSUES
  - NEGATIVE IMPACT ON OUTCOMES
  - STAFF RETENTION

SCENARIO: Long wait times, incorrect information at government department

- CHALLENGES:
  - DECLINING CUSTOMER SATISFACTION
  - EMPLOYEE FRUSTRATION
  - INCONSISTENT OPERATIONS
  - **MISSED OPPORTUNITIES**
  - DAMAGED REPUTATION
  - INCREASED COSTS
  - LEADERSHIP CONCERNS

SCENARIO: Improving project management at a bustling government agency

- CHALLENGES:
  - STRUGGLE WITH ANALYZING PROJECT TIMELINES, CLIENT FEEDBACK AND TEAM PERFORMANCE
  - **LACKS PROFICIENCY IN USING PROJECT MANAGEMENT SOFTWARE EFFECTIVELY TO SET REALISTIC TIMELINES AND COMMUNICATE THE TIMELINES EFFECTIVELY**

STRATEGIC DESIGN PLAN FRAMEWORK

1. Phase 1: Preparation Plan

- Define goal and objectives
- Audience Analysis
- Determine learning delivery type
- Target delivery date

Phase 2: Design and Iteration Plan

- Map out learning journey
- Identify gamified elements
- Establish guidelines and feedback loops
- Plan testing and iteration management

Phase 3: Implementation Plan

- Support documentation
- Communication plan
- Confirm Target date

Phase 4: Reporting and Evaluation Plan

- Evaluation
- Assessment
- Enhancement plan

DRAFTING THE PLAN: PHASE 1

Start with a SMART learning goal

S	**M**	**A**	**R**	**T**
Specific	Measurable	Actionable	Relevant	Timebound

DRAFTING THE PLAN: PHASE 1

Action-based Objectives

What does the learner need to do to accomplish the SMART goal?

Analyze the learners

Leverage chat GPT to help build learner personas.

Let this guide your initial designs and always test your hypothesis through focus groups and prototyping to ensure learner needs are met.

DELIVERY PLAN

Consider the delivery – for the sake of time in our session today, we are going with self-paced training

STRATEGIC DESIGN

1. Phase 1: Preparation Plan	Phase 2: Design and Iteration Plan	Phase 3: Implementation Plan	Phase 4: Reporting and Evaluation Plan
• Define goal and objectives • Audience Analysis • Determine learning delivery type • Target delivery date	• Map out learning journey • Identify gamified elements • Establish guidelines and feedback loops • Plan testing and iteration management	• Support documentation • Communication plan • Confirm Target date	• Evaluation • Assessment • Enhancement plan

DRAFTING THE PLAN: PHASE 2 – LEARNER JOURNEY

Establish the learner journey (this is the gamified system and it includes rules/guidelines)

Questions to consider

- What purpose does each of the elements play in the gamified system?

- What does the learner need to accomplish in the gamified system?

DRAFTING THE PLAN: PHASE 2 - GAMIFICATION ELEMENTS

Use the data you have pulled together to map out the gamified elements that could be used.

Reference your journey and your learner persona's motivations to help select your gamified elements.

DRAFTING THE PLAN - PHASE 2 – IDENTIFY FEEDBACK LOOPS

Establish feedback loops

What feedback loops are in place to let the learner know things like:

- How they are performing

- Their progress

DRAFTING THE PLAN: PHASE 2

Map out your iteration plan

Identify what is available and works for your organization:
1. Internal testing
2. Focus group or stakeholder testing
3. Pilot testing

STRATEGIC DESIGN

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DRAFTING THE PLAN: PHASE 3

Prepare support documentation (if needed) to help learners navigate the gamified learning platform.

DRAFTING THE PLAN: PHASE 3   Plan promotion and learning launch!

STRATEGIC DESIGN

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DRAFTING THE PLAN: PHASE 4

Plan for Reporting and Evaluation

STRATEGIC DESIGN

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DEBRIEF

What did we create?

What did you find most helpful in this process?

What would you do differently in your organization?

Ethical Considerations
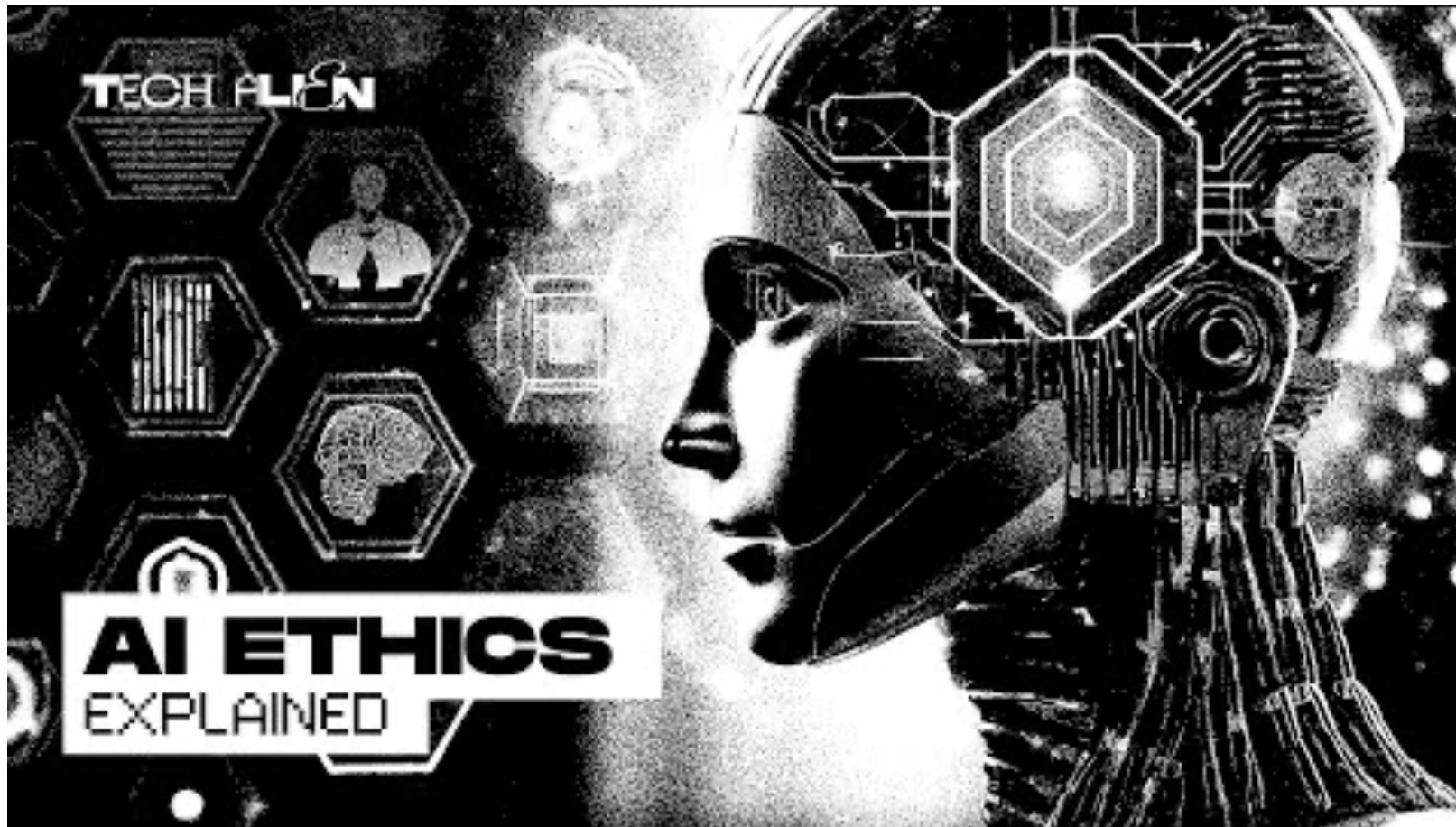
ETHICAL CONSIDERATIONS

Fairness and Bias

Transparency

Accountability

Privacy

Security

Informed Consent

Robustness and Reliability

Societal Impact

Environmental Sustainability Human-AI Collaboration

AI Governance

CERTIFICATE ASSIGNMENT

Present a Scenario

SMART goal

Action-based Objectives

Audience Analysis

Learning Journey

Gamified Elements to Protoype

Thank You for Joining!

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