

Proposal for Designing Instruction and Training for Nevada State Park Seasonal Employees

Group Design Proposal by:

Catherine Ellis
Janet Schwarz
William Vincent
Michael Williams

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Problem Statement

The Nevada Department of Conservation and Natural Resources is in need of a new training process that will help improve employee retention and increase the number of rehires of seasonal employees. In the following proposal, we have addressed the needs of the Nevada Department of Conservation and Natural Resources as detailed in their request for proposal. The employees would be divided into three groups: pre-placement candidates, current employees, and returning employees. This is so the training can be differentiated according to the needs of each group. In addition to the training, new hires would receive logistical information on topics such as payroll, code of conduct, and professionalism. Returning employees would receive training on leadership and mentorship. Each group would receive the same public safety, service, and legal information.

Training Strategy with Appropriate Theoretical Grounding

Our design project would utilize mobile computing technology. Pre-placement candidates would be required to complete a skills assessment prior to formal training. Also, there would be separate training modules for pre-placement candidates, newly hired employees, and returning employees. To present new information, the modules would include animated explanations, video explanations by park employees, multiple choice questions, and reflections. These modules would additionally incorporate skills development and relationship building, alongside the history, mission, and objectives of Nevada's state parks. We envision that park employees would lead training groups around the park as they complete the modules. This would allow for questions and reflections within a contextual framework. If we were able to develop this project, we would utilize the ADDIE instructional systems design model: Analysis, Design, Development, Implementation, and Evaluation. The training would align with two ontologies, behaviorism and constructivism. Additionally, the interpretivist epistemological tradition would best align with our training intentions.

As previously stated, the behaviorist learning theory is relevant to this potential design project. Principles of behaviorism would guide instruction for tasks requiring a low degree of mental processing, such as memorization. Correctly answering in-person

questions from park employees, as well as the multiple-choice questions, would allow for observable assessments. In addition to this, repeated practice, reinforcement, and feedback would lead to content mastery for pre-placement candidates, newly hired employees, and returning employees. Verbal cues, visual cues, and humorous anecdotes would encourage learner motivation. The behaviorist learning approach would best apply to learning non-negotiable information such as legal compliance and employee codes of conduct.

Likewise, the constructivist learning theory is appropriate to describe how this potential design project would be developed. One of the main tenets of constructivism focuses on how interaction between the learner and the environment creates knowledge. We think that coupling mobile technology with the park's environment is a good way to meaningfully anchor instruction and embed knowledge using authentic situations. For example, when discussing fires, firewood, or combustibles (NAC 407.090), the group would travel to a fireplace or rimmed grill within the park. The park employee would discuss fire regulations and exemplify past violations for teaching purposes. Or, when discussing the park's regulations on pets and other domestic animals (NAC 407.140), the park employee would use a stuffed pet animal to assist with describing the regulations and further reinforce the content with anecdotal examples of past violations. Per the constructivist theory, content knowledge transfer is best acquired from meaningful contexts and embedding information in authentic situations. Moreover, the training would employ multiple conceptual perspectives. Training scenarios would require learners to imagine themselves as park visitors or as park employees in various positions. By doing this, potential and current employees would be able to analyze real-world tasks and contexts while conceptualizing the various perspectives. Finally, the assessment portion will draw on social negotiation and reflection in addition to answering multiple choice questions. Within their training groups, current and potential park employees would discuss any remaining questions and other useful scenarios related to the job. Learners would then post individual reflections after all multiple-choice questions are correctly completed.

This proposed training most appropriately aligns with the interpretivist epistemological tradition, which holds that learners are actively influenced by the people

and environments around them. Accordingly, interpretivism embodies reality as internal, relative to a frame of reference, and assumes that knowledge is constructed by the learner. To put it simply, this entails that learners would be considerably influenced by the park imagery and the employees leading the various training modules. As previously described, park employees would be taking their groups around to different park locations during the training modules. They would be helping learners interpret new information while simultaneously using the park environment as reinforcement. When learners are trained by employees in an authentic setting, they are able to construct their own personal meanings from the content presented. This is important because when learners are given opportunities to create their own personal meanings, they are more likely to retain and transfer knowledge to a variety of situations. For instance, let's hypothesize that a trainee is becoming acquainted with restricted park access situations (NAC 407.069).

A park employee takes her group to the edge of a restricted area. She explains that the area is restricted because a female red-tailed hawk laid her eggs last week. The employee clarifies that when red-tailed hawks are protecting their eggs, they aggressively defend the area surrounding their nests. She further describes an incident that happened last fall when a park visitor failed to recognize the restricted area signs. Without warning, a hawk swooped down, cutting the visitor's head and cheek. The lacerations were deep enough to require stitches, so the park ranger on duty called an ambulance. If only the visitor had noticed the "restricted access" sign.

The park employee's story, linked to the imagery of the restricted environment, would encourage the learner to better conceptualize the significance of a restricted area. Interpretivism allows the learner to internalize this new information by making it personally meaningful. In turn, trainees are more likely to retain this information about restricted areas and transfer the knowledge to future situations.

Instructional Technology to be Used to Implement the Training

In order to accomplish the goals of the training across multiple groups and settings, our team will use a variety of mobile-based tools. Mobile technology will also allow the Nevada State Parks system to save on costs associated with the presentation software and computer hardware. All three training groups should have access to mobile phones and/or computing devices. Therefore, the technology would be readily

available throughout their training. This proposal largely focuses on training that would be held both indoors and out in the field. *The mobile technology training option would be used in consideration of the availability or lack of Wi-Fi and cellular access.* The instructional tools would all have the ability to run online and offline. This is important for outdoor sessions where groups will be visiting within the parks.

The design of the training applies elements of Gagne's Foundations of Instructional and Performance Technology to provide overview, review, and exemplars for seasonal work. For instance, we would use visually stimulating presentations that incorporate multimedia and animated tools to gain and maintain the attention of the participants. Online platforms such as Prezi, YouTube, VideoAnt, and Screencasts are dynamic tools that are not only engaging but are suitable for display on the average mobile phone. In classrooms and in the field, instructors would be using these resources to deliver new content and stimulate recall of prior knowledge. We would also be using pre-recorded vignettes of state park staff who would deliver basic information about the parks, outline staff expectations, and provide exemplary exercises to illustrate learning.

The instructional technology used throughout the training program would be housed in an open-source learning management system (LMS). This system would sequence the training over three primary modules. Moreover, this open-source, free platform is a budget-friendly option that would save the department considerable expense. Prior to the start of the training, participants would receive a brief tutorial for accessing and navigating the LMS, logins, and training expectations. Before starting the first module, prospective employees, new hires, and returning employees would all complete a pre-assessment. This would allow the park administrators to gain an understanding of the working knowledge of each group. The pre-assessments would be in the form of multiple choice and short text responses built into the Survey Monkey online survey software. This survey system would return immediate results. It would serve as a strong data source for understanding the proficiencies of future and current employees.

At the conclusion of the training, the employees would receive a final evaluation that would be delivered using Google Forms. The evaluation would serve as a tool for

reflection as well as an opportunity to provide valuable feedback to the parks system on improving future training and professional development sessions. The results of the evaluation would be delivered in Excel spreadsheets, word documents, and Google Docs.

Project Timeline

The Gantt Chart below shows the timeline and sequence for our instructional design development process, broken down into 13 weeks. Beginning the week of January 6, 2020, 13 weeks would be devoted to developing the training. The project is expected to be completed by March 30, 2020. Activities identified in this chart include detailed information gathering and processing, as well as development time for the various segments of the three training populations (pre-placement candidates, current employees, and returning employees). We have also built in time for testing, in-process reviewing, and client feedback. Included in the Gantt chart are estimates for the number of developers required to successfully complete this project in the time frame allotted. The final two weeks of the project would include field testing and deployment, during which time the developers would operate on-site with the client's staff. This would maintain the integrity of the final product while providing training to use the instructional training system.

Gantt Chart for Timeline and Sequence

Nevada State Park Employee Training Development Timeline	Dates given in (month/day) all in 2020												
	1/6	1/13	1/20	1/27	2/3	2/10	2/17	2/24	3/2	3/9	3/16	3/23	3/30
Initial Client Meeting Establish communications and gather information	█												
New Hire Training Development (1 designer and 2 developers)		█	█	█									
Client Review & Feedback					█								
Candidate Screening and Pre-Hire Placement (1 designer and 2 developers)						█	█						
Client Review & Feedback								█					
Retaining and Returning Employee Training (1 designer and 2 developers)									█	█			
Client Review & Feedback											█		
Field Test (2 developers)												█	
Deployment													█

Program Evaluation Plan

Ultimately, this training would undergo a complete evaluation as its final piece. For the summative evaluation, we aim to answer three questions: *Is the training worthwhile? Is it effective? Are there ways to make improvements?* To reach the summative evaluation portion, there are other tasks that would need to be completed first, including meetings and testing requirements. We would have one initial meeting for establishing communications and gathering pertinent information on January 6, 2020. Subsequently, we would have three additional meetings based around client review and feedback. These meetings would occur on February 3, February 24, and March 16, 2020. Formative evaluations would take place one-on-one, in small groups, or during the field test. Field testing with the developers and selected park employees would occur on March 23, 2020. During field testing, we would be employing current park employees to practice using the training system and report on any problems or technical issues. The program developers and park employees testing the system would work together to discuss any feedback and relevant improvements before deployment.

Once the training system has been deployed, each user would be required to complete an evaluation at the end of each training module. We would analyze these evaluations to discern added suggestions and plan for implementing improvements in the next version. For the culminating evaluation, we would address any additional questions about improvements and costs from the stakeholders and upper management personnel. The estimated total cost for this training project is expected to be \$65,600.00, as detailed in the Draft Budget below. On a final note, when the training concludes, users would complete an exit training module to evaluate their own personal growth from knowledge learned. If desired, the training system could also incorporate a “sales pitch” encouraging seasonal workers to return. Additionally, the training system could be used to promote professional growth opportunities within the park system.

Draft Budget with Staffing Requirements

Project Activity	Staffing	Time Required	Hourly Rate	Total Cost
New Hire Training Development	1 designer and 2 developers	3 weeks at 40 hours per week	designer \$50 per hour developer \$40 per hour	\$15,600.00
Candidate Screening and Pre-Hire Placement	1 designer and 2 developers	2 weeks at 40 hours per week	designer \$50 per hour developer \$40 per hour	\$10,400.00
Retaining and Returning Employee Training	1 designer and 2 developers	2 weeks at 40 hours per week	designer \$50 per hour developer \$40 per hour	\$10,400.00
Client Review and Feedback	1 designer and 2 developers	5 weeks at 40 hours per week	designer \$50 per hour developer \$40 per hour	\$26,000.00
Field Test	2 developers	1 week at 40 hours per week	developer \$40 per hour	\$3,200.00
Total				\$65,600.00