Teacher Answer Key

Case Study

1. Amara has experienced learned helplessness: repeated AI use has reduced her confidence in her own ability to write independently. The behavioral consequence is that she cannot begin the task without AI and feels her own voice is inadequate, causing avoidance and anxiety rather than engagement.

2. Amara used AI and produced polished work that received positive feedback. That feedback reinforced AI use. More AI use meant less practice with her own writing voice. Less practice meant her genuine writing felt wrong to her. The deeper the dependency grew, the less capable she felt of writing without AI, creating a cycle that only became visible when AI was unavailable.

Multiple Choice

1. A

2. D

3. C

Matching

1-B, 2-C, 3-E, 4-A, 5-D

Fill-in-the-Blank

1) anxiety, 2) number, 3) incentive

Short Answer (Sample Responses)

Q1: The three factors are: the cognitive functions being offloaded are more central to professional performance than spelling; the breadth of offloading is wider because AI covers reasoning, writing, analysis, and decision support simultaneously; and adoption is faster, meaning dependencies form before their effects can be studied.

Q2: The printing press caused the loss of memorization skills, which were largely storage and recall functions. AI offloads reasoning, analysis, and synthesis, which are more central to human professional and intellectual performance. Losing load-bearing cognitive capabilities is potentially more costly than losing memory techniques that printed books could substitute for.

Q3: AI produces better output than unassisted effort, so it receives positive reinforcement through grades or approval. Positive reinforcement encourages more AI use. More AI use means less independent practice. Less practice means the

underlying skill weakens further. Weaker underlying skills mean even less confidence to attempt the task without AI, making AI feel more necessary and increasing its use in the next cycle.