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Unit 4 Assignment: Constructivism Learning Scenario

1. Scenario Creation

Chosen Topic: The topic is device, account, and data security for working adults who are about to use a generative AI tool at work. It is taught as constructed learning rather than a checklist. Each learner discovers her own exposure, solves a real protection problem each week against her own accounts, and experiments on her own device, producing a personal security artifact she keeps.

Learning Scenario: The scenario is a four-week online minicourse called *Digital Foundations*, the device, account, and data module of the *Getting Ready to Work with AI* pathway. The audience is working adults whose employer is about to roll out a generative AI tool and who have to be ready to use it without putting their accounts or their data at risk. They use phones, laptops, and a dozen online accounts every day. Most have never thought about where their data goes when they paste it into a chatbot, and many reuse one password across half of those accounts.

The enduring understanding the course is built around is a single idea: you are the point where data leaves your control, so security is a habit of deciding what to expose, not a setup you do once and forget. Everything in the four weeks ladders up to one artifact the learner constructs from her own real situation, a one-page Device, Accounts, and Data Map that shows what she has, what protects it, and what she will and will not hand to an AI tool. No two learners build the same Map, because no two learners have the same devices, accounts, and exposure.

The course meets asynchronously through a learning platform with a guided workspace and a small-cohort discussion forum. Each week is one anchoring problem the learner solves against

her own accounts and devices. Week 1 is "what do I actually expose when I use an AI tool," and she builds the first draft of her exposure map. Week 2 is "close the easy doors," configuring a password manager, two-factor authentication, full-disk encryption, and an automatic backup, each verified on her own device. Week 3 is "read the fine print," interpreting a real AI vendor's privacy and data-retention policy and deciding what she will redact before she sends anything. Week 4 is "decide for yourself," evaluating a new tool against everything she has built and finalizing the Map. There is no lecture-first delivery. Each week opens with the problem and a short prompt, and the learner starts building against her own situation. Worked examples, short video walkthroughs, and reference cards sit beside the workspace, but she has to reach for them.

Constructivism sits at the center of the design (Bates, 2022; Vygotsky, 1978). The learner does not copy a finished security checklist. She builds a model of her own exposure and the habits that protect it, and that building is what builds the schema. The teacher sets the problem, supplies the scaffold, fades the scaffold, and brings the cohort together to compare what each person made.

2. Identify Zone of Proximal Development (ZPD) Skills

Skills/Knowledge Areas within the ZPD: Vygotsky (1978) defined the Zone of Proximal Development (ZPD) as the gap between what a learner can do alone and what she can do with the help of a more knowledgeable other. The course targets three skills that sit just above where this audience already works on her own.

Skill 1: Translating "the tools I use" into a personal exposure map. Independently, the learner can name the apps and accounts she uses. With guidance, she can take a question like "what does my company's new AI assistant actually see when I use it" and decide which of her accounts, devices, and pieces of data are exposed, and which of those matter most. This is the

move from a list of apps to a model of risk. The scaffold is a worked exposure map she adapts to her own accounts.

Skill 2: Reading a vendor's privacy policy and deciding what it means for her data. Independently, the learner can find a privacy policy and feel lost in it. With guidance, she can scan a real AI vendor's privacy and data-retention policy in about 90 seconds and name three things in plain words: what the vendor sees, what it stores, and what it trains on. Then she decides what to redact before she sends. The scaffold is a three-question template (what does it see, what does it store, what does it train on) she can apply to any vendor. The skill is judgment under uncertainty, not memorizing one company's rules.

Skill 3: Defending her Map and a redaction decision in front of peers. Independently, the learner can describe what she did. With guidance, she can walk three peers through why she protected what she protected and why she redacted what she redacted, accept a challenge to one of those choices, and revise the Map on the spot. This is the move from product to reasoning, and it is what separates a built understanding from a copied checklist (Wiggins & McTighe, 2005). The scaffold is the two seeded peer-review questions the cohort starts with and a worked example of a strong critique, and both fade across the four weeks as the cohort learns to challenge on its own.

3. Scaffolding and Social Constructivism Strategies

Scaffolding Strategy: Each week opens with a fully worked example of a related but different case. Week 2 shows a sample person's laptop being locked down, every control labeled and every reason written beside it, and the learner then does the same work on her own device. The worked example has each step visible and a one-line rationale next to it. As the week goes on, the prompts the system gives fade from "here is the control you need and why" to "what kind of control do you think this exposure calls for" to "secure it and verify it." This follows the worked-example effect (Sweller, 1988) and Bruner's spiral of moving from concrete action

through iconic representation to symbolic language (Bruner, 1960). By week four the example is gone and the prompt is just the decision.

Social Constructivism Approach: Every week ends with a peer cohort of three. Each learner posts the relevant slice of her Map and a one-paragraph walkthrough of one decision. Each peer comments on one assumption and asks one question, for example "why did you trust that vendor with your calendar but not your email." Each learner then revises and posts a short note on what changed and why. The structure follows the reciprocal teaching pattern (Gonzalez, 2014) and the social-construction principle that knowledge is built between people first and inside the head second (Vygotsky, 1978). The teacher seeds the first round with two worked questions so the cohort has a model to imitate, then steps back.

Differentiation for Diverse Learners: The learners arrive at very different starting points. A 47-year-old office manager who has reused the same password for a decade sits in the same cohort as a 29-year-old warehouse lead who already uses a password manager, next to a healthcare administrator on a hospital-issued device she cannot fully control. The design supports that range without holding the strong learners back or losing the weak ones.

Range of skill. Each week opens with a one-screen placement check (three quick tasks). A learner who completes all three can skip the worked example and go straight to auditing her own setup. A learner who misses any of them gets a short guided micro-lesson on the missing piece first. This is built-in differentiation without separate tracks.

Language and accessibility. All prompts and reference cards are plain language at Flesch-Kincaid Grade 8 to 10, with each technical term introduced by an everyday analogy first and then named (a password manager is a key ring with one strong lock). Videos carry captions and downloadable transcripts. The platform meets WCAG 2.2 AA for keyboard navigation, focus rings, and color contrast (CAST, 2018).

Context and culture. Every learner works from her own real devices, accounts, and data, so the course is personalized by construction. The healthcare administrator maps a hospital device and the patient-adjacent data she handles, the small-business owner maps a point-of-sale account and customer records, the freelancer maps client files. This honors the constructivist principle that learning is anchored in the learner's own experience (Egbert & Roe, 2021) and lets a diverse group ground the work in the life she actually lives.

Pacing. The course is asynchronous and self-paced within the week. A learner with limited time can split a week's build across three short mobile sessions. The peer-cohort deadlines are the only fixed points, and the cohort is small enough that one missed post does not block anyone.

4. Reflection

Constructivism Reflection: Constructivism, and Vygotsky's ZPD and scaffolding in particular, shape this design at every level. The starting assumption is that the learner is not empty. She already uses these tools every day and already has instincts about what feels risky. The course does not deliver a checklist to a passive learner. It moves her from using tools blindly into building a model of her own exposure and the habits that protect it, and that move requires her to do the building (Vygotsky, 1978; Bates, 2022).

The ZPD frame told me where to set the bar. The three target skills sit just above where the audience can already work alone. Hard enough that she cannot get there without help, reachable with the right scaffolding. That is how I avoided the two common failures in security training, which are starting at "what is a password" (too easy, lose the audience) or starting at enterprise threat modeling (too hard, lose her a different way).

The scaffolding strategy, worked example plus fading prompt, follows Wood, Bruner, and Ross (1976). The point of a scaffold is that it comes down. In week two the lockdown is half-done for her. By week four she makes the call from a one-line prompt. This is the arc Bruner

(1960) named when he described moving from concrete action through iconic representation to symbolic language.

The reciprocal-teaching cohort puts the social-construction layer on top. A learner who has to defend a redaction decision to three peers gets sharper questions than any quiz could ask, and she revises in response to a real human reading her work. This is the layer that turns a built Map into a built understanding (Vygotsky, 1978; Gonzalez, 2014).

I used AI tools as a thought partner while designing this scenario, which is also the literacy the course itself teaches. I used a large language model to pressure-test whether my three ZPD skills were genuinely sequential and to draft alternative worked-example cases, then I rewrote the wording, chose the final examples, and verified every claim against the cited sources. Differentiating my own design decisions from the model's suggestions is the same discipline the course asks of its learners.

Anticipated outcomes. A learner who finishes should be able to look at a tool she has not seen before, name what it would expose, decide what to protect and what to redact, walk a peer through that reasoning, and revise when challenged. That is a different result than memorizing a security checklist. It is the difference between a course that delivered content and a course that built judgment. Engagement is held by Keller's ARCS levers (Keller, 1987; Pappas, 2015). The opening problem each week earns attention, the use of her own accounts earns relevance, the fading scaffold earns confidence, and the finished Map earns satisfaction.

What I would watch for. The risk in any constructivist design is that pure discovery is slow and that some learners stall without enough support, which is sharper here because a wrong security setup can leak real data. The placement check and the worked example sit there to catch that, and the procedural floor stays tightly scaffolded until it is verified. The risk on the social side is that a quiet cohort gives weak feedback. The two seeded questions each week are meant to lift the floor. If a cycle of the course shows shallow critique, the next iteration adds a

peer-review rubric and a short worked example of a strong critique. That ongoing tuning is itself constructivist. The teacher learns by watching the learners build, and the next version is better.

5. References

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