

AN AI-ENHANCED TRAINING PLATFORM FOR OUTDOOR CAMPING LEADERSHIP WITH YOUTH PROGRAMS USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

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ABSTRACT

This paper addresses the inefficiency of traditional staff training for camp employees, which often requires extended in-person sessions before the camp begins. StaffPrep is designed to reduce the time staff spend on-site for training, allowing them to enjoy their summer vacation while learning essential skills remotely [1]. The app has three core components: an AI-driven feature that generates situational questions and answers to quiz staff members; a multiple-choice quiz platform that records scores and reports them to the camp for staff qualification; and an authentication system that enables users to create accounts and track their learning progress. To evaluate the app's effectiveness, 32 AI-generated questions were assessed for quality and relevance on a scale of 1–10, with results indicating high relevance and quality. Time is valuable, and StaffPrep empowers users to save time while maintaining the integrity and efficiency of the training process.

KEYWORDS

Remote training, AI-generated quizzes, Staff qualification, Camp employee efficiency

1. INTRODUCTION

StaffPrep is an app that was originally designed for a camp that I worked at. I was there one summer and realized that the staff training requires employees to be at camp a week and a half before the camp starts [2]. This annoyed me because it takes up a lot of time in addition to the 2 weeks I would work there as a counselor, and that there could be better things for me to do instead of being stuck in the camp. Additionally, the training was pointless and was not reinforced, as it would include lectures on how to deal with kids, what to do in certain situations, and camp rules, but no testing on whether the staff members understand and fully remember the concepts. On top of that, many returning staff would just not show up with an excuse of having previously planned out something and that they have done the training before, which could be potentially dangerous when unpredictable situations happen when camp starts. The process could be easily replaced by a training app that would prepare the staff remotely, and quiz them to make sure they are prepared for camp.

In Section 5, we explored three methodologies for remote staff training:

Remote Educational Interaction: This methodology uses digital tools like video lectures and interactive platforms to deliver remote training [3]. It aims to enhance digital competence and accessibility. However, it struggles with engagement, limited testing mechanisms, and lack of real-world application.

Training for Remote Service Providers: This method identifies training needs through ethnographic studies and uses experiential learning for skill-building. It focuses on team-based approaches but relies heavily on in-person mentoring and lacks scalable, technology-driven solutions [4].

Remote Training with Self-Assessment: This approach combines virtual labs and self-assessment tools for personalized training [5]. It promotes autonomy but falls short in replicating real-world experiences and providing specific feedback.

StaffPrep improves on these by incorporating AI-driven dynamic content for situational training, structured testing for knowledge reinforcement, and realistic scenario-based exercises [6]. These features address engagement, scalability, and real-world application, creating a comprehensive, flexible training solution.

The app essentially reduces the time that staff members have to spend on learning about the materials that the camp requires them to know before working. This is achieved by the utilization of the quizzing system and the situational AI generated questions that would help the staff better remember and master the concepts [7]. The AI generated questions present real world scenarios that are realistic, varied, and customizable to the users. Using AI allows the app to elaborate on the study materials provided by the camp and develop questions related but not mentioned in the materials. Additionally, since it is an app and a remote self-learning process, the staff members can complete this anywhere in the world while on vacation or work.

In this experiment, we evaluated the accuracy and relevance of AI-generated situational questions and answers within the StaffPrep application. The goal was to test whether the AI could reliably produce meaningful, high-quality questions that aligned with provided training materials and real-world scenarios.

To set up the experiment, we generated 32 questions across 8 topics, rating each question on a scale of 0–10 for relevance and quality. A score above 5 was considered relevant. The most significant findings indicated that the majority of questions (81.3%) were highly relevant, with an average score of 8.156. However, lower scores often reflected vague or nonspecific answers.

The results were consistent with expectations, as the AI successfully tailored most questions to the training context. Minor deficiencies were due to limited answer specificity. Overall, the experiment was successful, demonstrating that the AI-generated content was effective, with room for refinement to improve clarity and detail.

2. CHALLENGES

In order to build the project, a few challenges have been identified as follows.

2.1. Authentication

Authentication ensures secure access to StaffPrep’s functionalities. To address skepticism, the app uses encrypted storage and secure communication protocols to protect user credentials [8]. A

robust password recovery system ensures accessibility if users forget their credentials, while efficient design minimizes delays even for users with weaker internet connections. These measures ensure the authentication process is reliable, user-friendly, and secure.

2.2. Training Questions

The AI system generates dynamic, relevant training questions using study material. To address concerns about accuracy, the AI is fine-tuned and outputs are reviewed. Difficulty levels adjust based on user performance, ensuring appropriate challenges. Additionally, pre-launch testing and filters prevent nonsensical or inappropriate content. These safeguards ensure meaningful, high-quality question generation.

2.3. The Quiz System

The quiz system evaluates users’ knowledge and securely stores results. Anti-cheating measures include randomized questions and time limits [9]. Data validation ensures scores are accurately recorded, while encryption protects data during transmission and storage. These strategies guarantee fair, accurate, and secure reporting of users’ performance, addressing concerns about reliability and integrity.

3. SOLUTION

StaffPrep is an app that was originally designed for a camp that I worked at. I was there one summer and realized that the staff training requires employees to be at camp a week before the camp starts. The training would include lectures on how to deal with kids, what to do in certain situations, and camp rules. However, I realized that the process was not only tedious, inconvenient, but also could be easily replaced by a training app that would prepare the staff remotely. StaffPrep includes three major components or functions: study, practice, and test. The Quiz and Practice functions use Ai, specifically Gemini, to generate a series of prompts, questions, and the answers to those questions through the information in study materials that the camp would provide [10]. By using Ai the app could generate a greater variety of questions not limiting to the ones on the camp’s provided material. It could create scenarios for the staff so they could familiarize them before getting to camp making them more confident and decisive when they experience them in person. While the study function doesn’t record scores, the quiz does, which would eventually be reported to the camp. The quizzing aspect of the app is very important because it ensures that the staff fully understands the concepts and rules. Finally, the Study function allows the staff to learn the material provided by the camp, this section of the app would include more of the readings, videos or slideshows from the camp.

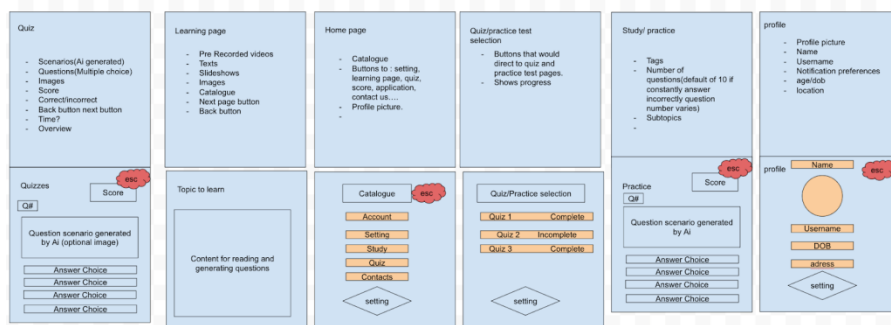


Figure 1. Overview of the solution

The authentication system of this app is designed so each user would have a profile to keep track of their progress and scores for their online staff training. Firebase authentication and Firestore database are the main services that we used to build and store the user profile [14]. While Firebase is used to authenticate user emails, usernames, and passwords, Firestore is used to store profile pictures and test results.

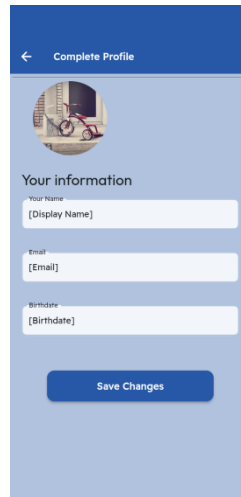


Figure 2. Screenshot of the log in page

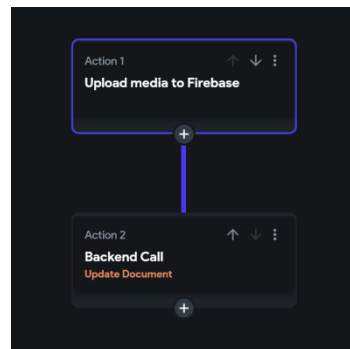


Figure 3. Screenshot of the actions 1

The authentication system includes the login/sign-up page, and the profile editing page. The login/sign-up page stores the user email and created password into firebase and is linked to the profile editing page, where the user would be able to edit their email and password there. We are using the firebase authentication system to store the emails and passwords. The action would then be synced and linked throughout the system through the “backend call– update document” action. The profile picture can be uploaded and stored in firebase in the profile page and it will also be synced in the app like the email and password. The image is stored in the “Storage” feature of Firestore and then the image url is stored into a collection in Firebase for each user. Besides the user authentication, firestore is also used to store the quiz results of the users. The results, like the email and password, are also stored in the user collection.

The Ai generation function of the app uses Gemini to generate situational questions and answers through sample articles provided by the administrator. Each user’s quiz is unique to the user as the quizzes are generated at the moment instead of previously provided quizzes. This would make the user experience more personalized and also prevent cheating.

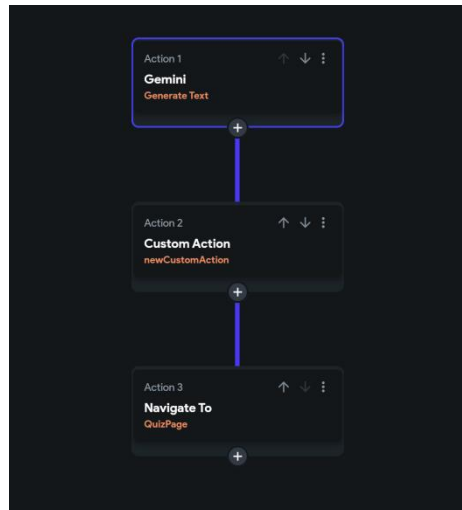


Figure 4. Screenshot of actions 2

```

1 // Automatic FlutterFlow imports
2 import './backend/backend.dart';
3 import './backend/schema/structs/index.dart';
4 import './flutter_flow/flutter_flow_theme.dart';
5 import './flutter_flow/flutter_flow_util.dart';
6 import './custom_code/actions/index.dart'; // Imports other custom actions
7 import './flutter_flow/custom_functions.dart'; // Imports custom functions
8 import 'package:flutter/material.dart';
9 // Begin custom action code
10 // DO NOT REMOVE OR MODIFY THE CODE ABOVE!
11
12 import 'dart:convert';
13
14 Future<List<QuestionStruct>> newCustomAction(String jsonText) async {
15 // Add your function code here!
16 final List<dynamic> jsonData = json.decode(jsonText);
17 return jsonData
18   .map((jsonQuestion) => QuestionStruct(
19     question: jsonQuestion["question"],
20     answerChoiceA: jsonQuestion["answer_a"],
21     answerChoiceB: jsonQuestion["answer_b"],
22     answerChoiceC: jsonQuestion["answer_c"],
23     answerChoiceD: jsonQuestion["answer_d"],
24     correctAnswer: jsonQuestion["correct"],
25   ))
26   .toList();
27 }

```

Figure 5. Screenshot of code 1

This function was created by linking the app with Gemini through an API key. Then, a custom code was made so that the prompt for Gemini could convert the articles provided into multiple choice questions through Json. The code translates Json into the format that Flutterflow uses and sends over the questions that the users would see in the quiz page [15]. The articles are stored in Firebase so it is easily accessed to change and edit. The prompt for Gemini is developed to generate situational questions that are flexible and beyond the articles. In other words, Gemini would process the article and create a made up scenario that would be more realistic to the users related to the information given. Examples for the format of the multiple choice questions is also provided in the prompt so that Gemini could build questions more accurately.

The quiz component of the app allows the users to test what they have learned in the app through the format of multiple choice questions. The quiz includes 5 questions for each article and each question would have a scenario generated by Ai with 4 multiple choice answers to go with it.

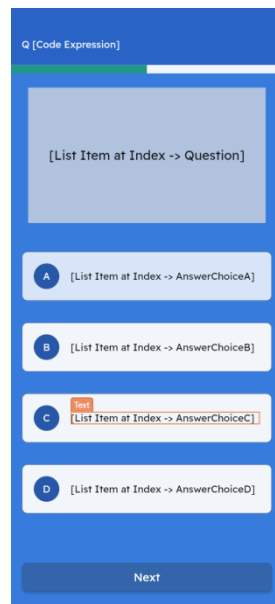


Figure 6. Screenshot of code question

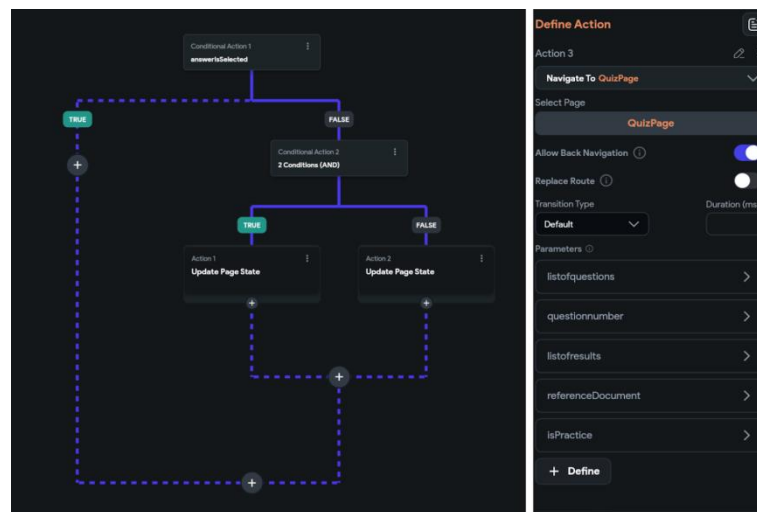


Figure 7. Screenshot of code 2

The questions and answers generated by the Ai are dynamically inserted into the quiz, meaning that Ai is able to create the set of questions with their corresponding right and wrong answers automatically. The action for this page allows the users to see if they get each question right after selecting an answer. The answer would either turn green for correct answers, or turn red for incorrect answers. The answers would then be recorded and stored into each user's account in Firebase to create a score report at the end. Every page receives the list of questions as the current question number so that the program would stop generating questions once it hits 5 questions for each section. Once the users complete the quiz, the quiz status would be reflected as either completed or incomplete on the Quiz Selection page. The practice page is similar to the quiz page, except the practice page doesn't record the score, and the users could do it as many times as they want to familiarize themselves with the concepts from the articles.

4. EXPERIMENT

In the experiment, Ai is asked to generate situational questions and answers like a scenario and solutions to the scenarios. the relevancy of the generated questions and answers would be tested. This is important because especially when using Ai, generating questions beyond the provided articles may not always be reliable.

Since the relevancy of the questions and answers is being tested, we will run tests that would repetitively measure the accuracy of the independent variable. The variable would be labeled as either relevant or irrelevant after testing 32 quizzes by going through the questions and determining if it is a helpful and accurate assessment for the reference articles. The amount of relevant and irrelevant questions is then recorded and assessed. Each question would be given a rating (0-10) on the relevance and quality of the question. Any number higher than a 5 would be relevant and any number lower would be irrelevant. The average rating of the relevant/irrelevant questions would then be helpful for app improvement and future studies. Ideally the questions and answers would be relevant but not limited to the sample articles. Although the questions and answers could be scenarios not mentioned in the articles, they should still be within the boundaries of the topic and helpful for the sake of staff training.

Question	Topic	Question output	Relevancy and quality(out of 10, a number greater than 5 means relevant and lower would indicate irrelevant)			
1	Resolving Conflicts Constructively at our Camp	["question": "Two campers you notice two campers arguing about who gets to choose the activity for the afternoon. How should you intervene?", "answer_a": "Tell them to stop arguing.", "answer_b": "Ignore the conflict and hope it resolves itself.", "answer_c": "Facilitate a discussion where both campers can express their feelings and find a compromise.", "answer_d": "Choose the activity for them."], "correct": "Facilitate a discussion where both campers can express their feelings and find a compromise".	8			
2	Resolving Conflicts Constructively at our Camp	["question": "A camper is upset because they didn't get the part they wanted in the camp play. How can you help them work through their disappointment and resolve the conflict constructively?", "answer_a": "Tell them they should be grateful for whatever part they got.", "answer_b": "Ignore their feelings and move on to the next activity.", "answer_c": "Encourage them to express their feelings and help them brainstorm ways to contribute to the play in other ways.", "answer_d": "Force them to play a bigger role in the next play."], "correct": "Encourage them to express their feelings and help them brainstorm ways to contribute to the play in other ways".	8			
3	Resolving Conflicts Constructively at our Camp	["question": "Two campers from different cultural backgrounds are having a disagreement about a tradition. How can you help them understand each other's perspectives and find a solution?", "answer_a": "Tell them to just give in to the other camper.", "answer_b": "Force them to compromise, even if it means sacrificing their own beliefs.", "answer_c": "Facilitate a discussion where they can share their cultural experiences and find common ground.", "answer_d": "Choose a side and force them to agree with your opinion."], "correct": "Facilitate a discussion where they can share their cultural experiences and find common ground".	8			
4	Resolving Conflicts Constructively at our Camp	["question": "Mar is a camper who has been excluded from the group activities and seems upset. What is the best approach to address the situation?", "answer_a": "Ignore the situation and assume it will resolve itself.", "answer_b": "Talk to Mar privately and ask him about his feelings.", "answer_c": "Publicly confront the campers who are excluding Mar.", "answer_d": "Talk to Mar privately and ask him about his feelings."], "correct": "Talk to Mar privately and ask him about his feelings".	7			
9	Creating a Bully-Free Camp: Prevention and Intervention Strategies	["question": "You notice a camper, Alex, is being excluded from group activities and seems upset. What is the best approach to address the situation?", "answer_a": "Ignore the situation and assume it will resolve itself.", "answer_b": "Talk to Alex privately and ask him about his feelings.", "answer_c": "Publicly confront the campers who are excluding Alex.", "answer_d": "Talk to Alex privately and ask him about his feelings."], "correct": "Talk to Alex privately and ask him about his feelings".	8			
10	Creating a Bully-Free Camp: Prevention and Intervention Strategies	["question": "A camper, Sarah, reports that another camper, Ben, has been making fun of her appearance. What should you do?", "answer_a": "Ignore the situation and assume it will resolve itself.", "answer_b": "Talk to Ben privately and ask him to stop.", "answer_c": "Publicly confront Ben without investigating the incident further.", "answer_d": "Investigate the incident thoroughly and take appropriate action."], "correct": "Investigate the incident thoroughly and take appropriate action".	7			
11	Creating a Bully-Free Camp: Prevention and Intervention Strategies	["question": "You observe a group of campers playing a game that involves teasing and making fun of each other. How should you respond?", "answer_a": "Let the campers continue playing as long as they are having fun.", "answer_b": "Intervene and stop the game immediately.", "answer_c": "Talk to the campers about the negative effects of teasing and bullying.", "answer_d": "Ignore the situation and hope it will resolve itself."], "correct": "Talk to the campers about the negative effects of teasing and bullying".	8			
12	Creating a Bully-Free Camp: Prevention and Intervention Strategies	["question": "A camper, Jake, tells you that he is being bullied by another camper. What should you do?", "answer_a": "Encourage Jake to talk to his parents about the bullying.", "answer_b": "Ignore the situation and assume it will resolve itself.", "answer_c": "Talk to the camper who is bullying Jake.", "answer_d": "Encourage Jake to talk to his parents about the bullying."], "correct": "Encourage Jake to talk to his parents about the bullying".	9			
13	Leading games and Activities with Confidence at our Camp	["question": "You are leading a group of campers on a nature hike when a camper starts to cry and say they're scared. What should you do?", "answer_a": "Ignore them and continue the hike.", "answer_b": "Tell them to stop being a baby and toughen up.", "answer_c": "Stop the hike and try to comfort the camper, asking them what's wrong.", "answer_d": "Tell the other campers to ignore the crying camper and keep walking."], "correct": "Stop the hike and try to comfort the camper, asking them what's wrong".	9			
14	Leading games and Activities with Confidence at our Camp	["question": "You're planning a game of capture the flag for a group of campers, but you notice that some of them are much smaller and less athletic than others. What should you do?", "answer_a": "Let them choose teams however they wish.", "answer_b": "Divide the campers into teams based on their abilities.", "answer_c": "Create special rules to make the game fair for everyone.", "answer_d": "Let the smaller campers play at all."], "correct": "Create special rules to make the game fair for everyone".	9			
15	Leading games and Activities with Confidence at our Camp	["question": "You're leading a group of campers on a canoe trip when a storm starts to roll in. What should you do?", "answer_a": "Keep paddling and try to outrun the storm.", "answer_b": "Pull over to the shore and wait for the storm to pass.", "answer_c": "Keep paddling, but avoid going under any bridges or trees.", "answer_d": "Pull over to the shore and wait for the storm to pass."], "correct": "Pull over to the shore and wait for the storm to pass".	9			
16	Leading games and Activities with Confidence at our Camp	["question": "You're leading a group of campers on a scavenger hunt when you notice that one camper is struggling to keep up. What should you do?", "answer_a": "Tell them to hurry up or they'll be left behind.", "answer_b": "Ignore them and let them catch up on their own.", "answer_c": "Offer them a faster camper to team with.", "answer_d": "Offer to carry their backpack for them."], "correct": "Offer to carry their backpack for them".	9			
17	De-escalation Strategies: Addressing Challenging Behaviors at our Camp	["question": "You are a camp counselor and notice a camper is becoming increasingly agitated and upset. What is the first step you should take?", "answer_a": "Ignore the camper and hope the situation resolves itself.", "answer_b": "Adapt to remove the camper from the situation by force.", "answer_c": "Recognize the early warning signs of escalation and try to establish a calm and supportive presence.", "answer_d": "Offer to carry their backpack for them."], "correct": "Recognize the early warning signs of escalation and try to establish a calm and supportive presence".	8			
5	Emergency Action Plans	["question": "You are a counselor at a summer camp and a camper suddenly begins to experience a severe allergic reaction. What should be your first course of action?", "answer_a": "Ignore the camper and continue with your planned activities.", "answer_b": "Try to treat the camper yourself using over-the-counter medication.", "answer_c": "Immediately activate the camp's emergency medical response plan and follow the established procedures.", "answer_d": "Call the camper's parents and ask them to come pick up their child."], "correct": "Immediately activate the camp's emergency medical response plan and follow the established procedures".				7 (correct answer is not specific enough but is still relevant)
6	Emergency Action Plans	["question": "A severe thunderstorm is approaching the camp, and you are responsible for leading a group of campers on a hike. What should you do?", "answer_a": "Continue the hike as planned, but keep a close eye on the weather conditions.", "answer_b": "Find a sheltered area and wait for the storm to pass before continuing the hike.", "answer_c": "Call the camper's parents and ask them to come pick up their child immediately.", "answer_d": "Try to outrun the storm by hiking faster."], "correct": "Find a sheltered area and wait for the storm to pass before continuing the hike".				9
7	Emergency Action Plans	["question": "A camper has gone missing during a nature walk. What should you do?", "answer_a": "Assume the camper will return on their own and continue with your planned activities.", "answer_b": "Try to find the camper on your own without notifying anyone else.", "answer_c": "Immediately activate the camp's missing person protocol and follow the established procedures.", "answer_d": "Wait a few hours before reporting the camper missing."], "correct": "Immediately activate the camp's missing person protocol and follow the established procedures".				7
8	Emergency Action Plans	["question": "A fire has broken out in the camp's kitchen. What should you do?", "answer_a": "Try to put out the fire yourself using whatever means are available.", "answer_b": "Evacuate the campers and staff to a safe location, then call the fire department.", "answer_c": "Ignore the fire and continue with your planned activities.", "answer_d": "Evacuate the campers and staff to a safe location, then call the fire department."], "correct": "Evacuate the campers and staff to a safe location, then call the fire department".				9

18	De-escalation Strategies: Addressing Challenging Behaviors at our Camp	["question": "A camper has been being out and disrupting the camp activities. You have tried to de-escalate the situation, but it continues to escalate. What should you do next?" "answer_a": "Physically remove the camper." "answer_b": "Ignore the camper and continue with the activity." "answer_c": "Hold a separating session with the camper to discuss the situation and find a solution." "answer_d": "Punish the camper." "answer_e": "Talk to the cabin." "answer_f": "Physically remove the camper from the situation without my regard for their dignity or respect."]	8			camper and continue with the activity." "answer_c": "Reach out to the camper and offer support and encouragement." "answer_d": "Ignore the camper and continue with the activity." "answer_e": "Physically remove the camper from the situation without my regard for their dignity or respect."]	8
19	De-escalation Strategies: Addressing Challenging Behaviors at our Camp	["question": "After a challenging incident involving a camper, you and your fellow staff members hold a debriefing session. What is the main purpose of this session?" "answer_a": "To assign blame to the camper for the incident." "answer_b": "To discuss the staff members involved in the incident." "answer_c": "To identify underlying issues, improve communication, and create a plan for addressing similar behaviors in the future." "answer_d": "To report about the incident and those involved to the camp director." "answer_e": "To create a plan for addressing similar behaviors in the future."]	8			["question": "A camper gets a bee sting and begins to experience difficulty breathing and swelling in their face. What is the most immediate action of these symptoms?" "answer_a": "A mild allergic reaction to the bee venom." "answer_b": "A severe allergic reaction (anaphylaxis) to the bee venom." "answer_c": "A bacterial infection from the bee sting." "answer_d": "A skin ailment caused by the sting of the bee sting." "answer_e": "A severe allergic reaction (anaphylaxis) to the bee venom."]	8
20	De-escalation Strategies: Addressing Challenging Behaviors at our Camp	["question": "You are a new camp counselor and are unsure how to handle a challenging situation with a camper. What is the best course of action?" "answer_a": "To report it out on your own without asking for help." "answer_b": "To ignore the situation and walk away." "answer_c": "To seek guidance from experienced staff members who offer advice and support." "answer_d": "To punish the camper." "answer_e": "To ask the camper to leave the camp."]	8			["question": "You are a camp counselor responsible for a group of 10-15 year olds. You've planned a day of activities, including hiking, swimming, and arts and crafts. However, a day before you see that some of the campers seem nervous and disengaged. What should you do?" "answer_a": "Cancel the planned activities, as they are age-appropriate." "answer_b": "Allow the campers to choose their own activities, regardless of whether they are age-appropriate." "answer_c": "Modify the planned activities to cater to the campers' interests and abilities." "answer_d": "Cancel the planned activities and let the campers free play." "answer_e": "Modify the planned activities to cater to the campers' interests and abilities."]	9
21	First Aid Essentials for Camp Counselors	["question": "While hiking with a group of campers, a child falls and scrapes their knee. The bleeding is minor but not controlled. What is the best course of action?" "answer_a": "Apply a tourniquet to the wound to stop the bleeding." "answer_b": "Clean the wound with soap and water and apply an antibiotic ointment." "answer_c": "Apply direct pressure to the wound with a clean cloth or bandage." "answer_d": "Elevate the injured limb to reduce swelling." "answer_e": "Apply direct pressure to the wound with a clean cloth or bandage."]	8			["question": "You are organizing a group activity for your 10-15 year old campers. You want to ensure that the activity is both stimulating and age-appropriate. Which of the following activities would be most appropriate for this age group?" "answer_a": "A board game." "answer_b": "A scavenger hunt." "answer_c": "A nature walk." "answer_d": "A simple craft project." "answer_e": "A competitive game of tag."]	9
22	First Aid Essentials for Camp Counselors	["question": "During a swimming activity, a camper begins to experience chest pain and appears to be struggling in the water. What is the first thing you should do?" "answer_a": "Ignore the camper." "answer_b": "Call for help." "answer_c": "Provide the camper with extra attention and support." "answer_d": "Punish the camper for not following the rules." "answer_e": "Remove the camper from the water."]	7			["question": "You are a camp counselor responsible for a group of 10-15 year olds who are consistently engaging and helpful. What is the best approach to address this behavior?" "answer_a": "Ignore the behavior and let them figure it out on their own." "answer_b": "Provide the camper with the answer or solution." "answer_c": "Offer the camper guidance and encouragement, but allow them to solve the problem independently." "answer_d": "Assign the camper a different task that is easier for them to complete." "answer_e": "Offer the camper a reward for their behavior, but allow them to solve the problem independently."]	8
27	Age-Appropriate Activities for 10-15 Year Olds	["question": "You notice that one of your campers, a 12-year-old, is struggling with a challenging task during an activity. What should you do?" "answer_a": "Ignore the camper and let them figure it out on their own." "answer_b": "Provide the camper with the answer or solution." "answer_c": "Offer the camper guidance and encouragement, but allow them to solve the problem independently." "answer_d": "Assign the camper a different task that is easier for them to complete." "answer_e": "Offer the camper a reward for their behavior, but allow them to solve the problem independently."]	9				
28	Age-Appropriate Activities for 10-15 Year Olds	["question": "You are planning a group activity that involves physical movement and coordination. Which of the following activities would be most appropriate for 10-15 year olds?" "answer_a": "A board game." "answer_b": "A scavenger hunt." "answer_c": "A nature walk." "answer_d": "A simple craft project." "answer_e": "A competitive game of tag."]	7				
29	Positive Behavior Management Techniques in 10-15 Year Olds	["question": "You are a camp counselor working with a group of 12-year-olds who are consistently engaging and helpful. What is the best approach to address this behavior?" "answer_a": "Ignore the behavior and let them figure it out on their own." "answer_b": "Provide the camper with the answer or solution." "answer_c": "Offer the camper guidance and encouragement, but allow them to solve the problem independently." "answer_d": "Assign the camper a different task that is easier for them to complete." "answer_e": "Offer the camper a reward for their behavior, but allow them to solve the problem independently."]	8				
30	Positive Behavior Management Techniques in 10-15 Year Olds	["question": "You have a camper who is frequently using out and disrupting the group. What proactive strategy can you implement to prevent future behavior issues?" "answer_a": "Ignore the behavior and hope it will improve." "answer_b": "Punish them severely to deter future misbehavior." "answer_c": "Build positive relationships with the campers and establish clear expectations for behavior." "answer_d": "Isolate the camper from the rest of the group." "answer_e": "Build positive relationships with the campers and establish clear expectations for behavior."]	8				
31	Positive Behavior Management Techniques in 10-15 Year Olds	["question": "You notice that one of your campers is struggling with a personal issue and is becoming increasingly withdrawn. What should you do?" "answer_a": "Ignore their behavior and hope it will resolve itself." "answer_b": "Punish them for being withdrawn." "answer_c": "Reach out to them privately and offer support and encouragement." "answer_d": "Isolate them from the rest of the group." "answer_e": "Build positive relationships with the campers and establish clear expectations for behavior."]	8				
23	First Aid Essentials for Camp Counselors						
24	First Aid Essentials for Camp Counselors						
25	Age-Appropriate Activities for 10-15 Year Olds						
26	Age-Appropriate Activities for 10-15 Year Olds						
32	Positive Behavior Management Techniques in 10-15 Year Olds						

Figure 8. Table of experiment 1

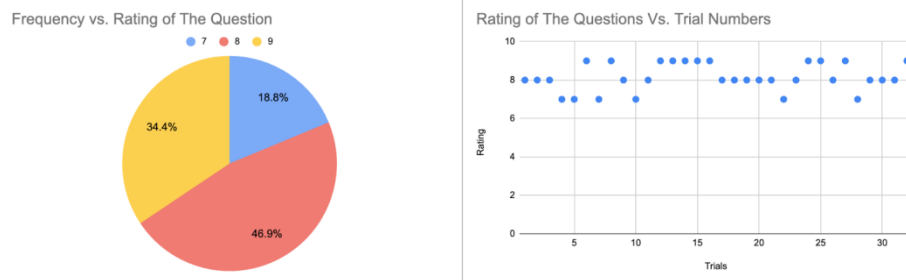


Figure 9. Figure of experiment 1

There were a total of 32 trials in the experiment, and all of the 8 articles were tested. Each article had 4 question samples, and each of the questions was given a rating out of 10 to evaluate the relevance and quality of the question. While the ratings that came out were either 7, 8, or 9, the 8 rating occurred most frequently (46.9%). Rating 7 and 9 followed with 18.8% and 34.4%. The average rating for the data set was approximately 8.156 which indicates that the relevance of the questions tend to be high as any rating higher than 5 would be considered relevant. The questions with lower ratings tend to have a trend of not being specific enough in the answers. For example, in question 22, the generated correct answer was “Assess the situation and call for assistance if necessary.” The answer is very vague and doesn’t include a clear approach to solving the issue in the question.

5. RELATED WORK

Source 1 leverages digital technologies to deliver remote education for professional development in postgraduate education. It incorporates distance learning platforms, video lectures, and interactive tools to enhance digital competence and accessibility. Customizable content delivery ensures that training aligns with individual professional needs. While effective in providing flexible and adaptive learning, challenges such as reduced engagement, technical barriers, and limited knowledge reinforcement persist. This system is valuable for training professionals remotely but would benefit from additional mechanisms to assess knowledge retention and practical preparedness [11].

Source 2 identifies the training needs of staff delivering remote services, focusing on skills like communication, ethics, and technological proficiency. It employs mixed methods, including ethnographic studies, interviews, and team learning frameworks, to create competency-based training. While didactic methods are used for basic knowledge, advanced skills are developed through experiential learning such as case discussions and shadowing. This approach effectively enhances staff confidence and teamwork but faces challenges like limited accessibility to experiential training and reliance on in-person mentoring. The methodology could benefit from integrating personalized and scalable digital solutions for broader applicability [12].

Source 3 uses remote labs and self-assessment tools to train electrical engineering students and professionals. It incorporates active learning through interactive virtual environments and quizzes, enabling learners to evaluate their progress and customize learning paths. The approach fosters autonomy and skill development while providing flexible access to resources. However, it faces challenges replicating real-world equipment interaction, providing in-depth feedback, and ensuring accessibility in low-infrastructure settings. Expanding collaborative learning and integrating real-life scenario training could enhance its effectiveness [13].

6. CONCLUSIONS

When programming the app, there were many difficulties that we faced and dealt with. For example, when using Flutterflow we realized that formatting the app and putting things where I wanted them to be was harder than we expected. We had to watch many tutorials to get the hang of it. Creating a Prompt for Gemini was also hard as we experimented with the wording extensively to convey the right message for Gemini. A specific prompt allows the situational quizzes in the app to be more accurate and varied. To create a 2.0 version of the App, we would develop more functions to the app like more setting options that can help the app run more smoothly. Additionally, we would add a function to the app where the camp could have administrator accounts. The administrator accounts would allow the camp to edit the articles that are being input into the app to generate questions and edit the quizzes themselves instead of asking for me as a developer to edit the app and update it.

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