Summative Evaluation Plan: How to Learn Online

IDD&E, Syracuse University

IDE 641- Techniques in Education Evaluation

April 29, 2026

Team Members: Billy Scott, Douglass Wilson, Gregory Tidwell, Greg Vasquez

Executive Summary

This executive summary briefly presents the summative evaluation plan for the fully implemented edX Massive Open Online Course (MOOC) titled "How to Learn Online". The primary purpose of this evaluation is to assess the course's instructional effectiveness, specifically measuring how successfully it equips learners with time management, digital literacy, and metacognition strategies necessary for asynchronous environments. The target audiences for this report include the edX instructional design team, primary project stakeholders, and institutional partners. These stakeholders will use the evaluation results to gauge the ultimate value of the instruction and determine if the course effectively mitigates common barriers like learner isolation and "technostress", which will drive decisions on maintaining, scaling, or further revising the program.

To achieve these goals, the plan focuses on four key evaluation questions aligned with Kirkpatrick's Four-Level Training Evaluation Model and their specific data collection methods. First, to assess learner reaction (Level I), post-course surveys and Learning Management System (LMS) analytics will determine to what extent learners find the interface easy to navigate and the content engaging. Second, to measure learning (Level II), pre- and post-instruction tests will evaluate the extent to which participants improve their knowledge of online learning strategies. Third, to evaluate behavioral transfer (Level III), document analysis and semi-structured interviews will assess if learners are able to successfully apply time management best practices to create a personal study plan. Finally, to measure overall results (Level IV), statistical data collection and comparative analysis of LMS backend data will determine if the course design successfully prevents student dropout and increases completion rates.

TABLE OF CONTENTS

Introduction

The "How to Learn Online" Massive Open Online Course (MOOC) is hosted on the edX platform. The instruction operates in a fully asynchronous environment where learners must rely entirely on the provided multimedia materials—including video lectures, interactive quizzes, and discussion boards—without real-time instructor support. The course is designed to aid a diverse demographic in developing sustainable learning techniques for digital environments. Specifically, it targets returning adult learners who may suffer from "technostress" regarding time management, as well as younger digital natives who may be unfamiliar with the self-directed nature of asynchronous study.

The instructional materials are built around three core competencies designed to prevent student dropout. Upon completion of the course, learners are expected to achieve the following objectives:

- Time Management: Identify at least three best practices for online learning and apply them to a tangible personal study plan.
- Digital Literacy: Demonstrate proficiency in navigating a Learning Management System (LMS) to ensure they can utilize digital tools without technical friction.
- Metacognition: Apply effective cognitive strategies suited for virtual environments to continually self-evaluate progress and adapt their techniques.

The purpose of this summative evaluation plan is to outline the framework for assessing the overall effectiveness of the finalized "How to Learn Online" course. While the prior formative evaluation focused heavily on identifying early friction points in user experience and instructional alignment, this summative plan shifts the focus toward measuring the final outcomes. It aims to determine if the implemented pedagogical strategies successfully equip learners with the necessary skills to overcome common online learning barriers, such as isolation, lack of motivation, and technical difficulties.

To determine the ultimate viability and instructional success of the course, this summative evaluation will seek to answer the following four core questions:

- Level I (Reaction): To what extent do learners find the course interface easy to navigate and the instructional content engaging?
- Level II (Learning): To what extent do participants improve their knowledge of online learning strategies (e.g., metacognition) after completing the instruction?
- Level III (Behavior): To what extent are learners able to apply time management best practices to successfully create and utilize a personal study plan?
- Level IV (Results): To what extent does the course design successfully prevent student dropout and increase overall completion rates?

Report Audience

This summative evaluation plan, and the resulting final report, are designed for several key stakeholders associated with the "How to Learn Online" MOOC. Identifying these groups ensures the evaluation data is collected and presented in a way that directly supports their distinct decision-making processes.

- Primary Client (The edX Instructional Design Team): As the creators and managers of the course, this team is the primary audience. They will use the summative evaluation report to measure the overall instructional effectiveness of the finalized product. The data will help them determine if the course successfully achieved its objectives of improving digital literacy, time management, and metacognition. Ultimately, the edX team will use these findings to justify the return on investment (ROI) for the course's development and make data-driven decisions on whether to maintain the course as is, promote it to larger global audiences, or commission future iterative updates.

- Secondary Stakeholders (Institutional Partners and Universities): Because the course targets a broad demographic—including returning adult professionals and international undergraduate students, external institutions often use this MOOC as an onboarding tool or prerequisite. These partners will use the evaluation report to gauge the validity and real-world value of the instruction. The findings will help them verify if their students or employees are actually acquiring the necessary self-regulation skills to succeed in subsequent, more rigorous asynchronous programs.

Evaluation Matrix

Kirkpatrick Level	Evaluation Question	Data Collection Method	Data Source	Procedure	Notes / Predictions
Level I: Reaction	1. To what extent do learners find the course interface easy to navigate and the instructional content engaging?	Post-course survey (Likert scale & open-ended) and LMS analytics.	End-of-course survey participants and the edX Learning Management System (LMS).	Administer a 10-question survey upon module completion focusing on usability and engagement. Review LMS data for average time spent per page.	Predict that 85% of users will report low navigation friction (indicating reduced "technostress") and high engagement due to the updated instructional signposts.
Level II: Learning	2. To what extent do participants improve their knowledge of online learning strategies (e.g., metacognition) after completing the instruction?	Pre- and Post-Instruction Tests.	LMS auto-graded assessments.	Participants complete a knowledge baseline test before Module 1 and an identical/equivalent final assessment after the last module. Scores are compared to measure growth.	Predict an average score increase of at least 30% from pre- to post-test, with 90% of learners achieving the 70% passing threshold.

Level III: Behavior	3. To what extent are learners able to apply time management best practices to successfully create and utilize a personal study plan?	Document analysis (Rubric grading) and Semi-structured Interviews.	Submitted personal study plans and a sample group of participants.	Collect and evaluate uploaded study plans using a standardized rubric. Conduct 15-minute interviews with a mixed demographic sample 30 days post-course.	Predict that 80% of submitted study plans will successfully incorporate at least three time management strategies explicitly taught in the course.
Level IV: Results	4. To what extent does the course design successfully prevent student dropout and increase overall completion rates?	Statistical data collection and comparative analysis.	edX LMS backend enrollment and completion data.	Pull backend data at the end of the academic quarter to compare completion and abandonment rates of the current finalized course against baseline historical data.	Predict a 15% increase in overall course completion rates resulting from the newly added navigational signposts and explanatory feedback loops.

Methods

To effectively evaluate the "How to Learn Online" course, we will employ a mixed-methods approach. The following section details the data collection methods for three of our primary evaluation questions, utilizing two distinct instruments (a Post-Course Survey and a Semi-Structured Interview Guide) which are provided in the Appendices.

Evaluation Question 1: To what extent do learners find the course interface easy to navigate and the instructional content engaging? (Kirkpatrick Level I)

Data Collection Method: Post-Course User Survey (Instrument located in Appendix A)

- Reasoning: A post-course survey is the most efficient and scalable method for gathering self-reported data from a large, distributed population of asynchronous learners. Because the course targets users who may experience "technostress," a survey allows them to anonymously report their comfort levels and frustrations immediately after experiencing the interface, preventing recall bias.

- Purpose: The purpose of this survey is to measure learners' immediate reactions, satisfaction, and perceived value of the course. Specifically, it seeks to evaluate whether the newly implemented navigational "signposts" successfully reduced cognitive load and if the explanatory feedback in the interactive elements successfully maintained engagement.
- Data Source: All learners who complete the final module of the "How to Learn Online" MOOC on the edX platform.
- Procedure: A digital survey link will be embedded directly into the LMS at the conclusion of the final module. The survey utilizes a 5-point Likert scale (Strongly Disagree to Strongly Agree) to quantitatively measure usability and engagement factors. It concludes with open-ended questions allowing learners to identify specific strengths or weaknesses in their own words. Data will be compiled and analyzed using descriptive statistics to identify trends in user satisfaction.

Evaluation Question 2: To what extent do participants improve their knowledge of online learning strategies (e.g., metacognition) after completing the instruction? (Kirkpatrick Level II)

Data Collection Method: Pre- and Post-Course Assessments (Knowledge Tests)

- Reasoning: Acquired knowledge is best measured by completing pre- and post-instruction tests directly tied to the course objectives. Using a pre/post-test model provides evaluators with a baseline of a learner's prior knowledge, allowing them to accurately measure the participant's level of development and knowledge acquisition when compared against the post-training results.

- Purpose: The purpose of this data collection is to measure the effectiveness of the instruction in teaching the core concepts, specifically focusing on digital literacy, time management, and metacognition. It objectively evaluates whether the instructional content and interactive elements successfully facilitate learning and information retention.
- Data Source: The data source will come directly from the participants. Data will be collected and housed within the edX Learning Management System (LMS) via auto-graded assessments.
- Procedure: Participants will be required to take a baseline knowledge test before beginning Module 1 of the training. Following the completion of the final module, participants will take the same (or a functionally equivalent) post-instruction test. Evaluators will access this assessment data directly from the LMS. The results will be analyzed by comparing pre- and post-test scores to document the degree of improvement, specifically focusing on the percentage of learners who achieve a passing score of 70% or higher on their final attempt.

Evaluation Question 3: To what extent are learners able to apply time management best practices to successfully create and utilize a personal study plan? (Kirkpatrick Level III)

Data Collection Method: Semi-Structured Interviews (Instrument located in Appendix B)

- Reasoning: While surveys are excellent for broad attitudinal data, evaluating the actual transfer of training into the real world requires a more nuanced approach. Interviews allow evaluators to probe deeply into how learners are applying the strategies, why certain strategies succeeded or failed in their unique environments, and observe behavioral changes that a multiple-choice survey cannot capture.

- Purpose: The purpose of these interviews is to determine if the course effectively equipped learners with the specific self-regulation and time management skills required to succeed in asynchronous environments. It aims to verify if the learners successfully transitioned from theoretical knowledge to practical application by creating a tangible study plan.
- Data Source: A purposive sample of 10-15 learners who completed the course at least 30 days prior. The sample will explicitly include representatives of both the "Returning Adult" and "Digital Native" target demographics.
- Procedure: Evaluators will contact a subset of course graduates via email to invite them to a 15-20 minute synchronous video interview. The interview will follow a standardized Semi-Structured Interview Guide (Appendix B) to ensure core topics are covered consistently across all participants. However, the semi-structured format allows the evaluator to ask clarifying follow-up questions based on the participant's unique context (e.g., asking an adult learner specifically about managing time around their work schedule). The interviews will be recorded, transcribed, and analyzed for qualitative themes.

Self-Reflection

Transitioning from the formative evaluation of the "How to Learn Online" MOOC to designing this summative evaluation plan illuminated the stark difference between troubleshooting a course and definitively measuring its impact. One of the most significant takeaways from this process is realizing the sheer volume of time and precision required to craft a sound evaluation strategy before any data is ever collected. Developing the evaluation matrix demanded a rigorous alignment of our core questions with specific, measurable outcomes. It became clear that poorly constructed or vague survey questions can completely derail the data pool, leading to incorrect conclusions about the instruction's effectiveness. This required a shift in perspective: the goal was no longer to evaluate the performance of the individual learner, but rather to use the learner's performance as a metric to evaluate the effectiveness of the instructional design itself.

Utilizing Kirkpatrick’s four-level model provided essential structure to this complex task, allowing the team to chunk the evaluation into digestible, targeted phases. However, designing the methods for Level III (Behavior) and Level IV (Results) highlighted a unique challenge: isolating the actual effect of the training from external environmental factors. Just as a combat medic or behavioral health technician must account for the broader environment when assessing long-term recovery, an evaluator must recognize that a learner’s ability to apply new time management or metacognitive strategies is heavily influenced by variables outside the LMS. If a returning adult learner returns to a highly supportive environment, they are far more likely to successfully implement a personal study plan than a learner who lacks that external scaffolding. Recognizing this limitation emphasizes why employing a mixed-methods approach, combining hard LMS data with nuanced qualitative interviews, is so critical for an accurate assessment.

Finally, the collaborative nature of this project reinforced the value of diverse perspectives in instructional design. Working alongside Gregory, Greg, and Billy allowed us to bounce theoretical ideas off one another, refining our survey and interview instruments far beyond what one person could achieve in isolation. The process of mapping out this summative plan demonstrated that evaluating a program is essentially a test of the "intent of the instructor"—if the instructional objectives are not explicitly aligned with the evaluation instruments, the entire mission loses focus. Moving forward, the discipline of building this evaluation matrix will be a critical tool in ensuring that future training programs not only look good on paper but yield verifiable, real-world results.

Individual Team Member Reflections

Douglass Wilson

As a Sergeant Major looking ahead toward my goal of becoming an instructor at the Sergeant Major Academy, developing this summative evaluation plan provided a critical bridge between military instructional doctrine and advanced academic evaluation models. During the formative phase, my background as a combat medic and behavioral health technician naturally drew my attention to the psychological barriers of the learners, specifically isolation and metacognition. However, working through the complexities of Kirkpatrick's Level III and Level IV evaluations during this fellowship at Syracuse University has fundamentally shifted my perspective on how we measure success. It is one thing to ensure a digital terrain is navigable; it is an entirely different challenge to design an instrument that objectively proves a student has transferred that knowledge into real-world behavioral change. I have always seen a clear parallel between the "intent of the commander" and the "intent of the instructor", but this project taught me that if our post-course assessments and interview instruments are not meticulously aligned with those intents, we have no empirical way of knowing if the mission was actually accomplished.

Billy Scott

Building the summative evaluation matrix shifted my understanding of what it means to assess an educational program. During the formative evaluation, the expert review results opened my eyes to the fact that scaffolding, particularly in discussion boards, isn't handholding, but rather essential instructional infrastructure. Moving into the summative phase, my challenge was figuring out how to objectively measure if that scaffolding actually succeeded in the long term. Designing the semi-structured interview guide taught me how difficult it is to separate the training's impact from the learner's external environment. It reinforced the lesson that a good evaluator must use mixed methods to find the truth; we cannot simply rely on completion rates but must actively interrogate whether the social learning structures we put in place successfully mitigated the isolation of the asynchronous environment.

Gregory Tidwell

My primary focus during the earlier stages of this project was analyzing the "digital native" profile and understanding why younger learners disengage when faced with generic, binary quiz feedback. Developing the summative evaluation plan forced me to think about how we capture user reaction and engagement data at scale. Creating the post-course survey instrument was a profound lesson in precision. I realized that if we write vague survey questions, we will get vague data, making it impossible to tell if our transition to "explanatory feedback" actually worked. This process taught me that the instruments we design for Level I and Level II evaluations must be razor-sharp to accurately capture the specific usability metrics required to justify the course's return on investment to stakeholders.

Greg Vasquez

Designing the summative evaluation plan highlighted the fact that instructional design is an ongoing, iterative cycle fueled by accurate user feedback. During the formative phase, observing returning adult learners struggle with time constraints made me realize how essential tools like the "Quick-Reference" summaries were for their success. In writing the summative plan, the main lesson I learned was that our evaluation methods must be just as respectful of the learner's time as the instruction itself. Moving from direct observation to planning a scalable summative evaluation taught me the immense value of combining automated LMS data with highly targeted qualitative interviews. It shifted my focus from simply asking "Did they finish the course?" to "Did the tools we designed actually result in sustainable, real-world study habits?"

Conclusion

The summative evaluation plan for the "How to Learn Online" MOOC is designed to rigorously assess the instructional effectiveness and real-world impact of the finalized course. By employing a mixed-methods approach grounded in Kirkpatrick's Four-Level Training Evaluation Model, this plan provides a comprehensive framework to measure everything from immediate user reaction to long-term behavioral changes.

Ultimately, the data collected through the proposed pre- and post-assessments, usability surveys, and semi-structured interviews will empower the edX instructional design team and partner institutions to make informed, data-driven decisions. Understanding whether the course successfully mitigates "technostress" for returning adults and fosters self-regulation for digital natives is critical for determining the course's overall scalability and long-term value.

By executing this evaluation plan, stakeholders will ensure that the "How to Learn Online" course not only delivers factually accurate content but actively cultivates the vital digital literacy, time management, and metacognitive skills required for learners to thrive in asynchronous environments.

References

AmeriCorps. (n.d.). *Choosing Data for Evaluation*. https://www.americorps.gov/sites/default/files/document/Choosing%20Data%20for%20Evaluation%20Presentation_060524.pdf

edX. (2026). *How to Learn Online* [Massive Open Online Course]. edX. https://www.edx.org/learn/how-to-learn/edx-how-to-learn-online

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating Training Programs: The Four Levels* (3rd ed.). Berrett-Koehler Publishers.

The Ohio State University. (n.d.). *Module 3 Chapter 2: Design for Data Collection*. Pressbooks. https://ohiostate.pressbooks.pub/swk3402/chapter/module-3-chapter-2/

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64–70.

Appendix A: Post-Course Usability and Engagement Survey (Level I: Reaction)

Instrument Purpose: To quantitatively and qualitatively measure learners' immediate reactions to the course interface, instructional design, and engagement features, specifically verifying if navigational "signposts" and "explanatory feedback" were effective.

Instructions for Participant: The following survey will take approximately 5 minutes to complete. Reflecting on the ENTIRE "How to Learn Online" training, please read each statement carefully and choose the response that best represents your experience. This data is anonymous and will be used to improve the course's content, usability, and overall effectiveness for future learners

Statement	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. The learning objectives for each module were clearly stated at the beginning, helping me understand what to expect.	[ ]	[ ]	[ ]	[ ]	[ ]
2. The navigation of the course interface was intuitive; I rarely felt confused about where to click next.	[ ]	[ ]	[ ]	[ ]	[ ]
3. Keeping the video lectures under six minutes helped me maintain my focus and manage my study time effectively.	[ ]	[ ]	[ ]	[ ]	[ ]
4. The feedback provided after quiz questions clearly explained why an answer was correct or incorrect, rather than just grading it.	[ ]	[ ]	[ ]	[ ]	[ ]
5. The "3-2-1" structure of the discussion board prompts provided enough guidance for me to formulate meaningful responses to my peers.	[ ]	[ ]	[ ]	[ ]	[ ]
6. The downloadable "Quick-Reference" PDF summaries were highly valuable for planning my independent study sessions.	[ ]	[ ]	[ ]	[ ]	[ ]

Part 2: Open-Ended Feedback

7. Please provide and expand upon at least two criteria or features that you felt were the most engaging aspects of this training.

- [Open text box]

8. Describe a moment (if any) where you experienced frustration, anxiety, or confusion regarding the course navigation. What specific change would have helped alleviate this?

- [Open text box]

9. How could the interactive elements (quizzes and discussion boards) be improved to better support your motivation to learn?

- [Open text box]

Appendix B: Semi-Structured Interview Guide (Level III: Transfer of Training)

Instrument Purpose: To determine if learners successfully transferred theoretical course knowledge into practical application, specifically focusing on the creation and execution of a personal study plan using the taught time management and metacognitive strategies.

Interviewer Instructions: Conduct this interview synchronously via video call approximately 30 days after the participant has completed the course. Use the questions below to guide the conversation but allow the participant to elaborate. Ask unscripted follow-up questions to probe into their specific demographic context (e.g., balancing work/family or adjusting to self-directed study).

Interview Questions:

1. Introduction & General Application

- "Describe how completing the 'How to Learn Online' course has changed the way you approach your weekly study schedule or online coursework."

2. Time Management & The Personal Study Plan

- "One of the primary goals of the course was to help you create a personal study plan. Can you walk me through the plan you created? What specific time management strategies from the modules (e.g., time-blocking, minimizing digital distractions) did you actively include?"
- *Probe:* "Have you been able to stick to this plan? Why or why not?"

3. Digital Literacy & Usability (Targeting the 'Returning Adult' profile)

- "Thinking back to your experience navigating the edX platform, how confident do you feel now in your ability to independently manage a fully asynchronous course?"
- *Probe:* "Did the visual 'signposts' and 'module overviews' help reduce any initial anxiety about using the technology?"

4. Metacognition & Self-Regulation (Targeting the 'Digital Native' profile)

- "Since completing the course, describe a time when you experienced a lack of motivation, focus, or felt isolated in your studies. How did you handle it?"
- *Probe:* "Did you utilize any of the metacognitive self-evaluation techniques taught in the course to get back on track?"

5. Real-World Translation & Closing

- "What items, practices, or guidance from the course did you initially value, which you now find difficult to implement in your actual day-to-day life?"

- "How did the downloadable 'Quick-Reference' summaries impact your ability to apply the course materials after you logged off?"