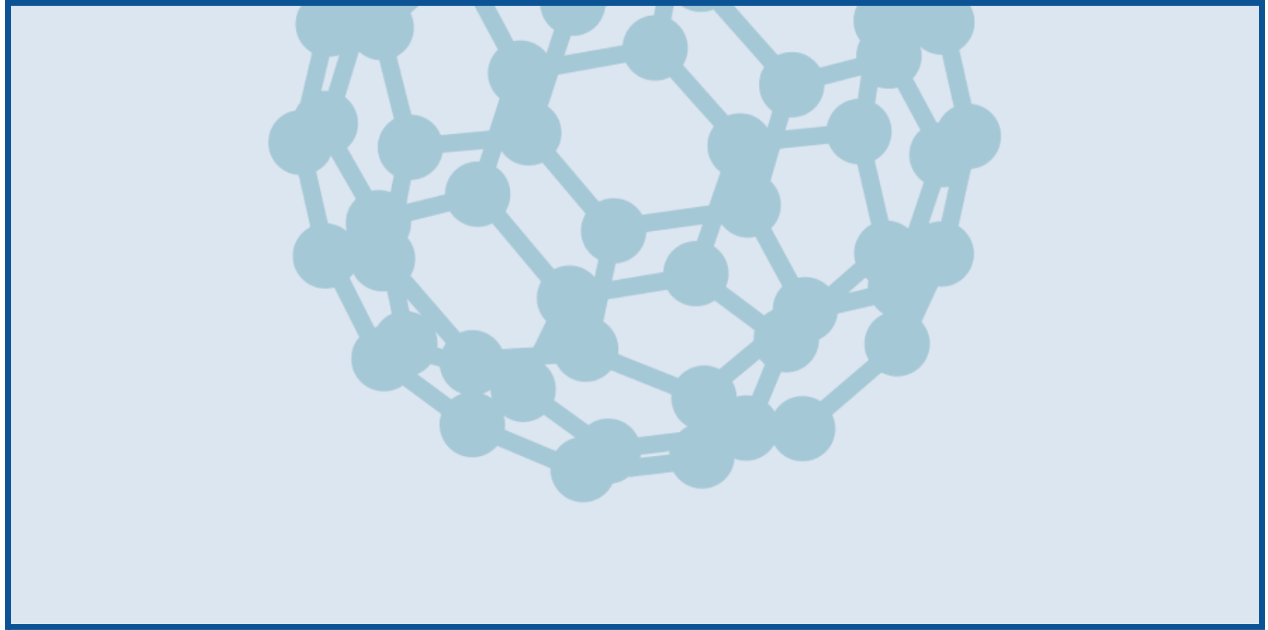




Formative Evaluation Report: SMART Money Budgeting Module

Emma Pate, Soroth San, and Chynara Turatbek Kyzy
IDE 641: Techniques in Educational Evaluation
Syracuse University
Dr. Robert Tornberg

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I. Introduction

Formative Evaluation

Formative evaluation refers to the iterative process of assessing instructional materials in their developmental stages in order to identify strengths and weaknesses and improve them before full implementation. As Tessmer (1993) explains, *“formative evaluation” is a judgment of the strengths and weaknesses of instruction in its developing stages, for purposes of revising the instruction to improve its effectiveness and appeal.* In other words, it involves collecting data and feedback while the instruction is still being designed or refined, then using that information to make revisions that enhance the material’s quality. This approach contrasts with summative evaluation, which occurs after instruction is finalized; formative evaluation is *evaluation for improvement* rather than for final judgment. By engaging in formative evaluation, designers can ensure the learning experience is as clear, relevant, and effective as possible **before** it reaches the full audience.

Background-SMART Money Peer Counselor Internship

This report focuses on a formative evaluation of the Week 1 module on Budgeting from the SMART Money Peer Counselor Internship training. The SMART Money Peer Counselor Internship is a financial literacy education program at Syracuse University aimed at training selected students to become “Smart Money” peer coaches. The participants are high-achieving undergraduate sophomores who will eventually mentor their peers in personal finance skills. The budgeting module constitutes the first part of a larger unit on “Spending”, laying the foundation for subsequent topics in the internship. In this first week, trainees learn fundamental budgeting concepts and practices, which are critical for their role as future peer financial coaches. Because the Week 1 content will set the tone and baseline knowledge for the entire program, it is essential that it be well-designed and effective. This formative evaluation was undertaken while the Week 1 instructional materials are being revised for a new academic year, with the goal of ensuring the budgeting training is pedagogically sound and aligned with learners’ needs before full rollout.

II. Overview

Goal and Objectives: The overarching goal of the SMART Money Peer Counselor training is to equip students with practical financial literacy skills so that they can confidently manage their own finances and coach fellow students. In the context of Week 1 (Budgeting), the specific learning objectives are as follows:

- **Identify components of a budget:** Learners will be able to recognize the different parts of a personal budget (e.g. income, fixed and variable expenses, savings, etc.).
- **Distinguish responsible vs. irresponsible budgeting practices:** Learners will differentiate between good budgeting habits and poor ones.

- **Apply budgeting practices:** Learners will be able to apply budget-making practices to create or improve a basic budget for themselves or others.
- **Explore tools/techniques for budgeting:** Learners will identify various tools and techniques for creating a healthy budget and managing credit.

These objectives indicate that by the end of Week 1, students should understand budgeting terminology and concepts, be able to critique budgeting behaviors, practice creating a budget, and be aware of common budgeting methods (such as the “50/30/20” rule introduced in the module) and tools.

Intended Audience

The training is designed for Syracuse University undergraduate sophomores, typically around 19–20 years old, who have been selected as peer counselor interns. These learners are generally high-achieving students with an interest in personal finance and leadership. While they are not expected to be experts in financial management at the start, they likely have basic familiarity with personal finance concepts. The content therefore aims to be introductory but not remedial, pitched at a level appropriate for college students who will later coach others. It is also important that the material be engaging and relevant to this demographic (e.g. using examples that fit a college student’s lifestyle and financial situation).

Status of Instructional Materials

The Week 1 Budgeting module materials have been fully developed in a prior iteration of the program and have been used at least once, but they are currently undergoing revision for the upcoming academic year. In other words, a complete set of slides, readings, and activities for the budgeting lesson already exists, and this formative evaluation is part of the process of updating and improving that content. Because the materials are **“in their formative stage”** and amenable to change, the feedback gathered will directly inform edits and enhancements. It’s worth noting that only Week 1 has been prepared and reviewed at this time; Weeks 2–10 of the internship training will be revised subsequently, but are outside the scope of this evaluation.

Instructional Context

The budgeting module is delivered as part of a fully online training experience. The internship’s training is fully asynchronous, in which students do not attend live classes for this content. Instead, they engage with the materials on their own schedule during the week. All communication is handled via email and online platforms. For Week 1, learners receive instructions from the program facilitator (Karina, the internship instructor) via email, including links to the lesson content and assignments. They are expected to watch pre-recorded video lessons (or narrated slides) on budgeting and complete associated activities independently. After reviewing the lesson, they complete the assigned tasks such as reading an external article (e.g., on the “50/30/20 budget” method) and writing short reflections by answering questions on their budgeting habits and learnings. If students have questions about the lesson content or the activities, they can reach out to the instructor via email for clarification. This asynchronous

setup was chosen to accommodate students' schedules and to allow self-paced learning, but it also means the materials must be especially clear and engaging on their own, since there is no live instructor to immediately address confusion. All components of the module (slides, readings, videos, and assignments) need to be accessible online, and consideration is given to making content accessible (e.g., ensuring videos have captions, documents are readable, etc.), although specifics of accessibility features are beyond the current evaluation focus.

Media Format and Accessibility

The Week 1 content is delivered through a combination of pre-recorded video presentations and reading materials, with follow-up activities conducted via written responses. The main instructional content is a PowerPoint slide deck titled "*Learning to Budget*" (narrated or converted to video). Learners access this slideshow/video and an online article about a budgeting method. Because the training is asynchronous, these media have to stand alone to instruct the learners. All materials are shared digitally via email, ensuring that participants can review them at any time. To maintain accessibility, the designers have likely incorporated features such as clear text on slides, high-quality videos, and explanations for visuals (though the effectiveness of these features is part of what the evaluation examines). The fully asynchronous, online nature of the module demands that the content be engaging and interactive enough to hold students' attention without real-time interaction. It also places importance on the clarity of instructions and prompts, since students must follow them independently. In summary, the context for Week 1 is an online self-guided module in which sophomore students review budgeting concepts via multimedia content and complete reflective exercises, all with remote support available as needed.

III. Description of the Formative Evaluation (FE) Framework

In planning the formative evaluation of the budgeting module, we established a clear framework to guide the process. This framework included specific evaluation questions, defined criteria and standards for judging the content, and clear boundaries to scope the evaluation.

Evaluation Questions:

Four key evaluation questions were formulated to focus the expert's review on crucial aspects of the **instructional** quality. These questions ask:

1. **Organization:** "*How can the instructional material be improved in its organization to best support its target audience?*" This question is to examine the structure and flow of the content .
2. **Accuracy:** "*How can the instructional material be improved in its accuracy to best support its target audience?*" This question is to examine the correctness and up-to-dateness of information provided .
3. **Relevance:** "*How can the instructional material be improved in its relevance to best support its target audience?*" This question is to examine how well the content meets learners' needs and contexts .

4. **Clarity:** “How can the instructional material be improved in its clarity to best support its target audience?” This question is to examine how understandable and clear the instruction is for learners .

These questions were provided to the expert reviewer to think about during the evaluation. They encapsulate the primary dimensions of quality we sought to improve: the structure of the lesson, the factual accuracy and correctness of content, the relevance and depth of the material for students, and the clarity of presentation (including language and explanation). While not stated explicitly in the questions, the reviewer was also attentive to issues of engagement and interactivity, since those factors influence relevance and comprehension even if they were not formally phrased as questions.

Criteria and Standards

In evaluating the module, we used a set of criteria derived from best practices in instructional design to assess quality. These criteria were designed to ensure the content promotes clarity, relevance, inclusiveness, critical thinking, and comprehension. Each criterion was paired with specific standards or indicators of success. For example, for *clarity*, a standard might be “key terms are defined and examples are provided for complex concepts”. For *relevance*, a standard could be “examples and scenarios reflect the target learners’ financial context”. For *inclusiveness*, “content is free of bias and considers diverse student backgrounds”. For *critical thinking*, “activities prompt learners to reflect or apply concepts”; and for *comprehension*, “the material’s difficulty matches sophomore students’ knowledge level and builds understanding.” During the expert review, the expert kept these quality dimensions in mind, providing feedback on whether the budgeting module met each criterion and how it could be improved. Ensuring clarity meant checking that explanations were straightforward and visuals/terminology were understandable. Ensuring relevance involved judging whether the lesson content and examples would resonate with and be useful to students’ real life. Although the expert’s feedback primarily centered on clarity, relevance, depth, and accuracy, we also briefly considered inclusiveness (e.g., whether any content might unintentionally exclude or confuse certain groups) and the extent to which the module encourages critical thinking (for instance, through its reflective questions and activities). Each piece of feedback was mapped to one or more of these criteria to systematically analyze where the module met expectations and where it fell short.

Boundaries of the Evaluation

We deliberately scoped this formative evaluation to be manageable and focused given time and resource constraints. The evaluation focuses only on Week 1 of the SMART Money training – specifically the asynchronous budgeting module materials (video/slides, the reading, and the activities for that week) . Other topics and weeks (Weeks 2 through 10) are excluded from this review and will be evaluated separately in the future. We also limited the content examined to the core instructional materials; this means that supplementary resources for Week 1 (if any), such as optional readings or external tools not included in the main module, were not part of the evaluation . Additionally, any learner-instructor interactions beyond the content – for example,

questions that students might email to the instructor – were outside the scope, since our focus was on the instructional materials themselves rather than the implementation support.

Given the constraints, the evaluation was designed as an expert review only, without a full pilot test with learners during this phase. Only one expert reviewer (a financial literacy education specialist) was engaged. This decision was due to feasibility: the project timeline and resources did not allow for multiple expert reviews or a broader field test with students at this stage. We acknowledge that relying on a single expert means we get a limited perspective; however, we mitigated this by choosing an expert whose background closely matches the subject matter and audience (see Expert Review section). Other forms of formative evaluation – such as one-on-one learner testing or a small group trial – were not conducted as part of this initial review, but they are intended in future stages. In summary, the boundaries of this formative evaluation are defined by a narrow content scope (Week 1 only) and a limited evaluative lens (one expert, no actual learners yet). These boundaries ensured the evaluation was achievable within our time frame, while still yielding valuable insights to improve the budgeting module.

IV. Expert Review

Goals of the Expert Review

The primary goal of conducting an expert review at this stage was to obtain specialist feedback on the budgeting module's design and content quality in order to guide revisions. Because the expert possesses both content expertise in financial literacy and familiarity with instructional design, she could identify issues that novice learners or general reviewers might miss. The expert review aimed to answer the evaluation questions (organization, accuracy, relevance, clarity) by drawing on the expert's knowledge of effective financial education. Specifically, we wanted the expert to point out any inaccuracies or outdated information, gaps in content depth, confusing explanations, or poor design elements that could hinder learning. Another goal was to leverage the expert's experience to gather actionable recommendations. For example, suggestions for additional examples, improved phrasing of questions, or reordering of topics. In formative evaluation terms, the expert review serves as an early "expert judgment" phase (as described by Tessmer, 1993) where an informed reviewer can catch obvious flaws and suggest improvements before involving real learners. Ultimately, this expert input is intended to improve the module's effectiveness, ensuring it meets high standards of quality (clarity, accuracy, relevance, etc.) *before* we pilot it with students. An additional, secondary goal was to validate that the content aligns with current financial literacy practices; the expert's critique would tell us if the advice and models we present are sound and up-to-date.

Expert Description

The expert selected for this review was **Jessica Calhoun**, a professional whose background uniquely qualifies her to evaluate the budgeting training module. Jessica Calhoun is the Associate Director of Financial Aid Communications and Financial Literacy at Syracuse University. In this role, she oversees/develops financial education programs for students, which means she has direct experience explaining budgeting and personal finance topics to the same

demographic as our target audience. She is also an Instructional Designer, which implies she has expertise in creating and reviewing educational content. Her combined experience in financial literacy and instructional design ensures she can assess both the accuracy of the financial content and the pedagogical effectiveness of the module. Furthermore, Jessica Calhoun's daily work involves understanding student needs and behavior around money, so she is well-positioned to judge the *relevance* of our examples and activities for college sophomores. In addition to her formal titles, she has a practical understanding of how students engage with budgeting (e.g. common challenges students face, misconceptions, and effective strategies to teach them). We chose Jessica Calhoun specifically because she represents an ideal expert reviewer: she is a content expert (in finance) and a stakeholder in the educational context (someone who works with SU students on these issues). Her insights would therefore carry weight in ensuring the module is credible, realistic, and educationally sound.

Methods and Tools

Preparation of Materials

Prior to the expert review session, our team prepared all necessary materials to ensure a structured and effective process. This preparation included drafting a brief introduction script, clear interview instructions, and a structured questionnaire organized around the key evaluation areas (organization, accuracy, relevance, and clarity). These documents were designed to guide the expert through the review and to elicit focused feedback aligned with the evaluation questions.

Structured Interview

Think-Aloud Protocol: The expert review was conducted as a single in-person session. At the start of the session, the expert was asked to verbally confirm consent to be recorded, ensuring ethical transparency. All instructional materials for the budgeting module (slides, readings, and activity prompts) were provided to the expert during the session itself – there was no independent pre-review of the materials before this meeting. The expert was then invited to engage in a think-aloud protocol while reviewing the module content in real time. In this process, the expert examined the materials slide by slide and page by page, verbalizing her impressions, reactions, and any questions or points of confusion aloud as they arose. One team member facilitated the session, prompting the expert to continue thinking aloud and clarifying the procedure as needed, while two other team members observed. These additional team members took detailed notes and managed the audio recording. Importantly, this was the only review session with the expert – no follow-up interviews were conducted afterward – so capturing the expert's spontaneous feedback in this moment was critical.

During the expert's think-aloud review of the materials, one of our team members (the primary interviewer) remained flexible and engaged by asking questions to clarify, confirm, and address any areas that may have been missed, which were necessary for the evaluation. The facilitator also utilized a predefined questionnaire, which had been prepared in advance, to guide the expert through deeper exploration of her feedback on the module. These questions were organized by topic, such as overall impressions, content structure and organization, factual accuracy, clarity

for the target audience, and relevance and applicability. Example questions included: “*What is your overall impression of the material?*”, “*To what extent is the material well-structured and organized?*”, “*How accurate and up-to-date is the information presented?*”, “*How relevant is the content to a sophomore student’s financial situation?*”, and “*Would a student like those in the target audience understand this material?*” among others. The expert responded in depth to each, often referencing specific slides or content elements to support her points. This approach ensured that all major evaluation criteria were systematically covered. The expert responded to each question, building on her initial observations from the think-aloud process. The structured interview format allowed the expert to confirm her initial impressions, discuss both strengths and weaknesses of the material, and suggest potential improvements, all within the same session.

Data Recording and Analysis: All data were collected during this audio-recording session. The entire session – including the think-aloud walkthrough and the interview – was audio recorded with the expert’s consent. In addition to the recording, the team’s note-takers captured key points and observations in writing to supplement the transcript. After the session, the recording was transcribed verbatim to create a detailed record of the expert’s commentary. The analysis of the expert’s feedback was then carried out qualitatively. The team performed qualitative coding on the transcript, identifying recurring comments and insights that corresponded to the evaluation questions. No numerical scoring or standardized rubrics were used in this evaluation; instead, the focus was on extracting qualitative insights and themes from the expert’s narrative feedback. This approach allowed our team to align the expert’s observations with the four key evaluation areas (organization, accuracy, relevance, clarity) and to develop actionable recommendations based on the expert’s in-depth commentary. The result of this process is a rich thematic analysis that directly reflects the expert’s real-time review and professional judgment, providing credible guidance for refining the instructional material.

Results of Expert Review

After collecting the expert’s feedback, we analyzed the transcript and notes to extract key findings. The expert’s comments were grouped into thematic categories corresponding to the evaluation questions and additional emergent issues. Six major themes emerged, each highlighting an area for improvement in the budgeting module. Below is a summary of each theme, along with representative evidence from the expert’s review:

- **Clarity and Comprehension:** The expert identified several instances where the material was not as clear as it should be for learners. Key terminology was sometimes introduced without explanation, and certain prompts or questions in the activity were confusingly worded. For example, one reflective question asked “*What are you most likely to use, or do you already use?*” – to which the expert responded, “*What do you mean—what? ... that question is very ambiguous.*”. She similarly flagged “*So, where and what have you learned?*” as “*a very, very ambiguous question*” that “*doesn’t even make any sense.*” Such ambiguity could leave students unsure how to respond. In terms of presentation, the expert noted that some visuals did not aid understanding; they were “*great, it’s cute – it’s not helping*”. For instance, an image of a dollar sign rolling up a hill appeared on one slide without explanation, prompting the expert to ask what it represented. In her words, “*What is this dollar sign going up the hill? ... I’m not sure. What is that?*”. Because it

wasn't clear, she "[*didn't*] feel like [*she's*] learning anything from that" visual alone . These observations indicate that the module's explanations and questions need to be more explicit and that visuals should be better integrated with the content to enhance (not confuse) comprehension. Overall, the Clarity theme revealed that while the general structure made sense, details were sometimes unclear or under-explained, potentially hindering student understanding.

Practical Utility: Under this theme, the expert's feedback centered on how useful and applicable the budgeting content would be to students' real-life finances. She suggested that as presented, some parts of the module remained a bit *too theoretical or generic* and didn't fully connect to typical student scenarios. For example, the module introduced the 50/30/20 budget rule from an article. The expert expressed skepticism about its blanket applicability: "*I don't think anybody's budget actually really looks like that... because of the rising cost in housing and things... I don't see it only being 50%*" for necessities. She felt students might struggle to apply such a rigid model given real constraints (e.g., if a student's rent takes well over 50% of their income, the rule might make them feel guilty or be irrelevant). The expert advised including more real-world examples and tools to boost practical utility. At one point, when reviewing a slide on income types, she remarked: "*I would love to see a more real-world example here... if you're talking about a job with consistent or fixed hours, it would be like working at Starbucks... versus a job with inconsistent or seasonal hours... like working at a summer camp.*" In another instance, she noted college students often have fixed housing leases, so advising them to adjust housing costs isn't practical; instead, "*you could go into other things other than housing to talk about cost control*". These comments highlight that the content should better address the immediate realities students face (like part-time jobs, tuition, rent, etc.) and provide tools they can use (she mentioned budgeting apps or calculators as potentially useful additions). In summary, the expert found the module's *practical utility* could be improved by making the budgeting lessons more hands-on and tailored to student life, rather than focusing only on abstract principles or idealized budget percentages.

- **Depth and Relevance:** The expert felt that certain topics in the module were treated **superficially**, missing opportunities to delve deeper and thereby increase relevance for learners. One example was a personal budgeting case study (a fictional student "Kyle's budget") that was presented, but not thoroughly analyzed. The expert expected the module to *break down Kyle's budget step-by-step* or use it as a running example, but noted that this did not happen: "*I think providing an example is really helpful... it could be better if they actually pointed to the parts in the budget they were talking about*". By not dissecting the example, the content stays high-level. She also commented on an important concept—distinguishing needs vs. wants—that was introduced but not explored in depth. "*Understanding a need versus a want is probably a big thing... it could be going into that more,*" she said, implying the lesson should spend more time on that concept. Additionally, the reflection questions at the end of the module could have been more thought-provoking; as she put it, "*I would definitely rewrite these questions... to get them thinking back to the content much more than what they are now.*". This suggests the

current questions may not fully engage students in reflecting on what they learned. The relevance aspect of this theme is about tailoring content to what matters for sophomores. The expert thought the module could do more to acknowledge personal factors affecting budgets. For instance, she proposed reordering the lesson: start with personal financial habits or “emotional literacy” before teaching the mechanics of budgeting, because considering personal factors first might make the budgeting exercise more meaningful. In short, the Depth and Relevance theme indicates the module should elaborate further on key points and tie them more directly to the learners’ context, ensuring that students find the content thorough enough and directly applicable to their own financial decisions.

- **Visual Design and Organization:** The expert’s review of the slide deck and layout uncovered issues with the **design, layout, and sequencing** of information. While she noted that overall the PowerPoint had a “good general structure”, she also pointed out specific slides that were poorly executed. Early in the deck, an agenda/overview slide drew criticism: *“This slide sucks... really isn’t a helpful slide at all. If I was doing this presentation, I probably would just delete this slide.”*. In her view, that slide was visually unappealing and added no value (perhaps too much text or not engaging). Such a slide could actually detract from the flow by front-loading unnecessary information. The expert also touched on sequence: she suggested that a section on “emotional literacy and money” (covering personal factors and mindset) should come before the detailed budgeting how-to, to create a better logical flow. This implies the current organization might be suboptimal (with that section coming after). Furthermore, she observed that the slide presenting terminology lacked on-slide definitions, despite the module claiming to introduce terminology. The design issue was not just aesthetics but also functional: slides were sometimes cluttered or too shallow to be useful. For example, one slide listing what a “responsible budget includes” was shown, but the expert felt *“this alone... doesn’t really do anything”* educationally because it wasn’t paired with examples or explanation. In terms of visual appeal, she noted a positive as well: *“I think the first slide provides the information... that looks great.”* indicating not all design was poor, just inconsistent. The takeaway from the Visual Design and Organization theme is that the module would benefit from a cleaner, more purposeful design: eliminate or fix slides that do not aid learning, ensure the sequence of topics is logical from a learner’s perspective, and make sure every visual element (diagrams, images, charts) clearly ties into the content being discussed. Good organization and design will help learners navigate the material more easily and keep them focused on the key messages.
- **Interactivity and Engagement:** Although not explicitly one of the original evaluation questions, **learner engagement** emerged as a significant theme in the expert’s feedback. The expert observed that the module in its current form is largely a passive experience – students watch/read the content and then answer questions, without much interactive involvement during the lesson. She remarked that the material has *“so much more opportunity for this to be interactive versus this just being something you’re reading and... retaining”*. Her concern was that without interactive elements, *“just reading it, the information will be gone within a half an hour”*, meaning students are unlikely to retain much. The expert did acknowledge there were a few interactive or participatory pieces

(perhaps referring to the reflection questions or an activity asking students to research another budgeting method), but she felt these were insufficient overall. *“It just needs a chance for the students to interact more with the content as they’re going through it,”* she noted. She gave concrete ideas, such as embedding questions throughout the presentation or having an example that learners actively work through during the module (not only after). One suggestion was to include an interactive budgeting worksheet within the module, for instance, *“an interactive portion within the budgeting section for them to fill out their own budget”* as they learn. The expert emphasized that by *“interacting with it, that gives you the chance to really internalize some of the content.”* This theme underscores that engagement is critical for an asynchronous module – without an instructor present, the materials themselves must prompt the learner to respond, practice, or make decisions, thereby keeping them mentally engaged. The expert’s feedback makes it clear that adding more interactive exercises or at least self-check questions would significantly improve the learning experience and knowledge retention.

- **Accuracy and Credibility:** Lastly, the expert addressed the accuracy of the content and the credibility it conveys. Overall, she found the factual content *“fairly accurate”*, but she raised two important issues: outdated concepts and lack of references. One slide in the module referenced Maslow’s Hierarchy of Needs in relation to financial priorities. The expert pointed out that *“Maslow’s Hierarchy of Needs is a very outmoded theory... it’s very popular, so I can see why it’s used, [but] I don’t love that [in there].”* Including an outdated psychological model without context could undermine the modern relevance of the lesson. She suggested it might not be a great fit, or if kept, should be updated or presented critically. Additionally, the module presented statistics or recommendations (e.g. what percentage of income to save, average spending habits, etc.) but did not show where these numbers came from. The expert said, *“I would love to see the references on some of these percentages — of a recent study... What are we talking about recently? The last five years? The last ten years?”*. She noted that what counts as a “recent” study can change, and for Gen Z learners, even five-year-old data might seem old. This indicates the content should be checked against the latest data and any figures used should be cited or attributed to a credible source to enhance trust. She also mentioned budgeting tools: *“I’m also wondering if some of these budgeting tools are up to date”*, since she recognized only a couple of the app names listed, suggesting a need to verify that we’re recommending currently relevant apps. The Accuracy and Credibility theme thus highlights the need to **update any outdated elements** (theoretical or factual) and to **provide evidence or references** for key claims. Ensuring accuracy isn’t just about being correct; it also affects how credible and authoritative the instruction appears to savvy students who may question the source of information.

In summary, the expert review yielded rich feedback, grouped into six themes: (1) *Clarity and Comprehension*—some content and wording need to be clearer for learners; (2) *Practical Utility*—make the budgeting advice more hands-on and realistic for students; (3) *Depth and Relevance*—certain topics should be explored in greater depth and tied more closely to student contexts; (4) *Visual Design and Organization*—improve slide design and logical flow of the lesson; (5) *Interactivity and Engagement*—add interactive elements to sustain attention and

reinforce learning; and (6) *Accuracy and Credibility*—update outdated content and include references for validity. These findings directly inform the following recommendations for revising the Week 1 budgeting module.

V. User Review

Goals: The goal of a user review would be to observe how real students interact with the budgeting module and to collect their feedback on its clarity, engagement, and usefulness. This would help verify whether the revisions guided by the expert’s input indeed improve the learning experience for the intended audience. The only characteristics of potential users was being a Syracuse University Undergraduate Sophomore.

Our selected potential users were a convenience sample of two Syracuse sophomore students. These individuals did offer varying cultural, and financial backgrounds and views, making for an interesting and valuable comparison of how different perspectives might interpret the instructional material.

- **User 1 Description:**

Our first user was Amy. Amy is an exchange student from China enrolled at Syracuse University. As such we encountered a language barrier, and cultural barrier to conducting the interview. She did not feel comfortable discussing or comparing her financial situation to that presented in the instruction, and struggled to answer open-ended questions about the material. This barrier led to interviewers needing to rephrase questions in a way that was not ideal, but necessary for her comprehension. The interviewer found themselves needing to offer her some guidance and additional elicitation that was not part of the original question script. Similarly, she did not feel comfortable expressing anything remotely negative or constructive about the instruction, even if she did not understand what the instruction was telling her. This led the interviewer using additional prompting with strategies like “*on a scale from 0-100% how clear was this slide?*” She would then respond with a percentage, and the interviewer would ask her to then explain her response. This was met with marginally more success than the traditional interview questions. Amy seemed to be highly motivated to please us, and it took multiple reiterations that we wanted feedback to make the instruction better, for her to grasp that the aim was not to test her on her knowledge of budgeting after she completed reviewing the material.

- **User 2 Description:**

Our second user was Sandra, a Sophomore psychology major at Syracuse University. She is a New York native that moved to Syracuse to complete her undergraduate degree as a freshman. She is also a student employee, who shares a space with two roommates off campus. Sandra wasn’t very interested in the content overall, and seemed to have low motivation. However, she was also not afraid to explain why she was not engaged by the content. Despite her disinterest in the topic of budgeting, Sandra offered some extremely useful insights as to how the content made her feel bad for not having similar financial circumstances to the examples used, and how this reinforced her opinion that she didn’t

need to budget because of how little money she personally made. She often said things like “*Maybe when I’m older*” or “*for people who make more money than me*” when asked to what extent certain parts of the instruction applied to her life circumstances.

Methods and Tools:

Both interviews were conducted in person inside small-group study rooms in Bird Library on the Syracuse University Campus. At least two group members were present for each interview, and both interviews were recorded with the users consent. The recordings of the formal review of instructional materials was approximately 30 minutes for both users, and the length of time taken for the entire process was about an hour. Both users were offered beverages and snacks in appreciation for their time. This context is very different from the one that our users would typically complete the instructional materials (by themselves at their preferred study location).

Results:

After completing both user reviews, our team was thankful to have found users with diverse backgrounds and experiences, as this led to many valuable and insightful points of comparison. This was especially apparent in how different each user interpreted the material. Amy would not outwardly say that she was confused or did not understand the content, but the interviewer and observer could tell by the long pauses and nervous questions she would ask us that some of the instructions and content was difficult for her to grasp. As such, our team was made aware of how difficult it was for a non-native english speaker to understand the instruction. She also pointed out that some of the content didn't align with her real-life experience of budgeting and spending. Her comment, “*I don't really know whether it is helpful for me, but I will use it when I face on the situation...*” suggested politely that the instructional material, though meant to reflect her situation, did not actually do so. Sandra did not have the same qualms about expressing how the material often made her feel nervous and defensive about her finances and spending habits. By doing so the interviewer and observers were able gather some interesting information about how the instruction failed to reach her in multiple ways. It did not make her reconsider her lack of a personal budget, and it made her feel like she was not living up to what others her age were accomplishing financially by exclusively presenting examples of situations in which students had much more disposable income than her. All of which is valuable despite not being what we were originally looking at. Finally, neither of the potential users was able to identify how the instructional content would support them in mentoring their peers. In fact, both appeared surprised to learn that this was the intended purpose of the material."

VI. Recommended Revisions

Based on the expert review, and potential user findings, several key revisions are recommended for the Week 1 budgeting module. Each recommendation corresponds to one of the six thematic areas identified, ensuring that the improvements directly address the issues raised. Implementing these changes will align the module more closely with best practices and the needs of the learners:

- **Clarity and Comprehension:** *Enhance the clarity* of the module by defining financial terms and concepts and refining any ambiguous language. For instance, include a brief

glossary or on-screen definitions for terms like “fixed income” or “pay yourself first,” and reword the reflective questions to be more specific. (For example, instead of “*Where and what have you learned?*” – ask “*What is one important thing you learned about budgeting, and where could you apply it in your life?*”). Ensure that any visuals and graphics directly support the text – if an image or chart is used, label it or describe its relevance so that students understand its meaning. These steps will make the content more coherent and easier for students to follow.

- **Practical Utility:** Increase the *real-world applicability* of the lesson by incorporating more relatable examples, tools, and exercises that reflect a wider variety of financial situations and incomes. For example, add scenarios or case studies that mirror common student financial situations such as managing a part-time job income, budgeting for textbooks or rent, etc. Integrate practical tools like a simple budgeting worksheet or a demo of a budgeting app. You might include an activity where learners input hypothetical expenses into a 50/30/20 template to see how it works, or provide links to suggested budgeting apps (e.g. Mint or PocketGuard) and have students explore one. By bridging theory to practice in these ways, learners can see how to apply budgeting principles in their own lives, making the module more useful and meaningful. Additionally, more emphasis can be placed on how to interact with peers in a mentorship or advisory role. What are some examples of things they can say to make the topic more approachable? What are some cultural, emotional, or practical barriers that learners fellow students may face when attempting to discuss or effectively manage their money?
- **Depth and Relevance:** Provide *deeper exploration* of key topics and ensure content is relevant to student needs. This could involve elaborating on the needs vs. wants discussion – perhaps adding a segment where common student expenses are analyzed as necessary or discretionary, with reasoning. Where the module introduces a concept (like Kyle’s budget example), follow through by breaking it down step-by-step (e.g., show exactly how Kyle allocates his \$1000 income, and what choices he makes). Additionally, consider presenting alternative budgeting methods or perspectives alongside the main one – for example, after covering 50/30/20, briefly mention another approach (envelope method, zero-based budget) and prompt learners to compare, as was actually assigned in the activity. Additionally, some students believe their income is too limited to warrant creating a budget. Providing budget examples that reflect lower disposable incomes could help demonstrate that budgeting is still beneficial, even when most of their income is allocated to essential expenses. Offering these comparative insights and more detailed walk-throughs will enrich the content, making it more engaging for learners who might have diverse financial situations or preferences. Greater depth will ensure that even students who already know the basics will find new value, and those who are new will gain a more robust understanding.
- **Visual Design and Organization:** *Refine the visual presentation and structure* of the module. First, improve the slide design for clarity and professionalism: use a clean layout with legible fonts, balanced text-to-visual elements, and a consistent style. Remove any superfluous or confusing slides – for instance, if the agenda slide isn’t adding value, it can be omitted, or replaced with a concise overview that actually prepares learners for what’s to come. Organize the content in a logical sequence that aligns with how learners build understanding. One recommended reorganization is to begin with personal factors

and mindset (why budgeting matters, financial attitudes) and then proceed into the mechanics of budgeting; this way, students first connect with the “*why*” and then learn “*how*”. Use clear section headings or transitions in the video to guide learners through this flow. Also, make sure each visual (chart, image, icon) has a clear purpose – for example, instead of a generic piggy bank graphic, use a simple pie chart to illustrate a sample budget breakdown. These design and flow tweaks will help maintain learners’ focus and prevent confusion, thereby supporting better comprehension.

- **Interactivity and Engagement:** *Incorporate interactive elements* to transform the module from a passive reading/viewing experience into an active learning process. Since the module is asynchronous, consider embedding self-check quizzes or knowledge checks at logical breaks – for example, a 3-question quiz after the budget components section to reinforce definitions. Introduce short activities within the lesson video/slides: e.g., ask the viewer to pause and estimate their own monthly expense split, or to try a quick calculation (such as how long it would take to save \$X with a given plan). Providing a downloadable budget template or worksheet that learners can fill out with their own data as they go through the lesson would create hands-on engagement. Another idea is to use reflective prompts that encourage learners to jot down answers before continuing (mirroring what an instructor might ask in a live session). By adding these interactive touches, we encourage learners to engage actively with the material – which the expert indicated is crucial for retention. These changes should make the module more dynamic and participatory, helping keep students interested and allowing them to practice skills during learning, not just afterward.
- **Accuracy and Credibility:** Update and bolster the content to ensure *accuracy and trustworthiness*. Review the entire module for any outdated information – for example, reconsider the inclusion of Maslow’s Hierarchy; if keeping it, add a note that it’s a classic model but not without criticism, or replace it with a more current framework for prioritizing financial needs (or simply focus on the concept of prioritizing needs vs wants without invoking Maslow). Check all statistics, percentages, and claims against current data (from the last 1-2 years ideally) and then cite the source in the materials or provide attribution. For instance, if we say “X% of college students have a budget,” include a footnote or spoken note about the source (e.g., “according to a 2022 study by...”). Ensure that any budgeting tools or apps mentioned are still relevant in 2025 and widely recognized; update the list if needed to include currently popular apps. By making these updates, the module will present information that is not only correct but also up-to-date, increasing its credibility. Including references or at least mentioning sources of information will also teach learners to value evidence-based financial advice and signal that the content is well-researched. These accuracy-focused revisions will strengthen learners’ trust in the material and in the program itself.

Implementing these recommendations will address the weaknesses identified in the expert review. The result should be a budgeting module that is clear in explanation, rich in practical relevance, well-organized in flow, visually clean, interactive for learners, and rigorously accurate. Such improvements are expected to significantly enhance student engagement and learning outcomes in Week 1, thereby setting a strong foundation for the rest of the SMART Money Peer Counselor Internship training.

VII. Self-Evaluation

Conducting the formative evaluation of our budgeting training module was an insightful and rewarding experience. This reflection evaluation details the tools we used, the roles of the expert and users, how our evaluation context compared to the real-world instructional use, and our approach to time and interaction management. By examining the strengths and weaknesses of our evaluation, we aim to share what we learned as a team and offer thoughtful recommendations for future evaluations.

One of the key strengths of our formative evaluation was the selection of our expert reviewer, Jessica Calhoun, Associate Director of Financial Aid Communications and Financial Literacy at Syracuse University. Her unique combination of expertise in both financial literacy and instructional design made her an ideal evaluator. She provided well-rounded feedback that addressed the accuracy of the content, its relevance to learners, and the instructional effectiveness of the materials. In addition to selecting the right expert, our team effectively prepared and used several evaluation tools. These included a structured interview script, clearly aligned evaluation questions, an observation sheet to capture behavioral responses, and predefined quality dimensions such as clarity, relevance, inclusiveness, and comprehension. These tools supported a thorough and systematic review process. All interviews, including the expert, first user, and second user, were conducted within a consistent time frame of approximately 30 to 36 minutes, allowing enough time for meaningful discussion while maintaining focus.

While we successfully incorporated a think-aloud protocol during the expert review where the expert effectively verbalized her thoughts due to her subject matter expertise and professional experience, we opted not to use the same approach for our student users. As sophomores, they lacked the background knowledge and experience to fully engage in a reflective think-aloud process. Instead, we made a slight modification: users were simply asked to indicate where they were in the material during the interview. For example, referencing which slide they were viewing or which activity they were responding to. This adjustment helped maintain clarity and focus during the session while still allowing us to capture their reactions in context. These experiences highlighted the importance of adapting evaluation methods to match the background and capacity of each participant group.

The interviewer also demonstrated adaptability throughout the sessions by rephrasing questions, adjusting prompts as needed, and encouraging participants to provide specific examples. As a result, the feedback gathered was insightful and actionable. For instance, during the first user interview, we noticed the participant was confused about her role. She might have believed she was being evaluated as a learner rather than acting as a reviewer of the instructional material. In response, we revised our approach for the second user interview by clearly explaining that her role was to critically review the materials to help improve them, not to assess her own learning. This clarification led to more specific and constructive feedback, including suggestions for

improving instruction clarity and enhancing examples related to budgeting. Our facilitation skills improved as we became more confident in prompting for deeper insights and setting clear expectations, which strengthened the quality of our interactions and the depth of participant responses. In other words, the interviewer asked clarifying and follow-up questions to draw out deeper insights and allowed the conversation to flow naturally while staying on track. This adaptability led to rich and meaningful expert feedback.

Despite our preparation, we encountered several challenges, particularly during the first user interview. The participant appeared to misunderstand her role in the evaluation; instead of providing feedback on the design and effectiveness of the instructional material, she approached the session as if she were being evaluated as a learner. As a result, her responses were limited to general remarks such as “It’s okay” or “I understand,” without offering critical or constructive input. This issue was compounded by a lack of clarity in how we initially communicated the purpose and objectives of the review. The user overlooked the module’s stated learning goals, requiring reminders during the session to revisit those foundational elements. In response to this experience, we revised our approach for the second user interview by explicitly clarifying the participant’s role as a reviewer and emphasizing the purpose of the evaluation. These adjustments resulted in more thoughtful, specific, and actionable feedback.

Another notable challenge was the timing of when we finalized our evaluation criteria and standards. Although we began with a general understanding of quality dimensions such as clarity and relevance, it was not until after conducting the expert interview and beginning our first round of coding that we articulated a complete set of evaluation criteria. This delay limited the consistency of our early data collection and analysis.

One of the key takeaways from our formative evaluation experience is that conducting interviews with users or experts requires a combination of strong communication skills, flexibility, and prior experience. We found it particularly challenging when participants were unsure of their role or had difficulty understanding the task, especially in cases where language barriers affected comprehension. These challenges often led to less detailed and less reflective feedback. Additionally, we learned that thorough preparation before each interview is essential to ensure clarity and focus. Overall, this process provided our team with several important insights into how to effectively plan, manage, and adapt formative evaluation practices.

- Expert selection matters: A reviewer with relevant content expertise and instructional design background significantly enhances the quality, credibility, and actionability of the feedback.
- Clarifying interview purpose and roles is essential: Clearly explaining the goals of the evaluation and the role of each participant, especially user reviewers, leads to more focused, meaningful, and critical input.

- Instructional objectives must be clearly presented: Emphasizing learning objectives to reviewers ensures that their feedback aligns with the intended outcomes of the instructional materials.
- **Evaluation criteria and standards must be prepared early:** Defining these elements before conducting interviews ensures consistency and structure throughout the evaluation process.
- Adapt questioning for diverse participants: When working with linguistically or culturally diverse users, it is important to rephrase or simplify questions and use supportive strategies to promote understanding and engagement.
- Time and flexibility management are critical: Maintaining a structured yet adaptable approach allows the interviewer to explore insights deeply while staying within time constraints.
- Simulate real-world use context when possible: Because user engagement may differ in a controlled interview setting, evaluations should strive to replicate the authentic learning environment for more accurate feedback.

Reflecting on our formative evaluation experience, we identified several areas for improvement that could strengthen future evaluations. These recommendations are based on the challenges we encountered and the lessons we learned throughout the process. By addressing these areas, future evaluations can become more structured, inclusive, and effective in gathering meaningful feedback.

- Define evaluation criteria and standards in advance: Establish clear criteria early and share them with all team members to ensure consistent assessment and alignment with instructional goals.
- Conduct a short orientation for users: Explain users' roles and the purpose of the evaluation before starting to help them provide focused and meaningful feedback.
- Incorporate think-aloud or usability testing methods: Use real-time engagement techniques to capture users' thought processes and reactions as they interact with the materials.
- Prepare alternative questioning strategies: Adapt questions for participants who may experience language or comprehension challenges to ensure inclusivity and clarity.
- Pilot the evaluation process with one participant: Conduct a trial run to identify and resolve potential misunderstandings before launching the full evaluation.

In conclusion, this formative evaluation process was both a learning opportunity and a reflective exercise for our team. We realized that successful evaluation is not only about gathering feedback, but also about designing a thoughtful evaluation process that respects the participant's role, simulates real usage, and encourages critical engagement. With clearer preparation, earlier definition of evaluation criteria, and a focus on authentic learning contexts, future evaluations will be more effective, insightful, and impactful.

VIII. References

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IX. Appendices

Appendix A – Expert Review Scenario and Instructions

Before conducting the expert interview, our team prepared essential documents, including an introduction, interview instructions, and a questionnaire. The following sections present the scenario narrative and the questionnaire.

For the Introduction:

Hello Jessica, Thank you so much for being here today!

There are just a few things to go over before we begin the formal review:

1. I know that you have already consented to being recorded, but would you please state once again for the record that you consent to the entirety of this expert review being recorded?
2. Next, I'll just describe how this review will go. The first thing that we will do is give you all of the materials for the first module of the Smart Money Program - Budgeting
3. You will take all the time you need to review the material while considering our three focus areas: content structure and organization, content relevance/accuracy, and content matching learner-level.
4. We ask that while you are going through the material you “think aloud”. In other words, as you read the content or look at the presentation you just say whatever comes to your mind whether it be positive, constructive, or even to voice confusion or questions.
5. After you have looked through the materials we will then engage in a more formal interview where I will ask you some relevant questions about your thoughts on the materials.
6. Finally, we cannot guarantee your anonymity in our assignment because we need to justify choosing you as an expert to our professor. However, none of your comments will be linked to you when we present our recommendations to the client (Karina) so please be honest and don't hold back with your feedback.

Any questions?

Alright if you have no further questions here is the material [give computer with material pulled up].

The first thing you'll see is a list of objectives for this material and a description of the context of this instruction. This is followed by a written description of the instructions students would typically receive upon starting this module. Please click the links in order to access the material as you read the instructions.

We do not need you to complete the activities, just consider to what extent a learner might be able to accomplish the tasks, given the instruction that they have had access to.

Appendix B – Expert Interview Questionnaire

For the Interview:

Category	Questions
General Assessment:	What is your overall impression of the material? - What are the key strengths of this content? Please explain - Are there any areas where the material could be improved or expanded upon? Please explain
Structure and Organization:	To what extent is the material well-structured and organized? To what extent does the flow of information make sense and support the main objectives? Are there any sections that could be reorganized for better clarity?
Accuracy and Factual Information:	To what extent is the information presented in the material accurate? Are there any factual errors or inconsistencies you noticed?
Clarity and Understanding:	To what extent do you believe students within the target audience (undergraduate sophomores) would be able to understand this material? - To what extent are the concepts explained in a way that is easy to follow? - To what extent do you believe that learners with no prior experience would be able to grasp the content presented? Why?
Relevance and Application:	To what extent does this material support the program's goal of instructing learners to be able to act as peer mentors in financial literacy? To what extent can this information be applied in real-world scenarios?
General concluding questions:	Is there anything else that you can think of about the content that you would like to mention or anything we missed? Do you have any further recommendations for improvement?

Appendix C – Selected Transcript Excerpts

Clarity and Comprehension

Supporting quotes from the expert:

- “I think providing an example is really helpful here. Um, identifying the parts of the budget—I think it could be better if they actually pointed to the parts in the budget that they were talking about.”
- “If you’re talking about like parts of a budget, you know, where actually on their budget sheet would they see this?”
- “I think after this would definitely be a chance to— to break out all of these monthly expenses and to get a better picture of what they are.”
- “Is that something you have to manually go in and update and things like that? So, um, again, that can be beefed up—definitely.”
- “Uh, this alone is—is kind of just not—it doesn’t really do anything. I don’t feel like I’m learning anything from that.”
- “High-interest debt, pay over time. Quick fix is what you may impulse to purchase. Okay, that’s not great either. It’ll hope that.”

Practical Utility

- “I would love to see like if you’re talking about a job with consistent or fixed hours, it would be like working at Starbucks, right?”
- “It’s not usually those fixed expenses. It’s those variable expenses.” “Trying to stick to this too rigidly could also be negative for a student because if their necessities are like 75% of their budget, then they’re going to feel guilty for not meeting some of these.”
- “I don’t see it only being 50% of their budget with housing and necessary expenses.”
- “I would love to see like a calculator referenced in here of like, ‘Let’s say you’re buying that—you want to use this much in credit card and you have this much of an interest rate.’”

Depth and Relevance

Supporting quotes from the expert:

- “I think it’s actually good that they look at an article that they might not agree with and then research something that’s more aligned to a budget method that they agree with.”
- “Again, this is where you could get into the need versus want in more depth, I think, here.”
- “Expert: I think you could go into other things other than housing to talk about cost under control. So that is just my— Am I going into late depth on each of these slides?”

Supporting quotes from the expert:

- “I would definitely rewrite these questions. I think they can be used in a much stronger way and get them thinking back to the content, um, much more than—than what they are now.”
- “I think you could go into other things other than housing to talk about cost under control. So that is just my— Am I going into late depth on each of these slides?”
- “Again, but if they’re having like a group discussion about this, then it might be okay questions. But for just a one-off, um, for an individual—I don’t love that there.”

Visual Design and Organization

Supporting Quotes from the expert:

- “I think the first slide provides the information, you know, to give them some context for that. I think that looks great.”
- “This slide sucks... This slide really isn’t a helpful slide at all.”
- “If I was doing this presentation, I probably would just delete this slide, honestly. Because I don’t feel like it’s adding anything to the presentation whatsoever.”

Interactivity and Engagement

Supporting Quotes from the expert:

- “There is definitely a chance for—whether it’s questions that you answer throughout, whether it’s actually like an example that you work through yourself—I think there’s, um—I think just reading it, the information will be gone within a half an hour.”
- “So I would say, again, it has the opportunity and the potential to be great, but it just needs a chance for the students to interact more with the content as they’re going through it.”
- “By interacting with it, that gives you the chance to really, um, internalize some of the content.”
- “Yeah. I would say building in terminology. Um, I would make an interactive portion within the orange budget—even for them to fill out for their own budget.”

Accuracy and Credibility

Supporting quotes from the expert:

- “I would love to see like a calculator referenced in here of like, ‘Let’s say you’re buying that—you want to use this much in credit card and you have this much of an interest rate.’

- “Um, it might be nice to reference out these studies and these percentages because it’s very interesting to—like I think a lot of students want to know where this data came from.”
- “Um, so I’m kind of— I would love to see a little bit of reference here if they’re— Yeah, that’s all I’ll say on that.”
- “I would love to see some—again, some references there, because, you know, depending on your generation, like something five years ago—I don’t think would be recent.”
- “Um, and so I would love to see something that’s—again, a little bit more fleshed out—and I hate that I’ve said that like four times—that’s a better reference for them once they’re kind of in the thick of it and they need—they’re like, “Okay, now I need to reference—I need to recommend some apps for these students.”

Appendix D - Observation Tool

Sections	Think aloud	Observation
Objectives		Start with Emotional literacy Budget section
Slides	• For interns • Starts well with some context • Reference studies and percentages for quick facts • Slide sucks (agenda), can be better • Orange budget is better, more interactive, good to have an example • Point to the parts of the budget (where on the example that element is) • More real world examples (fixed hours or inconsistent hours) • Need vs want - more elaborated • P8. - doesn’t make sense “no time to check in” • Needs vs want - emphasize • Students might have questions • Real world examples are helpful • expense>income.. Interested to see • We dont go to Kyle’s example/// why not? TBC	• The expert starts with feedback on the slides, aesthetic of the slides, and content, and takes the expert some time to comprehend the materials and she turns out that she finds it more comfortable to give more insights of the materials after she gets familiar with the structures of the slides and materials. • The expert continues giving comments slides by slides without significant struggles to

	• Differentiate btw going out, entertainment. Get a better understanding of expenses being so high. Causes? • Budgeting tools - okay... better to break up btw apps, or google template with manual entry of info • Planning your income - not helpful, dollar sign going up the hill? Better use Kyle's example and use his scenario, won't learn anything • Students might have hard time with examples with housing... • Hierarchy is terrible, outmoded, don't like it. • Warmth - clothes? Heating? • Wants vs needs → good thought process on the example with macbook. • Slide 17 - not grade • Slide 18 - • Slide 19 - okay Overall okay	understand the materials. • The expert appears to give both feedback on areas of improvement and positive areas, pointing out what she thinks is good and not good. • The expert is not hesitant to give feedback on the materials. • Personal expression! Hu with deep breath when the materials are not great. • She is happy with the materials (slide overall).
Article	50/20/30 budget Would be interesting to compare students' actual budget versus the example. Variations of article, could be adjusted to individual circumstances. Better not to rigidly stick to it, they might feel guilty.	She is fluent in giving feedback as she has read simple articles like this.
Activity 1	• Any type of budget method.. Compare and contrast is a good practice • Questions very ambiguous, more flushed out method.. Be specific. • Where and what u learnt - ambiguous. Instead: if you could apply one of XYZ, what would be more applicable to your circumstances. • Could make more sense to students	• Very insightful giving comments, suggesting other options based on her understanding and experience.

Activity 2		
Interview questions	Just major points to be added here • Reading = fast to forget • More interactivity would help internalize info • Good structure • No definitions could be added as “terminology” is mentioned • Flow - start with emotional literacy then more to budget. Personal factors - then budget • Fairly accurate. Some outmoded theories: hierarchy, need more references (years) depending on generation. • Understanding = pretty well. If there is a room for interjection from an experienced one • As a stand-alone “could be beefed up” • Show examples of apps, are they up-to-date? Do they require you to link banking info? Be aware if students are comfortable with that. Spreadsheet. Time/security consideration • Percentage by your... money rolling up the hill is questionable • Use Kyle’s example.. • No prior experience = definition/glossary to start off would address if they are a blank slate • Good leaping off point, unlikely to be smth they referenced back to • pros/cons of apps, something that answers questions that will come up • Show calculations (when a student needs a laptop), what is it really gonna cost me? Or should i use the computer lab? cost/benefit analysis	good, not great. • very intellectual about the financial literacy • Comprehensive structure of the organization of the materials • Examples of apps • Points out strengths and weakness of the materials insightfully View on No prior experience learner: • Take the expert a while to express her opinion as it is a very hard questions -gives suggest a few methods that might be helpful Expert -to give more practical examples (use credit card-to buy computer)

Overall feedback	• Kyle example to be used in multiple cases when it comes to Budget worksheet, • Article is a good tool for activity 1 (research something they might like) - at least 2 • Clarify questions for activity. • Question 2 - don't like it, Ambiguous. • Terminology • Interactive elements with budget • Use kyle examples • Examples • P.11 • Examples of apps/tools • Affordable housing - don't have control over, might not be reasonable to talk about... • Budget under control - food, entertainment - variable expenses VS housing that is a fixed expense. How to work with variable expenses? Tips that can be implemented. • Open a space for conversations on entertainment expenses • Agenda - visually terrible. Make it first. Section one.... More info. Section two.. About emotional impact... more info.	Expert feel ease to see where to improve the materials. This is her suggestions of how to improve the materials "Terminology Interactive activity to their own budget Use Kyle budget to study and analyse and ask student to help Kyle, more relatable to students"
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(This same tool was also used during user interviews)

Appendix E – A structured approach comprising three coding stages: Initial Coding, Focused Coding, and Thematic Coding

State 1: Initial Coding (Line-by-Line Coding): The initial coding involved a thorough, line-by-line examination of the interview transcript. Codes were generated for every meaningful phrase, sentence, or paragraph, yielding a total of **229 initial codes**. This approach captured a comprehensive range of feedback, including comments on clarity, practicality, relevance, organization, accuracy, and engagement.

Stage 2: Focused Coding: In the focused coding stage, the 229 initial codes were grouped into **13 broader categories** based on similarity and relevance. The categories included:

1. Lacks Clarity
2. Lacks Utility for Learners
3. Combination of Lacks Depth and Lacks Utility
4. Poor Design Functionality
5. Poor Organization
6. Possibly Inaccurate
7. Offers Value to Instruction
8. Serviceable but Could Be Improved
9. Lacks Depth
10. Lack of Relevance
11. Requires for Examples
12. Content Requires Decomposition
13. Needs to Be More Practice-Oriented

Stage 3: Thematic Coding: The final stage involved synthesizing the focused coding categories into broader themes that align with the evaluation questions. The themes were developed by combining codes with similar underlying issues or objectives. The following six themes emerged:

1. Clarity and Comprehension
2. Practical Utility
3. Depth and Relevance
4. Visual Design and Organization
5. Interactivity and Engagement
6. Accuracy and Credibility

1. Clarity and Comprehension

- **Lacks Clarity:** Indicates ambiguity, poorly worded questions, unclear visuals, or lack of proper definitions.
- **Content Requires Decomposition:** Complex concepts that are not broken down properly contribute to lack of clarity.

Explanation: These codes were combined under *Clarity and Comprehension* because they all point to difficulties in understanding the instructional material. If concepts are not broken down properly, are presented with poor structure, or are confusing, comprehension suffers.

2. Practical Utility

- **Lacks Utility for Learners:** Directly addresses the relevance and usefulness of content to learners' real-world needs.
- **Need to be More Practice-Oriented:** Lack of practical application or real-world examples diminishes usefulness.
- **Requires for Examples:** A lack of concrete examples weakens practical utility.

Explanation: These codes were combined because they all relate to the **applicability and usefulness** of the material. If content is not relevant, lacks practical examples, or doesn't offer hands-on practice, learners will struggle to apply what they learn.

3. Depth and Relevance

- **Combination Lacks Depth and Lacks Utility:** When content lacks depth, it often also lacks relevance.
- **Lacks Depth:** Superficial coverage of concepts makes the material less useful and less engaging.
- **Lack of Relevance:** When material doesn't connect deeply with learners' needs or contexts, it lacks relevance.

Explanation: These codes were grouped under *Depth and Relevance* because they reflect a lack of detailed exploration of key topics. When the content is superficial or overly simplified, it becomes less relevant to learners' needs.

4. Visual Design and Organization

- **Poor Design Functionality:** Ineffective visuals and poor presentation design.
- **Poor Organization:** Disorganized flow and lack of coherence in structure.

Explanation: This theme covers the structural and aesthetic aspects of the material. Poor visual design and organization can impede learners' understanding and reduce the overall effectiveness of the instructional content.

5. Interactivity and Engagement

- **Serviceable but Could Be Improved:** The existing interactivity is functional but lacks engagement.
- **Offers Value to Instruction:** Some interactive elements are beneficial but need enhancement to be more engaging.

Explanation: This theme emerged because of feedback related to **enhancing learner engagement** through interactivity. While the content may be valuable, it is not optimized for engagement, which is critical for learner comprehension and retention.

6. Accuracy and Credibility

- **Possibly Inaccurate:** The presence of outdated theories or unsupported statistics. When information is unclear or presented poorly, it may seem inaccurate, even if technically correct.

Explanation: This theme captures issues related to **the accuracy, credibility, and currency of the content**. It is important that the instructional material is not only

accurate but also relevant to contemporary practices and supported by credible references.

Appendix F - Potential User Reviews Scenario and Instructions

Before conducting both user interviews, our team prepared essential documents, including an introduction, interview instructions, and a questionnaire. The following sections present the scenario narrative and the questionnaire.

Introduction:

Hello [insert user name], Thank you so much for being here today!

There are just a few things to go over before we begin the formal review:

1. Before we go any further would you please state for the record that you consent to the entirety of this user review being recorded?
2. Next, I'll just describe how this review will go. The first thing that we will do is give you all of the materials for the first module of the Smart Money Program - Budgeting
3. You will take all the time you need to review the material while considering our three focus areas: content structure and organization, content relevance/accuracy, and content matching your learner-level.
4. We ask that while you are going through the material you state out loud what slide you are on/what you are looking at, and if anything stands out to you good, bad, confusing, if the material is presented in an aesthetically pleasing way, etc. In other words, as you read the content or look at the presentation you just say where you are in the materials and whatever comes to your mind. If nothing comes to mind that's fine too, just let us know that everything makes sense and looks good.
5. After you have looked through the materials we will then engage in a more formal interview where I will ask you some relevant questions about your thoughts on the materials.
6. Finally, we will be keeping your name and details confidential so none of your comments will be linked to you when we present our recommendations to the client so please be honest and don't hold back with your feedback. The whole point is to improve this material so keep that in mind as you go through.

Any questions?

Alright if you have no further questions here is the material [give computer with material pulled up].

The first thing you'll see is a list of objectives for this material and a description of the context of this instruction. This is followed by a written description of the instructions students would typically receive upon starting this module. Please click the links in order to access the material

as you read the instructions.

We do not need you to complete the activities, just consider to what extent a learner might be able to accomplish the tasks, given the instruction that they have had access to.

Appendix G - User Interview Questionnaire

For the Interview:

Category	Questions
General Assessment:	What is your overall impression of the material? - What are key strengths of this content? Please explain - Are there any areas where the material could be improved or expanded upon? please explain
Structure and Organization:	To what extent is the material well-structured and organized? - To what extent does the flow of information make sense and support the main objectives (show main objective once again)? - Are there any sections that could be reorganized for better clarity? Please explain why.
Clarity and Understanding:	To what extent are you able to understand this material? - To what extent are the concepts explained in a way that is easy to follow? - Do you believe that someone with no prior experience would be able to grasp the content presented? <u>Why</u>?
Relevance and Application:	To what extent does this material support the program's goal of instructing learners to be able to act as peer mentors in financial literacy? To what extent can this information be applied in real-world scenarios like what you experience in your day-to-day?
General concluding questions:	Is there anything else that you can think of about the content that you would like to mention or anything we missed? Do you have any further recommendations for improvement?

Appendix H – Selected User Transcript Excerpts

Supporting quotes from the expert for each category:

Clarity and Comprehension

- “I like the example in slide nine. It's practical for students in class”.
- “...little hard for me too understand. Like maybe it can just like show more stuff on it”.
- “I need some scenario or example”.
- “... the chart the picture [Maslow's Pyramid] I just told you that I thought a little hard to understand”

Practical Utility

- “ I just I didn't um, like lease any house or buy any house, so I didn't really know whether it is helpful me”.
- “I found it can help me just um know the new skill about saving the money in daily life because I really didn't pay attention to sit my money before”.
- “It's a little hard to just transport this knowledge to other students. because it can only understand, but that maybe more detailed need in this material”.
- “...just lacks some practical um use in real life, because I only know, like, what I should do is not I only know, like, um the direction, but I don't really can just use this direction to really um plan my budget in real life”. “...maybemore explanation or like, a tutorial or something, cause it just like, tells me these are the tools”.
- “...just like explain what that means more. like, maybe give me an example or something”.
- “I just, like, don't know how I'm supposed to apply this”

Depth and Relevance

- “Some slides only shows me some little topic. Maybe I need more explanation”.
- “I would like more distinction on, like, what is like truly a necessary and not I guess, because I don't know, like, I consider it a necessity, even though, like it isn't really”
- “...it's a little overwhelming, like, there's a lot of choices here, but, like I don't really know what any of them are about”.
- “It was kind of like boring, but like, um like, you know, showed you how to use a budget and like, what? a budget, I guess, could, like, look like and why it's important and stuff”

Visual Design and Organization

- “Scenario in the slide 15 is is totally fine, but it can be, like, divided into two power point two slides”.
- “I think that don't the words [font] in slide six is a little small”.
- “I just find it feel like it's [slide] just cut in immediately”
- “Maybe just can add some YouTube YouTube video in the PowerPoint like about more specific on teaching video”.
- “It's just like boring, it's just, you know, I don't want to spend any time on this”
- “...just like it's like boring. If it could, like, have, like some more, like videos or, like or something like interesting to look at, um yeah”.

Interactivity and Engagement

- “Maybe just more activity, like more example, more examples” (suggestion for improvement)
- “many more practices” [could be added].
- “...it doesn't actually, like, help me figure out how to, like budget myself maybe”.

Appendix I – A structured approach comprising three coding stages for User Transcripts: Initial Coding, Focused Coding, and Thematic Coding

State 1: Initial Coding (Line-by-Line Coding): The initial coding involved a thorough, line-by-line examination of the interview transcript. Codes were generated for every meaningful phrase, sentence, or paragraph, yielding a total of **86 initial codes**. This approach captured a comprehensive range of feedback, including comments on clarity, practicality, relevance, organization, accuracy, and engagement.

Stage 2: Focused Coding: In the focused coding stage, the 229 initial codes were grouped into **8 broader categories** based on similarity and relevance. The categories included:

1. Lacks Clarity
2. Need more real-world examples
3. Needs more detail
4. Need more practice/interactivity
5. Material was understood
6. Poorly designed
7. Not realistic/lacks utility
8. Instruction is not Engaging

Stage 3: Thematic Coding: The final stage involved synthesizing the focused coding categories into broader themes that align with the evaluation questions. The themes were developed by combining codes with similar underlying issues or objectives. The following six themes emerged:

7. Clarity and Comprehension
8. Practical Utility
9. Depth and Relevance
10. Visual Design and Organization
11. Interactivity and Engagement

1. Clarity and Comprehension

- **Lacks Clarity:** Indicates ambiguity, poorly worded questions, unclear visuals, or lack of proper definitions.
- **Content Requires Decomposition:** Complex concepts that are not broken down properly contribute to lack of clarity.

Explanation: These codes were combined under *Clarity and Comprehension* because they all point to difficulties in understanding the instructional material. If concepts are not broken down properly, are presented with poor structure, or are confusing, comprehension suffers.

2. Practical Utility

- **Lacks Utility for Learners:** Directly addresses the relevance and usefulness of content to learners' real-world needs.
- **Need to be More Practice-Oriented:** Lack of practical application or real-world examples diminishes usefulness.
- **Requires for Examples:** A lack of concrete examples weakens practical utility.

Explanation: These codes were combined because they all relate to the **applicability and usefulness** of the material. If content is not relevant, lacks practical examples, or doesn't offer hands-on practice, learners will struggle to apply what they learn.

3. Depth and Relevance

- **Combination Lacks Depth and Lacks Utility:** When content lacks depth, it often also lacks relevance.
- **Lacks Depth:** Superficial coverage of concepts makes the material less useful and less engaging.
- **Lack of Relevance:** When material doesn't connect deeply with learners' needs or contexts, it lacks relevance.

Explanation: These codes were grouped under *Depth and Relevance* because they reflect a lack of detailed exploration of key topics. When the content is superficial or overly simplified, it becomes less relevant to learners' needs.

4. Visual Design and Organization

- **Poor Design Functionality:** Ineffective visuals and poor presentation design.
- **Poor Organization:** Disorganized flow and lack of coherence in structure.

Explanation: This theme covers the structural and aesthetic aspects of the material. Poor visual design and organization can impede learners' understanding and reduce the overall effectiveness of the instructional content.

5. Interactivity and Engagement

- **Serviceable but Could Be Improved:** The existing interactivity is functional but lacks engagement.
- **Offers Value to Instruction:** Some interactive elements are beneficial but need enhancement to be more engaging.

Explanation: This theme emerged because of feedback related to **enhancing learner engagement** through interactivity. While the content may be valuable, it is not optimized for engagement, which is critical for learner comprehension and retention.