

Monterey Bay Aquarium Learner & Context Analysis Worksheet

Amanda Philbrick

Instructional Science and Technology, California State University, Monterey Bay

IST522: Instructional Design

Dr Sheryl Hathaway & Dr. Gary Rauchfuss

October 4, 2022

Brief Introductory Info

Your Name	Amanda (Mandy) Philbrick
Your IDD Topic	Financial Stewardship/Fiscal Awareness
Organization	Monterey Bay Aquarium (MBA)
Learners	MBA Management Team

An Introductory Note

Monterey Bay Aquarium's (MBA) mission to inspire conservation of the ocean environment is one that resonates with me, and I aspire to support their important work. I was fortunate to be in put in direct contact with former master's in Instructional Science and Design (MIST) student and current MBA employee, Brianne Fitzgerald. Communications with Brianne led me to explore building upon Mona Antonious and Yerlany Mendez's current capstone project: a Financial Stewardship Series with MBA management as the target audience. Their modules aim to address management's lack of familiarity with both the language of finance and the spending practices of the Aquarium. The goal is to maintain MBA's financial stability. My keen interest in furthering MBA's conservationist mission drew me to their organization, and I am honored by the opportunity to devote my assessment efforts this semester, and my MIST capstone work, to the needs of the Monterey Bay Aquarium.

Learner Analysis Data Collection**First Source (Brianne Fitzgerald, MBA Director of Learning and Engagement)**

I initially collected learner data by communicating with former MIST student and current MBA Director of Learning and Engagement, Brianne Fitzgerald. She indicated that the Aquarium is "involved in many projects right now as we head toward the end of the

year...Education, in particular, has been operating short-staffed and focusing on rebuilding their team...The entire Aquarium is rebuilding both staff and programs after our shutdown during the pandemic.”

This communication lends critical understanding of my target audience. Management team members are over-taxed with a multitude of responsibilities. It will be wise to take this into account. As Stolovitch and Keeps (2011) advise, learning is change; unless I facilitate this change in an organized and meaningful fashion, retention of instruction for managers whose short- and long-term memories are near capacity may be a struggle.

Second Source (Mona Antonious, MIST Capstone Student)

I arranged to interview current MIST capstone student, Mona Antonious on the status of the Financial Stewardship Series project. Mona generously shared pieces of the final product with me and relayed difficulties she and teammate Yerlany have experienced with obtaining consistent feedback from financial subject matter experts (SMEs). She indicated that there has been limited introduction of the instructional material thus far to the target audience.

Mona confirmed that the reason for creating these instructional materials is an established lack of fiscal skills and knowledge among management team members. When embarking on the project, Yerlany and she were provided with several informational documents. Even with the aid of Internet searches, they found the fiscal content difficult to discern. The support of SMEs has been critical in deciphering concepts. If capstone students whose primary concern is delivering meaningful content struggle with comprehension, it can only be assumed that managers novice to the subject matter might experience confusion. Concerted effort will be required to adeptly convey effective instruction to the target audience. At this time, I have limited data on management's reception of the existing materials. Further assessment will be necessary.

Third Source (Email Updates and Magazine Review)

As a Monterey Bay Aquarium devotee, I am signed up to receive regular updates from aquarium@mbayaq.org. On reviewing the September 2022 email content, I noted the announcement concluded with the message: “Help us continue our urgent conservation work...together we can help protect the ocean for future generations.” A link to “Donate now” is included, with a notification that MBA is a 501(c)3 nonprofit institution.

Evaluating the content of previous email updates, I noted that the MBA team provided a user-friendly virtual path to plan Aquarium visits or, alternatively, to “check out or live cams” from the home or office. In the recent MBA Shorelines magazine, the vice president of education, Dr. Jenny de la Hoz confirmed that, in the wake of the pandemic “We were able to pivot on a dime because of the forward-thinking that our staff had already done around digital learning” (Cooper et al., 2022).

It is clear from these community communications that MBA management elicits community and staff support to maintain their fiscal stability – providing the opportunity to contribute financially as donors, visitors, or online viewers.

Learner Profile**What Work They Are Doing Now**

As Brianne Fitzgerald relayed, managers in all MBA departments are actively engaged in restructuring programs and staff post-pandemic. Management has not yet engaged with the majority of existing Financial Awareness Series content. Receptivity within the context of their current work requires further evaluation. Aquarium financial stability is of obvious importance to all staff members, but how knowledge of esoteric financial concepts directly relates to each individual team’s management staff might not be readily apparent.

Prior Knowledge About This Topic

Management personnel work in diverse programs that specialize in a variety of topics. Departments include exhibit design, aquarist and facilities operations, research and policy development, education, science communication, tour guide services, and volunteering (Monterey Bay Aquarium, 2022a). Unified by the Monterey Bay Aquarium's mission to "inspire conservation of the ocean," employees from all backgrounds are one in their desire to positively impact the environment and to inspire community engagement in that work. Most management personnel come to the topic of fiscal management with limited knowledge and skills, having specialized in work and education that led them to the fields of science and community outreach.

Work in prior organizations may have introduced managers to some concepts. The more personally relevant those experiences were, the more likely it will be that they have retained that instruction. It will be valuable to further assess exposure to financial concepts in previous positions. However, my data sources indicate that baseline knowledge for the majority of management is minimal.

Tool Skills

In conversing with MIST capstone student Mona Antonious, I was informed that the learning management system (LMS) she is utilizing for delivery is unique to the Monterey Bay Aquarium. Of significance, post-pandemic restructuring has led to the hiring of many new staff members. Jenny de la Hoz, for example, only became the vice president of education in 2021 (Cooper et al., 2022).

Given these factors, onboarding to existing software will be necessary. Management has universal access to tools, but many will require engagement to facilitate mastery of LMS navigation.

Expected Ease or Difficulties in Learning

As a world-renowned and nationally ranked institution, Monterey Bay Aquarium attracts talented and dedicated staff (Jernigan, 2018). As such, members of the management team are goal-oriented and discerning. If the personal and institutional value of the Financial Stewardship Series is made clear and the management audience is engaged, I anticipate that learners will grasp concepts with relative ease. These management team members have a well-established aptitude for learning.

Motivation for Learning About This Topic

Motivation for learning about financial concepts is present but requires reinforcement. The topic of fiscal management is not one of intrinsic interest for most team members, many of whom came to MBA with a passion for conservation and science. The necessity of fiscal management is without reproach, and enhanced stakeholder understanding will maximize productivity and bolster efficiency. However, as expressed by Brianne Fitzgerald, the scope of management's demands at this time is overwhelming. Shifting attention to a topic not specific to their department may prove challenging.

Other General Characteristics That May Impact Their Instructional Experience

Creation of accessible learning ought to be a central goal for all instructional designers. As Rothwell et al. (2016) state, the Cornell University's 2012 Disability Status report revealed that 10.4% of working-age adults have a disability – physical, mental, or learning.

The Monterey Bay Aquarium has expressed its dedication to building a diverse and inclusive team. Their Diversity, Equity, Inclusion, and Accessibility (DEIA) Committee, composed of staff from its various departments, strives to implement strategies that will “attract, retain, develop, and engage diverse staff” (Monterey Bay Aquarium, 2022b, para. 6). DEIA

efforts are necessary to ensure education can reach management from all backgrounds. It will be important, for example, to assess for visual and hearing difficulties, preferred language delivery, learner sensitivity to gender-neutral language, and learner's cultural backgrounds. Further assessment is required to gather this data on management team members.

With the goal of creating instructional materials that meet the tenets of Universal Instructional Design – built from the very beginning to address learners of all language skills, ethnicities, abilities, and disabilities – instruction will ideally require little to no modification as new learners are introduced to the content (Rothwell et al., 2016).

Prerequisites (Courses)

Prerequisite courses will be provided to management in the form of the final capstone project of current MIST students Mona Antonious and Yerlany Mendez. Their modules will be completed and delivered by the end of this semester. Their first module engages the audience in thinking about and understanding why this content is important. It addresses the critical question: “What’s in it for me?” (Stolovitch & Keeps, 2011). The second instructional module introduces key terminology within the context of real-life scenarios, impactfully delivering valuable financial information.

In order to fully comprehend the content I create, it will be important for these initial courses to have been completed.

Entry Requirements

As the course is built for delivery to management team members, a current management position within the Monterey Bay Aquarium is the only entry requirement. However, future audiences might include general staff members, empowering the entire team to make responsible financial decisions for the benefit of the Aquarium

Context (Workplace/Environment/Setting) Analysis Data Collection**First Source (Brianne Fitzgerald, MBA Director of Learning and Engagement)**

I collected information about the instructional design delivery environment by communicating via email with the MBA Director of Learning and Engagement, Brianne Fitzgerald.

Second Source (Mona Antonious, MIST Capstone Student)

I assessed the context in which the current capstone project is being created and delivered by interviewing MIST capstone student Mona Antonious over Zoom.

Third Source (Observation and Internet Search)

I physically visited the Monterey Bay Aquarium and surrounding areas. I confirmed the names and locations of Monterey Bay Aquarium facilities by completing online Internet searches.

Numbers & Locations**Number of People in Your Target Audience**

I have reached out to Mona Antonious and Yerlany Mendez inquiring as to the size of the management target audience. I am currently awaiting a response. While request for input was sent out ahead of time and I anticipate a response, I recognize that both capstone students are tasked with many responsibilities at this time as they approach the completion of their master's degree.

Location(s) of People in Your Target Audience

The target audience are employees of the Monterey Bay Aquarium. Staff members work at multiple physical locations within the Monterey area – the main Monterey Bay Aquarium

visitor campus, the Bechtel Education Center, business offices, etc. Additionally, management team members work remotely at times.

Work Setting Logistics, Resources, Constraints

Classroom Instruction Considerations

A successful in-person training session would require reservation of a conference room(s) ahead of time. A task of greater difficulty will be identifying a time that will allow all management team members to be present. Efforts to schedule far in advance will be necessary given the reports of extremely busy staff. If in-person training sessions are determined appropriate for this content, providing multiple opportunities to attend will be necessary.

I will need to secure physical tools ahead of time including chairs, tables, computers, a projector screen, a microphone, and possibly a staging area to ensure instructional components are visible to learners. Direction would need to be provided to learners to bring necessary support materials – laptops, notebooks, writing utensils, etc. – as appropriate to the training. If possible, I would ideally arrange for such materials to be available for learners, minimizing complications.

It may be helpful to secure SME attendance for additional support at in-person trainings. Communication to secure commitments ahead of time would be necessary.

Online Instruction Considerations

The current Financial Awareness Series modules are digitally housed in the Monterey Bay Aquarium's learning management system. This necessitates that all management staff members be enrolled in this LMS. They will also require work or home access to necessary hardware, software, and Wi-Fi. Time will need to be identified for managers to engage with the online material.

As Rothwell et al. (2016) advise, transfer is best achieved when the training environment is as similar as possible to the job environment. While the online module content cannot identically replicate real-life, scenarios presented within the LMS ought to mirror reality as much as possible. Opportunities to implement the delivered instruction should be integrated into the online content.

Summary

Learner and context analyses are vital components of the instructional design process. Direction provided from these assessments should not be underestimated.

Continuing to gather data on the knowledge, skills, motivation levels, tools, aptitudes, and general characteristics of my target population will allow me to tailor content and optimize outcomes. With the Monterey Bay Aquarium management team as my identified audience, I will be designing instruction for a capable group that possesses limited financial knowledge and skills, and whose motivation levels will likely vary. I anticipate that their heavy workloads in the context of MBA restructuring will pose the greatest challenge in delivery and engagement.

Context analysis is crucial. Per Rothwell et al. (2016), theorist Michael Allen expressed that context analysis is perhaps the most foundational and most neglected component of instructional design. The most effectively designed instruction will fail if the context to support delivery does not exist. While I have gathered basic data on the physical and online context of planned instruction, continued assessment be necessary to facilitate smooth delivery.

References

Cooper, H., Bauman, A., Thomas, V., Molle, K., Wolfrum, A., & Mapp, A. (2022). Meet

Education VP Dr. Jenny de la Hoz. *Shorelines*, 38 (2), 8.

Jernigan, M. (2018, April 25). *Top Five Aquariums in the U.S.* USA Today.

<https://traveltips.usatoday.com/top-five-aquariums-us-104653.html>

Monterey Bay Aquarium. (2022a). *About Us*. <https://www.montereybayaquarium.org/about-us>

Monterey Bay Aquarium (2022b). *Diversity, Equity, Inclusion, and Accessibility*.

<https://www.montereybayaquarium.org/about-us/diversity-equity-inclusion-accessibility>

Rothwell, W.J., Benschoter, B., King, M., & King, S.B. (2016). *Mastering the Instructional*

Design Process: A Systematic Approach (5th ed). Pfeiffer.

Stolovitch, H.D. & Keeps, E.J. (2011). *Telling Ain't Training* (2nd ed). Association for Talent

Development.