Module 2 – Individual Front-End Analysis
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This training, "*Learn to Discern*", aims to empower teenagers (ages 13-18) with critical thinking and media literacy skills to navigate the digital world effectively in an era of information overload. By the end of this training, learners will have the knowledge and tools they need to be discerning consumers of online information, such as the ability to critically evaluate sources, spot misinformation, and engage in informed digital communication.

Content/Needs Analysis

A) What is the need for your educational product?

> Media literacy is an essential skill in the digital age, particularly for teenagers who spend a significant amount of time online. Far beyond the traditional media of previous generations, today's teens consume a huge amount of information from a wide array of sources, such as clips, memes, viral videos, social media, video games, advertising, and more. These types of media are not inert, neutral artifacts that might simply be ignored; much of media content actively seeks to communicate a message and capture our attention. From these sources come challenges such as the prevalence of misinformation, online threats, and the impact of social media on their perceptions and behaviors. As such, the need for this training comes from the presence of this contemporary digital reality and the pressing need to help youth become savvy to potential underlying messages and how our behavior might be influenced.

B) Would a CBT be required?

> A CBT (Computer-based Training) will be required; this training will be delivered virtually and asynchronously so as to reach a wider audience and to be available 24/7 to youth who are navigating today's busy, information-saturated world. In addition to self-paced learning, this training may be part of blended instruction where facilitators can run workshops with students. Given the nature of the subject matter, which is centered around navigating the digital world effectively, it makes further sense to develop this project as an online training.

C) What method of data collection would you recommend for the Needs Analysis?

A combination of data collection methods would be effective for conducting a Needs Analysis; initial surveys with the target audience would be designed to measure perceived internet-related knowledge, safety concerns, and digital literacy gaps. Focus groups would provide an opportunity to dive deeper into survey responses, where respondents' experiences, perceptions, and challenges related to digital literacy can be discussed at a face-to-face guided discussion. Here, qualitative insights can be gathered for specific areas where "Learn to Discern" can be most beneficial. As an additional step, interviews with outside experts in this subject could provide valuable, thorough, and informed insight into the current digital literacy landscape for teenagers.

D.) Provide an outline of steps that you would use to obtain information on the potential need for the project, including:

- *Who will you get information from?*

  Information will be primarily sourced from digital literacy experts, educators, and mental health professionals.

- *How will you get it?*

  Invite experts who have relevant knowledge and experience in digital literacy education by introducing them to the training program, its design, and the need for their expertise. One-on-one **interviews** and **focus group discussions** can be arranged with these identified stakeholders and might be conducted in person or virtually, depending on the availability and preferences of the participants.

- *How will you analyze the information?*

  As interviews and focus group discussions are conducted with participants, information can be gathered as experiences, expertise, and recommendations are shared openly. All responses and insights will be documented and recorded with their permission. Once recordings are transcribed and notes organized, the information can be used for analysis. Qualitative data analysis techniques can emerge common themes, challenges, and recommendations from these experts. Main insights, challenges, and opportunities will be examined, and complemented by a literature review.

- *What kind of report will you create to report back to the employer?*

With the synthesized information obtained from interviews, focus groups, and the literature review, a report can be created to return back to the employer/project sponsor – this needs-based assessment will include a clear understanding of the potential need for the "Learn to Discern" training program, supported by data, insights, and expert opinions. The report will also include a description of the methods used to gather data, and any techniques used.

E.) Discuss the pros & cons of the methods you selected. For example, if you mentioned interviews, what are the advantages and problems with conducting interviews, or surveys, etc.

Chosen Data Gathering Methods	Pros	Cons
One-on-one Interviews	Participants may feel more comfortable sharing personal experiences and insights; in-depth exploration of an individual's opinions	Resource-intensive – time, personnel needed to conduct and transcribe interviews
Focus Groups	Efficient for gathering diverse opinions; reveals collective perspectives and shared experiences	Potential for fewer intimate insights in group settings

F.) What factors (other than training) might be responsible for poor performance?

- Insufficient Motivation - If participants do not see the immediate value of the training, they may lack motivation; although digital literacy is an increasingly important skill in navigating the web, it may not be seen as necessary. Teenagers are often drawn to short-term rewards, and digital literacy, which focuses on critical thinking, online safety, and responsible online behavior, may not offer the same immediate rewards as other digital activities, such as gaming or social media engagement.
- Complexity of Content - Training on digital media literacy may include a complex set of jargon or terminology that can hinder understanding if participants have not previously been exposed to these terms online.

Target Audience Analysis

Characteristics of the target audience (to the best estimate)	
Cognitive characteristics; aptitude, reading level, visual literacy, specific prior knowledge	- Diverse cognitive abilities, from average to above-average aptitude. - Reading level varies within the age range (ages 13-18), typically from middle school to high school level. - Visual literacy is high, as teenagers are accustomed to visual media and digital content. - Limited prior knowledge of advanced digital literacy concepts; basic digital skills are prevalent.
Physiological characteristics; health, age, gender	- Age range: 13-18, encompassing adolescence. - Varied gender representation with potential variations in learning preferences.
Affective Characteristics: interests, motivation, anxiety, attitude toward learning	- Interests vary widely, which might include pop culture, video games, and academic pursuits. - Motivation levels may differ; some are self-motivated, while others may need external motivation. - Anxiety levels may vary, particularly regarding online safety and misinformation. - Attitude toward learning can range from enthusiastic to indifferent, influenced by individual experiences and subject matter.
Social Characteristics: racial/ethnic, relations to peers, feelings toward authority	- Diverse racial and ethnic backgrounds, reflecting a multicultural audience. - Peer relations play a significant role, as teenagers often value peer opinions and interactions, particularly in online spaces. - Attitudes toward authority figures, such as teachers and parents, may vary from rebellion to compliance, depending on individual experiences.

A.) What are the design implications of the assessment of the target audience? For example, if you stated that 50% of the learners are deaf, your lesson would be more text-based and would probably not include audio.

To create a training program that's as inclusive as possible for learners of all experience levels in online spaces and digital literacy practices, "Learn to Discern" would begin with foundational concepts and gradually progress to more advanced topics to accommodate those with basic digital skills. These foundational concepts in digital literacy and online spaces may include understanding the basic structure of the internet, recognizing common online platforms and tools, and grasping the fundamentals of online communication and digital information. Once learners clear this initial intro to the training, the curriculum will gradually introduce more advanced topics and skills, such as media literacy, critical thinking, fact-checking techniques, privacy protection, etc. Recognizing the varying reading levels within the age group (13-18), all of the training materials will be written at a middle to high-school reading level. All training materials will also be complemented, when applicable, with visual aids, infographics, and videos to enhance understanding and engagement. Importantly, the training will integrate and incorporate recognizable, relatable, and engaging examples/scenarios from pop culture to real-life situations that might capture the interest of the target audience where disinformation/credibility was brought into question.

B.) Deepen your content: find out more about the outcomes that you plan for your target audience to learn. You could, for example, interview a content expert, get books out of the library, find content on the Internet, or access relevant learning standards.

To delve more into the potential outcomes that are predicted for learners to take away from the "Learn to Discern" training, additional research, outside consultation of experts, and a review of relevant learning standards will be performed. Educational standards and guidelines for digital literacy and media literacy, such as the set of media literacy standards released by the RAND Corporation, a non-partisan American research institute, can be referred to when looking at the competencies we wish for participants to take away to engage in the online information ecosystem ("Media Literacy Standards to Counter Truth Decay," 2021). This is to ensure that "Learn to Discern" aligns with recognized benchmarks for digital literacy education. Online resources from reputable sources such as Common Sense Media, the News Literacy Project, MediaWise from Poynter, The Center for Media Literacy, etc. Engaging with participants' parents, caregivers, and educators to gather their perspectives will also be an insightful contribution to what these groups believe would be the most desired outcomes of digital literacy training.

Goal/Task Analysis

A.) Step-by-step analysis of the target audience doing the desired behavior after they have completed the CBT:

Step 1: Recognizing Online Information Sources

> After completing the CBT, students should be able to identify a variety of trustworthy online information sources, such as websites, social media platforms, and online news outlets. For instance, students will understand that results that appear at the top of a search might not be the most reliable, and site addresses that end in .org or .edu may be more reputable. Learners may use search advantages, for example, using the phrase "site:.edu" so the Google engine will only turn up results under that domain.

Step 2: Assessing Credibility

> Learners will assess the credibility of online information by examining the source, authorship, and publication date. They will look for signs of bias, sensationalism, or misinformation. Students will recognize that hyperbolic headlines, full of heated, 'scary' looking buzzwords, are probably not reliable. Students will also know to search for other key pieces of information, asking questions such as "Who owns this website/TV station/newspaper? Do they have a known political agenda?", or "Who is the author of the article and what else have they written? Do they have a notable reputation?". Learners will recognize that search engine algorithms or the spaces of discussion in which they might be participating might limit available facts and perspectives.

Step 3: Fact-Checking

> Upon encountering new information, learners will employ fact-checking techniques learned in the CBT. This may involve cross-referencing information with trusted sources and using fact-checking websites, and other strategies to fill gaps in knowledge. This might also include fact-checking themselves: if students tried to investigate the same issue, would they easily find proof that the article's report contains real facts?

Step 4: Critical Evaluation

> Learners will ask questions about the latent or deeper meaning of messages online, asking questions such as "Who is sending the message?", and "Why are they doing that?".

Learners will critically evaluate content by considering multiple perspectives, analyzing arguments, and detecting logical fallacies or emotional manipulation. Critically, learners will be able to recognize their own limitations of their knowledge or understanding of the facts.

Step 5: Identifying Misinformation and Disinformation

Learners will be able to identify instances of misinformation (false or misleading information spread without harmful intent) and disinformation (false information spread with harmful intent). Learners will be able to point to previous instances in documented Internet history where disinformation/misinformation was knowingly spread, how this occurred, and how to critically assess such situations.

Step 6: Ensuring Online Privacy

Learners will implement basic strategies to protect their online privacy, including using strong passwords, enabling two-factor authentication, and recognizing potential privacy threats. Lesser-known strategies and knowledge, such as that it's unwise to browse on public networks as many of them can see the websites you're browsing, will also be learned and utilized.

Step 7: Promoting Responsible Online Behavior

Learners will engage in responsible online behavior, including respectful communication, refraining from cyberbullying, and reporting harmful content when necessary. Learners will be able to expand on the importance of civility, empathy, and tolerance when engaging with individuals who hold different opinions or backgrounds in order to keep a healthy and productive online environment.

Step 8: Seeking Help and Guidance

When faced with challenging situations or online threats, learners will know how to seek help and guidance from trusted adults, educators, or relevant authorities. At the same time, learners will know that technology has the capability to undermine formerly trustworthy information sources and individuals (e.g., audio and video "deep fakes", impersonation, AI-generated content) and to be aware of this when seeking out seemingly trustworthy sources.

Step 9: Application in Real-Life Scenarios

Ultimately, learners will apply these digital literacy skills in real-life scenarios, such as when conducting research, interacting on social media, or making informed decisions based on digital information. At a broader level, learners will be able to take what they learned from this course and use it to take action from evidence, recognize multiple perspectives, and update their own views when presented with new facts or evidence.

References

Media Literacy Standards to Counter Truth Decay. (2021). In *RAND Corporation eBooks*. https://doi.org/10.7249/rra112-12