Focus Mode Microcourse

Design Document | Evidence Base and Rationale

Christopher Kokoski | Instructional Design Portfolio | July 2026

1. Overview

The deliverable is a self-contained, interactive HTML microcourse of roughly four minutes that teaches users of a team messaging app, Lumen, how to adopt a new feature called Focus Mode. The course runs as a single file with no external dependencies, so it works in an LMS, on an intranet page, inside an in-app webview, or in a plain browser tab, and it functions fully offline.

The course is gamified, mobile friendly, and ends with a personal commitment device rather than a knowledge quiz. That choice reflects the core design position of the project: the goal is a change in behavior, not a passing score. Every screen exists to move the learner toward one measurable action, turning on Focus Mode during their next block of deep work.

Lumen and Focus Mode are fictional, created so the course can demonstrate design decisions without licensing constraints. The structure transfers directly to any real feature adoption problem, from a CRM workflow to an EHR shortcut.

2. The Problem Is Behavior, Not Awareness

Feature announcements create awareness. They rarely create adoption. Interruption research gives the motivation a hard edge: Gloria Mark and colleagues found that returning to full focus after an interruption takes roughly 23 minutes, which means a feature that batches notifications has a real productivity payoff if, and only if, people actually use it.

Three barriers typically block adoption of a notification control feature:

- **Fear of missing something urgent,** which is a loss aversion problem, not a knowledge problem.
- **Not knowing where the setting lives,** which is an ability problem.
- **Having no trigger to remember the feature** in the moment it would help, which is a prompt problem.

The course was designed backward from these three barriers, in the spirit of Wiggins and McTighe's backward design. Each barrier is answered at least twice before the course ends.

3. Learning Objective and Success Definition

The course carries a single performance objective: given a realistic work situation, the learner will enable Focus Mode with an appropriate duration and breakthrough setting, and will state a specific personal plan for first use.

Success is defined at the behavior level, not the course level. The target metric is Focus Mode activation within 7 days of course completion, with repeat use at 30 days as the retention signal. Section 9 details the full evaluation plan.

One deliberate constraint shaped everything: one objective only. Microlearning fails most often by carrying the scope of a full course in a five-minute container. Everything that did not serve this objective, including advanced settings, admin controls, and edge cases, was cut.

4. Design Frameworks at a Glance

Framework	Where it shows up in the course
Gagné's Nine Events of Instruction	The sequencing spine. Attention, objective, recall of prior experience, content, guidance, practice, feedback, assessment, and transfer map onto the ten screens in order.
ARCS motivation model (Keller)	Attention through the opening poll, Relevance through the 23 minute stat, Confidence through the 30 second promise and guided practice, Satisfaction through the badge and locked plan.
Cognitive load theory (Sweller) and Mayer's multimedia principles	One idea per screen, tight word counts, signaling through a highlight glow, concepts before procedure, and zero decorative media.
Retrieval practice (Roediger and Karpicke)	A from-memory sequencing task near the end strengthens retention beyond re-reading.
Scenario-based learning (Clark)	Two judgment scenarios with elaborative feedback build decision skill, not just recall.
Implementation intentions (Gollwitzer)	The when-then plan builder converts intention into a situational trigger.
Fogg Behavior Model and COM-B (Michie, van Stralen, and West)	The adoption architecture. Motivation, ability, and prompt are each engineered explicitly. See Section 7.
Self-Determination Theory (Ryan and Deci)	Gamification is tuned toward competence and autonomy rather than pressure or social comparison.
Andragogy (Knowles)	Problem-centered framing, immediate utility, and learner choice throughout, because the audience is working adults.
Kirkpatrick four levels	The evaluation plan runs from reaction to results, anchored in product analytics.

5. Course Architecture: Screen by Screen

Screen	What the learner does	Design rationale and evidence
1. Hook poll	Reports how often notifications interrupt their own work	Self-relevance beats a generic intro. The poll activates prior experience and starts engagement with one low-stakes tap (Gagné, ARCS Attention).

Screen	What the learner does	Design rationale and evidence
2. The 23 minute stat	Sees the cost of interruption, revealed as feedback on their answer	Interruption cost research (Mark, Gudith, and Klocke) supplies loss framing, which raises motivation in the Fogg model. The stat lands after the learner's own answer, so it reads as personal.
3. Objective preview	Reads three concrete outcomes and a 30 second promise	Learners commit when the goal is explicit and clearly achievable (Gagné, ARCS Confidence).
4. Concept cards	Taps three cards to reveal what the feature does	Pre-training principle: concepts before procedure lowers load during practice (Mayer). Card three answers the top adoption barrier, fear of missing urgent messages, before it is ever tested.
5. Guided simulation	Performs the three-tap flow with a highlight glow	A worked example with physical practice. The learner performs the real gesture sequence, which builds procedural memory and self-efficacy (Sweller, Bandura).
6. Solo simulation	Repeats the flow unaided, with a precise 60 minute goal	Faded scaffolding from worked example to independent practice. Immediate corrective feedback on mistaps, with a flawless-run bonus that rewards accuracy rather than speed.
7. Scenario one	Chooses the best move under deadline pressure	Scenario-based learning with elaborative feedback that explains why each option succeeds or fails (Shute), building judgment for transfer.
8. Scenario two	Chooses the best move on an on-call day	Discrimination training. Teaching the boundary condition prevents misuse, protects trust in the feature, and rehearses breakthrough rules a second time.
9. Recall	Taps the three setup steps in order, from memory	Retrieval practice. Testing strengthens retention more than restudy (Roediger and Karpicke), and the task takes about ten seconds.
10. Plan and badge	Builds a when-then plan, locks it, and earns a tiered badge	Implementation intention plus closure. In Milne, Orbell, and Sheeran's study, a simple when-then plan more than doubled follow-through. The badge and single confetti moment deliver ARCS Satisfaction when it is earned.

6. Gamification Design

The governing principle: mechanics must serve learning and motivation, or they are decoration. Meta-analyses of gamification in learning (Hamari, Koivisto, and Sarsa; Sailer and Homner) find positive effects when mechanics support competence and meaning, and weak or negative effects when they are cosmetic. Every mechanic below was kept or cut against that standard.

Mechanic	How it works here	Why it earns its place
XP tied to doing	Points come from answering, practicing, and committing, never from merely advancing	Rewards effort and mastery, serving the competence need in Self-Determination Theory
First-try and flawless-run bonuses	Extra XP for first-try correct answers and an error-free solo simulation	Encourages care over speed and gives skilled learners a reason to stay sharp
Streak counter	A flame appears for consecutive correct judgment calls	Light momentum feedback that makes a run of good decisions feel like a run
Segmented progress bar	Ten segments fill as the learner advances	The goal-gradient effect: visible proximity to completion increases persistence (Kivetz, Urminsky, and Zheng)
Tiered badge	Gold, Silver, and Bronze tiers based on total XP	Mastery tiers invite replay without punishing a first pass, and the tier names an identity, not just a score
One celebration	Confetti fires once, at completion only	Celebration is a reward signal. Used everywhere, it means nothing
Retry economics	Wrong answers allow another attempt at reduced XP, never zero	Effort always pays, which keeps learners in a mastery orientation instead of a performance-avoidance one

Deliberately excluded, and why:

- **Leaderboards.** Social comparison depresses persistence for novices and is meaningless in a single-learner flow. For a team deployment, a cooperative goal would be added instead of a ranking.
- **Countdown timers.** Time pressure adds extraneous cognitive load and anxiety without improving transfer for a procedural task.
- **Point penalties.** Subtracting points punishes exploration. Reduced XP on retry preserves the incentive to keep trying.
- **Completion-only badges.** A badge earned by clicking Next devalues both the badge and the course. Tiers here are tied to demonstrated accuracy.

7. Behavior Change Architecture

The Fogg Behavior Model holds that a behavior happens when motivation, ability, and a prompt converge. The course engineers each element deliberately:

- **Motivation.** The opening poll personalizes the problem, the 23 minute stat prices it, and the status-update card removes a social cost of going quiet. Scenario feedback repeatedly frames Focus Mode as the move a skilled operator makes.
- **Ability.** The three-tap flow is practiced twice, once guided and once solo, so the real-world action becomes a rehearsed gesture rather than a novel task. Practicing in a simulated interface that mirrors the real one supports near transfer.
- **Prompt.** The implementation intention converts a vague intention into a situational trigger, such as when I sit down after lunch, that fires in real life. The plan is displayed, locked, copyable, and echoed on the final screen.

In COM-B terms, capability is built through procedural practice, motivation is built through reflective framing and affective feedback, and opportunity is assumed present because the feature ships in the product. A day 3 in-app nudge containing one retrieval question is recommended as a companion, adding a spaced practice touch (Cepeda and colleagues) and a second prompt.

Barrier pre-emption deserves its own note. The fear of missing something urgent is addressed three times: in concept card three, in scenario one through the manager breakthrough, and in scenario two through the launch channel breakthrough. By the time the course asks for a commitment, the learner has rehearsed the answer to their own strongest objection.

8. Cognitive Load and Multimedia Decisions

- **Segmenting.** One idea per screen, learner-paced, with a continue action gating each step.
- **Signaling.** The highlight glow directs attention to exactly one target during guided practice, and feedback panels sit directly beneath the choices they explain.
- **Coherence.** No background audio, no autoplay, no decorative imagery. The only illustration is the functional phone simulation.
- **Pre-training.** The three concept cards precede the procedure, so working memory during practice is spent on the taps, not on what the feature is.
- **Personalization.** The writing uses a conversational register, second person, and plain verbs, which improves engagement and processing relative to formal exposition.
- **Fidelity.** The simulated phone mirrors the real interaction, including tap targets, a sheet animation, and duration chips, because near-transfer procedural skills benefit from practicing the actual gesture sequence.

Copy is held tight throughout. Most screens carry roughly 40 to 60 words of instruction before the first interaction begins, and feedback messages run two sentences or fewer.

9. Measurement and Evaluation Plan

Level	Question	Metric	Source
1. Reaction	Did it feel worth four minutes	Completion rate, drop-off by screen, and an optional one-tap pulse at the end	Course event data
2. Learning	Can they perform and judge	First-try accuracy on both scenarios and the recall task, plus flawless-run rate on the solo simulation	In-course interaction data
3. Behavior	Do they use the feature	Focus Mode activation within 7 days of completion, and repeat use of two or more sessions per week at 30 days	Product analytics
4. Results	Did the work change	Average uninterrupted session length, digest engagement, and self-reported interruption load in a short pulse survey	Product analytics plus survey

Recommended experiment: randomize new users between this course and tooltip-only onboarding, then compare 7 day activation and 30 day feature retention. The course is built for this kind of instrumentation, because every meaningful interaction is a discrete event, including poll answers, mistaps, hint use, first-try accuracy, and the plan text, and each maps cleanly to an xAPI statement in an LMS deployment.

10. Accessibility and Inclusion

- Text and interactive elements meet WCAG 2.1 AA contrast targets.
- Every interaction is a real button, keyboard operable, with a visible focus indicator.
- Feedback regions use polite live announcements for screen reader users.
- Correct and incorrect states pair color with icons and text, never color alone.
- The prefers-reduced-motion setting disables transitions, the glow pulse, and confetti.
- Plain language and short sentences are used throughout, targeting a general workplace reading level.
- Nothing in the course depends on audio.

11. Extension Paths

- Wrap the course in SCORM 1.2 or xAPI for LMS tracking of the Level 2 metrics above.
- Rebrand for a real product by swapping one color value, one logo mark, and the simulation labels.
- Add a day 3 booster message with one retrieval question to exploit the spacing effect.

- For team deployments, add a cooperative goal, such as a shared team focus-hours target, to serve relatedness without leaderboard downsides.
- Localize by externalizing strings. The single-file build keeps every learner-facing string in one document.

12. References

- Bandura, A. (1997). Self-Efficacy: The Exercise of Control. W. H. Freeman.
- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., and Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. Psychological Bulletin, 132(3).
- Clark, R. C. (2013). Scenario-Based e-Learning: Evidence-Based Guidelines for Online Workforce Learning. Pfeiffer.
- Fogg, B. J. (2009). A behavior model for persuasive design. Proceedings of the 4th International Conference on Persuasive Technology.
- Gagné, R. M. (1985). The Conditions of Learning and Theory of Instruction (4th ed.). Holt, Rinehart and Winston.
- Gollwitzer, P. M., and Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. Advances in Experimental Social Psychology, 38.
- Hamari, J., Koivisto, J., and Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. Proceedings of the 47th Hawaii International Conference on System Sciences.
- Keller, J. M. (2010). Motivational Design for Learning and Performance: The ARCS Model Approach. Springer.
- Kirkpatrick, J. D., and Kirkpatrick, W. K. (2016). Kirkpatrick's Four Levels of Training Evaluation. ATD Press.
- Kivetz, R., Urminsky, O., and Zheng, Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. Journal of Marketing Research, 43(1).
- Knowles, M. S., Holton, E. F., and Swanson, R. A. (2015). The Adult Learner (8th ed.). Routledge.
- Mark, G., Gudith, D., and Klocke, U. (2008). The cost of interrupted work: More speed and stress. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.
- Mayer, R. E. (2021). Multimedia Learning (3rd ed.). Cambridge University Press.
- Michie, S., van Stralen, M. M., and West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation Science, 6(42).
- Milne, S., Orbell, S., and Sheeran, P. (2002). Combining motivational and volitional interventions to promote exercise participation. British Journal of Health Psychology, 7(2).
- Roediger, H. L., and Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. Psychological Science, 17(3).

- Ryan, R. M., and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1).
- Sailer, M., and Homner, L. (2020). The gamification of learning: A meta-analysis. Educational Psychology Review, 32.
- Shute, V. J. (2008). Focus on formative feedback. Review of Educational Research, 78(1).
- Sweller, J. (2011). Cognitive load theory. Psychology of Learning and Motivation, 55.
- Wiggins, G., and McTighe, J. (2005). Understanding by Design (2nd ed.). ASCD.