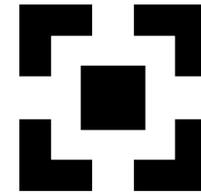


Select the Protected Plateau button to travel to your next location.

Protected Plateau



K2SHARE

Cyber Artifact Explorer: Gamified Web-Based Learning

MOST INNOVATIVE SOLUTION

Online Oasis

Multifactor Mountain

Risk Rainforest

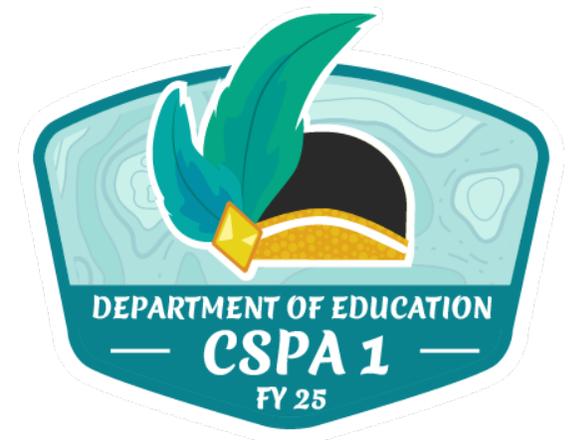
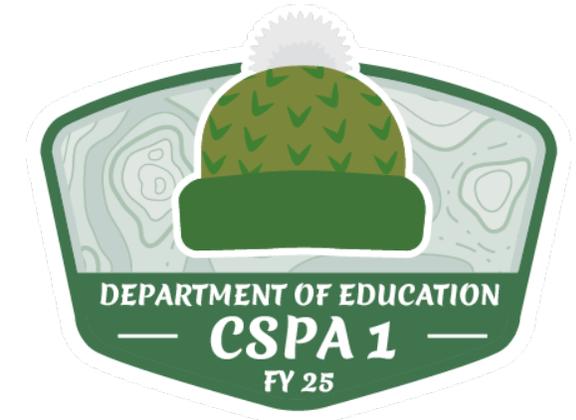
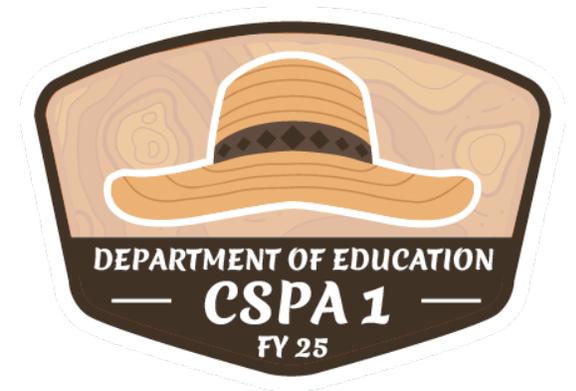
The Concept

- The Cybersecurity and Privacy Awareness course is a **gamified web-based training** created for the Department of Education using **customizable animated characters** loosely based on real life explorers such as Bessie Coleman and Ferdinand Magellan.
- Each character has a **unique voice** that was **generated using AI tools**.
- Game mechanisms such as **avatars, badges, and collecting** are utilized.

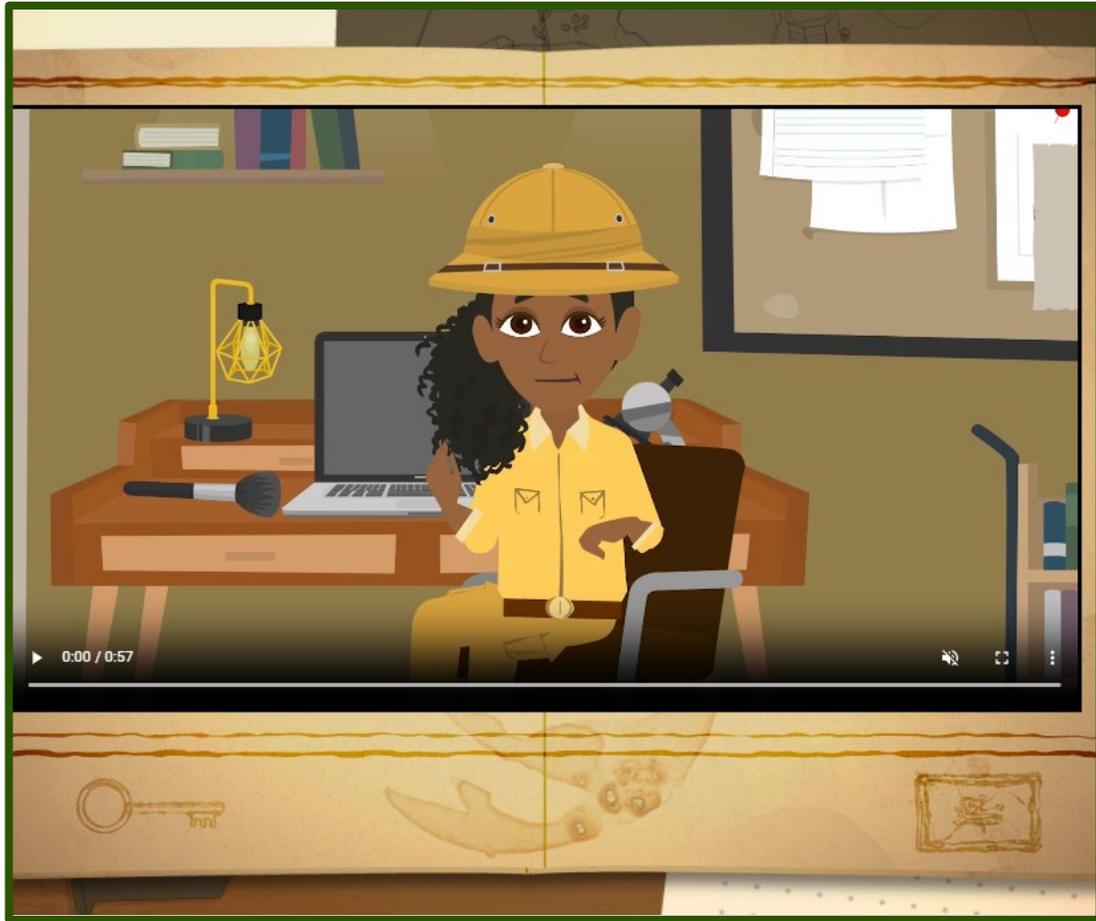


Course Premise

- The course focuses on **increasing awareness** of potential risks and vulnerabilities to the **security and privacy of Department of Education information and information systems**.
- Learners are put in the shoes of explorers searching for lost cyber artifacts as they journey around the Isle of Knowledge. Through these exercises, **learners gain the knowledge needed to protect the Department from cyber threats**.
- **Game mechanisms** help learners invest more in the material and **retain information at higher rates**.



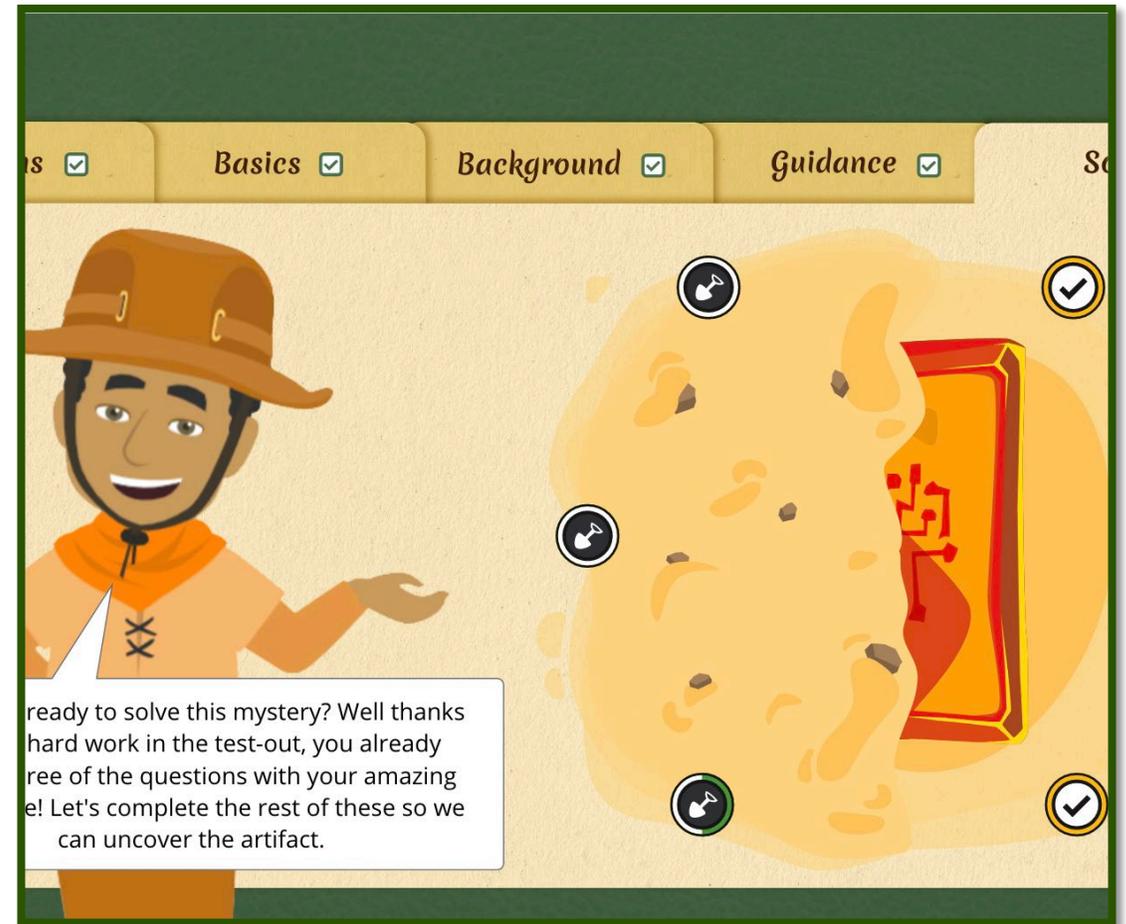
It's All in the Hook



- When learners are presented with information, they **need a reason to retain and recall** beyond rote memorization.
- Gamification presents opportunities in the web-based training space to make what could be considered mundane into something more exciting, thereby **incentivizing and enabling true learning**.

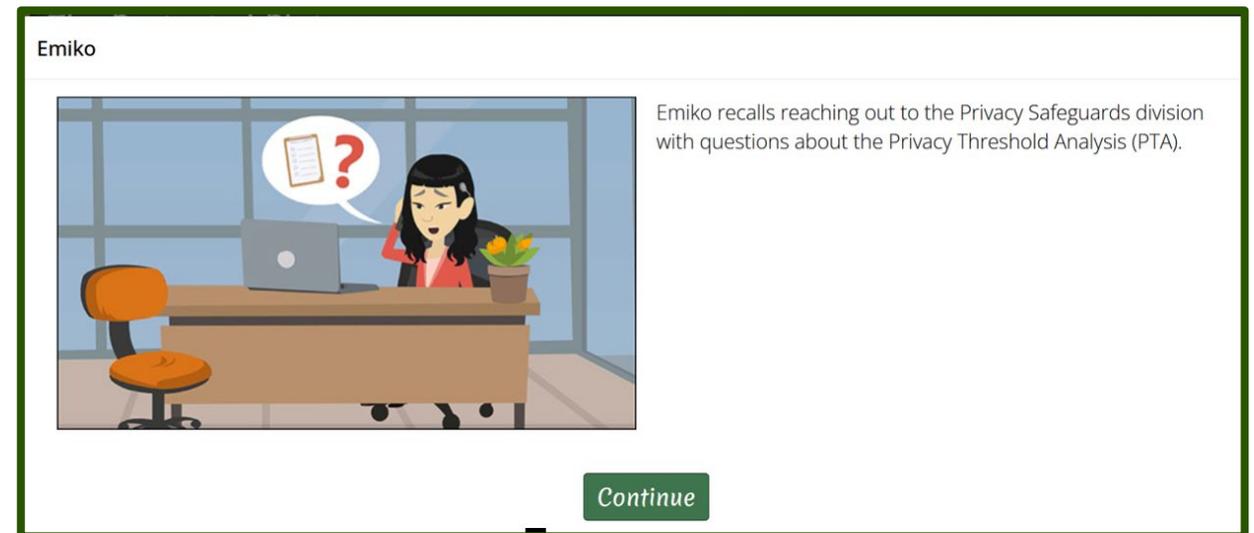
Content Building Upon Content

- Creating scenarios for learners to not just intake information, but **experience memorable locations, characters, and interactivity** ensures that the knowledge gained will be tied to **tangible memory inputs**.
- The dangers reflected in the adventure storyline **parallel everyday cybersecurity challenges** learners face.
- This **dual storytelling methodology** allows for the **real-world application of knowledge** gained.



Objectives Map to Memory Triggers

- Each location focuses on specific learning objectives, **building confidence as the learner progresses**.
- This **improves knowledge absorption and retention** and enhances the overall learning experience.
- The varied experiences, which include text, videos, and interactive challenges and inputs, also **appeal to multiple learning styles** — holding learner attention and increasing motivation.



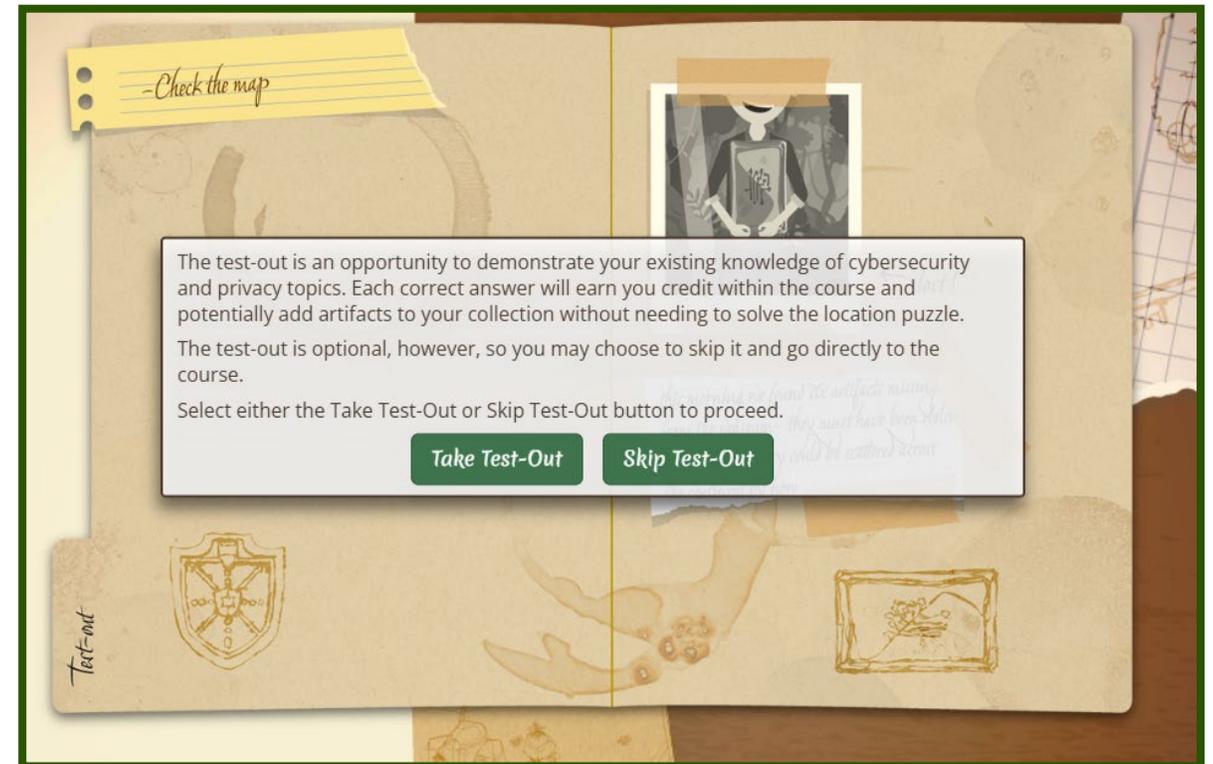
Layers of Learning

Learners can **explore the Basics** of a given topic, **dive into the Background** for more information, and **receive Guidance** from the Department and its resources.

The screenshot displays the 'The Protected Plateau' interface. At the top, the title 'The Protected Plateau' is shown next to a puzzle piece icon. Below the title is a navigation bar with five tabs: 'Situations' (checked), 'Basics' (checked), 'Background' (checked), 'Guidance' (checked), and 'Solve' (checked). On the left side, there is a vertical toolbar with icons for a home page, a refresh button, a search icon, and a close button (X). The main content area is split into two panels. The left panel contains a text notification: 'Phenomenal! You've uncovered the Data Shield artifact and demonstrated your keen skills in privacy and data protection. The Department is lucky to have you! We'll add this artifact to your collection. Select the **Continue** button to resume your journey.' Below the text is a green 'Continue' button. The right panel shows an illustration of a person wearing a yellow hard hat and a yellow uniform with a shield emblem, standing in a desert landscape with a shovel and a backpack.

Targeted Testing and Feedback

- Learners can **demonstrate existing knowledge** by testing out of areas where they show proficiency, which is a key feature for adult learners.
- As learners progress through the course, their knowledge is tested on **Solve pages** for each location that present six **questions targeted towards the location's material**.
- With each successive correct answer, part of **that location's artifact is unearthed** — eventually revealing one of the lost cyber artifacts learners have been hunting.



Objectives Achieved

- At the end of the course, learners are presented with **a trophy case containing the cyber artifacts** they uncovered on their journey.
- They also receive a **downloadable badge**, which includes their chosen adventurer's hat from the beginning of the adventure.
- These **course rewards emphasize their accomplishments** and close out their learning journey in a meaningful fashion.



Learner Feedback

Entertaining.

Game format was an incredible addition.

Keep this format. I found it much more user friendly and easier to retain information given the interactive tools.

The test-out feature is great, especially getting full or partial credit in different subject areas which saves a ton of time.

Easy to understand and navigate.

Nice integration.

By far the best I have ever taken.

Allows us to demonstrate skills.

Exceptional.

