**Training Student Workers at UH ITS Help Desk: An Instructional Design Study**

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**Abstract:** The purpose of this instructional design project was to improve the orientation training and assessment of new student workers at the University of Hawaii (UH) Information Technology Services (ITS) Help Desk (HD). This was done by adding additional, guided instruction with practice, feedback, and formative assessment to pre-existing internal documentation (wiki). This project aimed to ensure new student hires understand policies and procedures of the help desk and understand how to read and use the wiki to reduce the number of errors in troubleshooting and workplace performance. The project also provided staff with data on student hires' understanding of policies and procedures. Student workers completed five online instructional modules in their own time during their scheduled work hours. The training was developed using Laulima and Google Forms. The purpose of using Laulima was to introduce new hires to a platform UH ITS services and Google Forms was used to survey and test students anonymously. Since the training had been substantially revised, the training was mandatory for all help desk students. Nineteen students successfully provided data for all the project components out of 33 total students. All data collected through Google Forms were summarized, analyzed, and concluded. The results showed that students displayed an increased understanding of the material and students responded positively to the instruction.

**Introduction**

The goal of the project was to provide a structured orientation for new student hires to help them understand basic policies and procedures of the University of Hawaii's (UH) Information Technology Service's (ITS) Help Desk (HD) and understand how to read and use the wiki to reduce the number of errors in troubleshooting and workplace performance. It will also provide staff with data on student hires' understanding of policies and procedures. Student workers completed five online instructional modules on 1) basic HD policies and procedures, 2) schedule and attendance procedures, 3) email procedures, 4) SIMP (internal ticketing) procedures, and 5) technician scheduling procedures. Students completed these modules in their own time during their scheduled work hours.

The main problems identified with the current training process and evaluation of new and current student hires were 1) lack of structure to the new hire training, 2) evaluation of student understanding of policies and procedures are arbitrary, and 3) the current method of correcting student performance is after a mistake is made with a customer. These problems were identified through personal experience and informal interviews with staff and students on how to improve training at the help desk. The purpose of this instructional design project is to improve the orientation training and assessment of new student workers through an improved wiki at the University of Hawaii (UH) Information Technology Services (ITS) Help Desk (HD).

**Literature Review**

To ensure students understand the policies and procedures of the help desk, I needed to know what understanding is, how to encourage understanding, and how to measure understanding in the context of this project. Students successfully understand the material when they can remember the policies and procedures or know where to look for the information. This project needs to be able to deliver the content in a way to help students remember this information.

Working memory can be equated with consciousness. Working memory is capable of holding only about seven items or elements of information at a time (Miller, 1956). Furthermore, because working memory is most commonly used to process information in the sense of organizing, contrasting, comparing, or working on that information in some manner, humans are probably only able to deal with two or three items of information simultaneously when required to process rather than merely hold information. Anything beyond the simplest cognitive activities appears to overwhelm working memory (Sweller, Van Merrienboer, & Paas, 1998).

The human cognitive system can be characterized as one that places its primary emphasis on the ability to store seemingly unlimited amounts of information in long-term memory. According to schema theory, knowledge is stored in long-term memory in the form of schemas. A schema categorizes elements of information according to the manner in which they will be used (Chi, Glaser, and Rees, 1982). It is through the building of increasing numbers of ever more complex schemas by combining elements consisting of lower level schemas into higher level schemas that skilled performance develops. Thus, Schema construction has two functions: the storage and organization of information in long-term memory and a reduction of working memory load. It can be argued that these two functions should constitute the primary role of education and training systems (Sweller, Van Merrienboer, & Paas, 1998).

Cognitive strategies are useful in teaching problem-solving tactics where defined facts and rules are applied in unfamiliar situations (knowing how). Tasks requiring an increased level of processing, that is classifications, rule or procedural executions, are primarily associated with strategies having a stronger cognitive emphasis, such as schematic organization, analogical reasoning, algorithmic problem solving (Ertmer &

Newby, 1993). Due to these definitions, cognitive theories were used to design the learning material.

Cognitive theories focus on the conceptualization of students' learning processes and address the issues of how information is received, organized, stored, and retrieved by the mind. Cognitive theories emphasize making knowledge meaningful, and helping learners organize and relate new information to existing knowledge in memory. Instruction must be based on a student's existing mental structures, or schema, to be effective. It should organize information in such a manner that learners are able to connect new information with existing knowledge in some meaningful way (Ertmer & Newby, 1993). Learning is concerned not so much with what learners *do* but with *what* they know and how they come to acquire it (Jonassen, 1991b).

Analogies and metaphors are examples of this type of cognitive strategy. Instructional explanations, demonstrations, illustrative examples and matched non-examples are all considered to be instrumental in guiding student learning. Similarly, emphasis is placed on the role of practice with corrective feedback (Ertmer & Newby, 1993). Learners' thoughts, beliefs, attitudes, and values are also considered to be influential in the learning process (Winne, 1985).

This project will use cognitive strategies to ensure students are creating schemas of the information learned to increase the level of processing and problem solving abilities of the student. Through a better foundational understanding of policies and procedures, students should be able to build upon this knowledge to perform more unique, and complex tasks.

**Project Design**

The old method of training did not provide any feedback or examples to work through which left new hires lacking in correct, practical skills before interacting with users, those who call, email, or arrive at the HD for assistance. Prior to this project, the new hire training process was primarily static. The new hire would spend one to three days reading all the wiki articles, spend one to three days reading email examples and drafting some email responses with guided assistance from a supervisor. Finally, students experienced live calls to the HD where new hires would listen in on calls, answer calls with the assistance of a current hire, and finally answer calls on their own which would signal the end of the training (Figure 1).
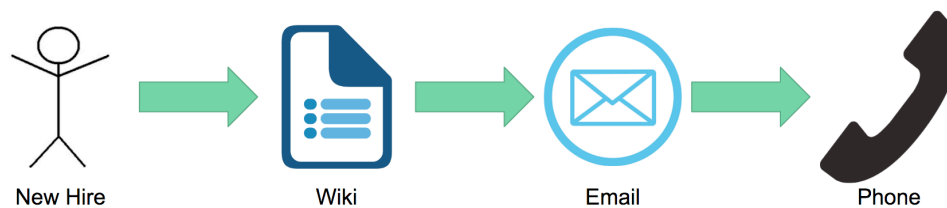


New Hire     Wiki     Email     Phone

**Figure 1**. Previous training model.

This project replaced the static action of reading the internal wiki with actions that provided measurable feedback to supervisors on the new hire training progress. New student hires immediately went to Laulima (a UH-owned and serviced learning management system) to receive guided instruction through five foundational topics within the wiki. The act of reading was supplemented with a Laulima forum activity that allowed students to practice what they had read in the wiki. Students were able to practice what they learned in a risk-free environment and self-evaluate given assessment criteria. Once submitted, new hires could build peer-to-peer rapport by receiving feedback from current hires on performance of the activity through a rubric. This ensured feedback was guided and not subjective. Finally, this activity provided measurable performance to supervisors on new hire understanding on the forum activity as well as current hire understanding of processes based on feedback given to the new hire. The new hire then took a quiz based on the reading and activity to reinforce what was learned and notify the new hire if there are any gaps in learning. This ensured the new hire had seen and worked through common HD problems as defined by the wiki. The information and activities were scaffolded for the learner so that each following activity tested the schemas developed by the student (Figure 2).
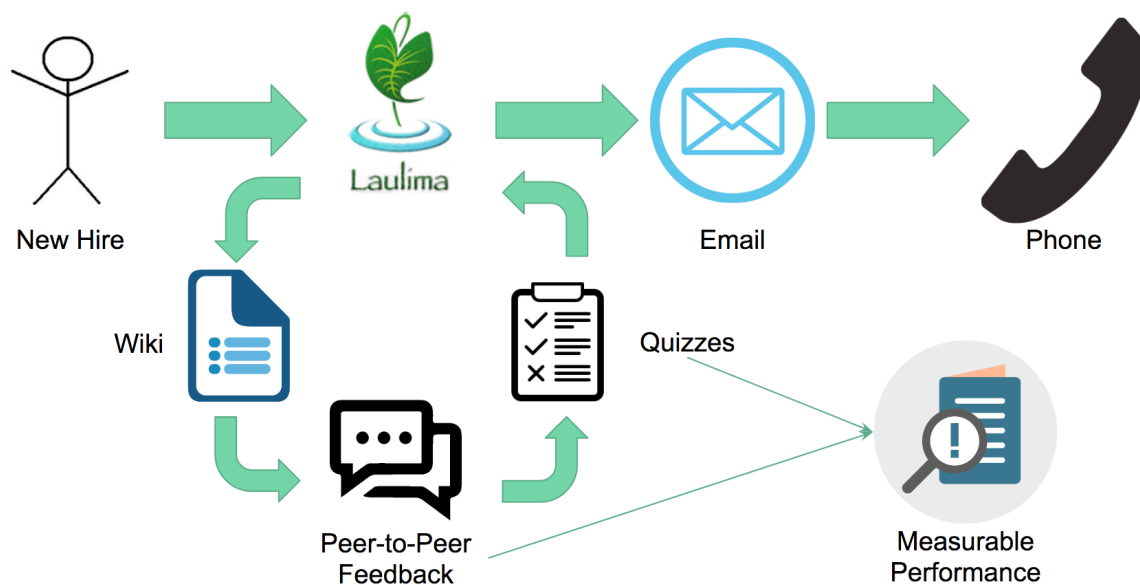


**Figure 2.** Updated training process.

The project was designed using the corporate learning strategy by Ben-Hur, Jaworski, and Gray (2015) and backwards design strategy by Grant Wiggins and Jay McTighe (2012). Backwards design is a three stage process which identifies the desired results of the learning material (Stage 1), the desired effects (or evidence) that learners are making meaning of and transferring information learned (Stage 2), and lastly creating a learning plan to help learners through the acquisition, meaning-making, and transfer of knowledge (Stage 3). This was lined up with the corporate learning strategy which identifies a similar, but four-step process of 1) mapping the CEO agenda, 2) aligning learning and development resources, 3) gaining buy-in for the learning agenda, and 4) activating the learning agenda (Appendix A).

*Stage 1 & Mapping the CEO Agenda*. The purpose of Stage 1 and mapping the CEO agenda is to identify the long-term goal of the training for learners and the "CEO". In the context of this training, the CEO is defined as the supervisors of the help desk. The supervisors' agenda is to ensure that the help desk be a complete resource for UH students, faculty and staff to obtain information on software and hardware problems. To meet this, students must have the problem solving and critical thinking skills to take the resources and information of the help desk and translate the information to be an effective employee to meet the supervisors' agenda.

*Stage 2, Aligning Resources, & Gaining Buy-In.* Ultimately, a student worker is meeting the goal previously stated when the student understands all of the policies, procedures, and expectations of him or her to perform his or her job effectively. This means that the student is familiar with the HD job performance expectations, internal and external HD resources, and HD job procedures. As previously outlined by the literature review, through schema building techniques, this project aimed to curb the difficulty of committing all the information directly to memory.

Laulima was chosen as the platform of choice because the help desk supported the platform (meaning student hires were expected to provide support for Laulima-related issues). Laulima's lesson builder tool was used to link to wiki articles, forum assignments, and quizzes (Appendix B-I). The forum assignments were also hosted within Laulima so students would be able to see and critique each other's work. However, due to anonymity-limitations on the Laulima platform, Google Forms was used to administer tests and surveys anonymously.

To gain buy-in for the learning agenda, a HD supervisor reviewed and approved all material of the project. In addition, informally interviewing student workers on their feelings toward old training methods was taken into consideration in deciding what to cover and how to cover the chosen material. Due to time constraints, only five modules were developed, but these modules were identified as foundational knowledge by both supervisors and students. These modules are discussed in more detail in the Methods section of this paper.

*Stage 3 & Activating the Learning Agenda.* The way this project guided learners through the acquisition, meaning-making, and transfer of knowledge process (TAM) is by having the learner read the wiki once through (general acquisition of knowledge), perform the forum activity (meaning-making and transferring knowledge of what was read in the wiki and allowing the student to refer back to the wiki during the activity to acquire more knowledge), and finally having the new hire take a test at the end of each lesson to measure the meaning-making and transfer of knowledge process.

Analogies, metaphors, non-examples, and instructional explanations were provided in the internal wiki. The purpose of having the learner read through the internal wiki was to familiarize them with the navigation through and formatting of the resource. The lessons

also tried to encourage the learner to continuously refer to the wiki as the main source of information.

The purpose of the forum assignment within each lesson was to answer lesson-related scenario questions that simulated complex, authentic situations new hires will encounter during their time at the help desk. Through the Laulima forum activities, new hires were able to practice concepts learned, as well as receive corrective feedback from their peers. Each assignment consisted of three to six scenario questions. Rubrics were provided for self-assessment and peer-assessment purposes. By having current hires assess new hires' works, current hires then become a form of learner where their thoughts, beliefs, attitudes, and values are highlighted when grading new hires' works. These assignments were not graded formally within this project, but provided an extra level of assessment for supervisors as well as extra, informal feedback for students.

Tests and assignments provided evidence that the learner was meeting knowledge-acquisition milestones. Feedback on correct and incorrect answers were provided on the embedded and posttest so that students could learn from their mistakes. Feedback was not provided on the pretest so that students would learn from the lesson material rather than memorizing the questions and answers from the pretest.

These strategies were used to ensure that the learning material was meaningful not just for the learner, but for the entire system of the help desk. Student workers need to be able to take information provided to them from the training and apply it to every unique situation encountered daily. Problem solving and critical thinking are the cornerstones of achieving the overarching goal of creating an effective help desk, and the learning material should reflect this.

**Methods**

This project had a sample size of 19 students out of 33 possible students. The 19 students selected were the only students who completed the training process completely and without testing error. The sample is sub-divided between new hires and current hires. Although the target audience for this project was new hires, the likelihood of having more than three new hires in the help desk during the testing period was highly unlikely. Therefore, current hires were also required to go through the training process. Students are from a diverse background ranging from different socioeconomic levels, as well as different regions of the state. To work at the HD, students need to be a current, part-time or full-time student at any of the UH campuses and in the interview process, display medium-level knowledge of computer hardware, software, and basic soft skills in customer service.

All participants were undergraduates. The majority of the participants were computer science majors (47.37%). As previously stated, because new hires were hard to get during the testing process, current hires made up 84.21% of the sample size. The majority of the students in this sample size has worked at the help desk for two to three years (26.32%) (Table 1).

**Table 1.** Participant major, hire status, time employed at HD, and education level where n=19.

| Characteristics | Number of Students | Percentage |
|---|---|---|
| *Major* | | |
| **Computer Science** | **9** | **47.37%** |
| Engineering | 4 | 21.05% |
| Management Information Systems | 2 | 10.53% |
| Other | 4 | 21.05% |
| *Hire Status* | | |
| **Current Hire** | **16** | **84.21%** |
| New Hire | 3 | 15.79% |
| *Time at Help Desk OR New Hire with Previous IT Support Experience* | | |
| < 1 year | 2 | 10.53% |
| 0-6 months | 4 | 21.05% |
| 1-2 years | 4 | 21.05% |
| **2-3 years** | **5** | **26.32%** |
| 3-4 years | 1 | 5.26% |
| New hire WITH previous IT support experience | 1 | 5.26% |
| New hire WITHOUT previous IT support experience | 2 | 10.53% |
| *Education Level* | | |
| **Undergraduate** | **19** | **100.00%** |
| Graduate | 0 | 0.00% |

In this study, all HD student workers were required to complete this training and were given the option to opt-in or out of the study. All 33 students in the population gave their consent to participate, but only 19 students completed all testing material completely. Potential participants were contacted in person and by email. Three one-on-one sessions were conducted to test for any errors in the material before the material was released to the rest of the population. Students were given 10 days to complete the training in their own time during work hours.

All help desk students and staff were added to the pre-existing Laulima course called "ITS_Help_Desk_Training" (Appendix J). Each element of the lesson needed to be completed in chronological order and could not be accessed until each previous task was complete. Where applicable, pages were sectioned with instructions for new hires and current hires (Appendix K).

A consent form (Appendix L) was embedded into and prior to the content of the demographic and pre-instruction attitudinal survey for new hires (Appendix M) and current hires (Appendix N). The consent form informed participants about the purpose and content of the study, length of the study, risks and benefits, confidentiality and

privacy of the individual, and the contact information of persons of interest involved in this project.

After the demographic and pre-instruction attitudinal survey, participants were instructed to take a pretest. Once the pretest was completed, students went through each lesson. Each lesson contained a reading from the internal wiki, a forum assignment, and an embedded quiz. The questions were the same as the pretest. The embedded quizzes and pretest questions and answers are not included in this paper because they contain sensitive information.

The forum assignments were developed and implemented in Laulima. Students would either access the appropriate forum through the lesson or through the Forum tab on the interface (Appendix O). Each forum had instructions for posting and commenting (Appendix P). Students who were posting were answering the scenario questions (Appendix Q) while students commenting were reviewing the posting student's work. Students who were posting and commenting, reference the provided rubric in each forum (Appendix R). The instructions advise commenting students to score the posting student using the rubric.

After all lessons were completed, students finished the learning portion of the training by completing a posttest. The posttest is not included in this paper due to containing confidential information. A post-instruction attitudinal survey was delivered to new hires (Appendix S) and current hires (Appendix T) measure student attitudes toward the new training as well as provide additional comments on their experience. The post-instruction attitudinal survey for current hires also contained a retrospective survey to measure self-reported levels of understanding and job preparedness. There are seven tests total which were the pretest (53 questions) which the student takes before instruction begins, five embedded tests (totaling 53 questions) which were taken after each instruction module, and a posttest (53 questions) taken after instruction was finished. Google Forms was used to track all the results of the completed surveys and tests.

**Results**

***Pre-Instruction Attitudinal Survey.*** Since only current hires have experience with the old format of training, only current hires were surveyed in the pre-instruction attitudinal survey. The majority of the current hires sampled were computer science majors (50%) who have been working at the help desk for two to three years (26.32%).

In the pre-instruction attitudinal survey, students were asked to rate the usefulness of the old HD training (in the survey it is worded as "current training" since the project had not been introduced) (Table 2), rate how prepared the student felt to perform his or her job based on their current level of understanding (Table 3), and rate how well the student felt he or she understood each section they would be reviewing in the project (Table 4). Current students sampled reported the old training as "somewhat useful" (43.75%) yet the majority of students rated their preparedness at a four out of five (43.75%). When asked how well the students understood each section about to be covered in the training,

students felt that they understood the Schedule and Attendance Policies section the most (4.6 out of 5).

**Table 2.** Pre-instruction usefulness rating of old HD training where n=16.

| Usefulness Rating of Current HD Training | Number | Percentage |
|---|---|---|
| 1 (Not useful at all) | 1 | 6.25% |
| 2 | 0 | 0.00% |
| **3 (Somewhat useful)** | **7** | **43.75%** |
| 4 | 5 | 31.25% |
| 5 (Very useful) | 3 | 18.75% |

**Table 3.** Pre-instruction job preparedness rating where n=16.

| Preparedness Rating of Current HD Training | Number | Percentage |
|---|---|---|
| 1 (Not prepared at all) | 1 | 6.25% |
| 2 | 0 | 0.00% |
| 3 (Somewhat prepared) | 6 | 37.50% |
| **4** | **7** | **43.75%** |
| 5 (Very prepared) | 2 | 12.50% |

**Table 4.** Pre-instruction self-reported understanding of lesson subjects where n=16.

| Lesson Subject | Average Rating |
|---|---|
| HD Policies and Procedures | 4.25 |
| **Schedule and Attendance Policies** | **4.63** |
| Email Procedures | 4.44 |
| SIMP Ticket Procedures | 4.44 |
| Tech Scheduling Procedures | 4.44 |

Note: Rating is out of 5

How useful a student rated the old training and how prepared the student felt to perform their job was largely based on the time spent employed at the HD rather than their major. The trend appears to be that the longer a student stays at the help desk, the less likely the student would find the old method of training useful (Appendix U). When students were categorized based on their time at the HD, students were more likely to rate the usefulness of the old training and rate their preparedness level nearly the exact same. Those who have been at the HD for 1-2 years reported higher levels of preparedness than any other group (Appendix V). The exact cause for these difference is unknown as many factors within the help desk were changing such as changes in training, supervisors, and work locations.

When new student hires were asked how prepared they felt to perform their tasks at the help desk, all three students gave a four out of five rating. This is interesting considering they have never seen any internal resources or information about the HD before taking

this survey. Only one student reported having previous IT experience and one student is majoring in computer science.

When students were asked how well they understood each section of the training before instruction, there were differences based on the student's time at the HD and major (Appendix W). Those in engineering, computer science, and management information systems (all computer and tech-related fields), reported at or below average levels of understanding based on the total levels reported. Students who classified their major as "Other" tended to report higher levels of understanding across the majority of section topics. In addition, those who just started working at the HD (0-6 months) reported feeling the least levels of understanding across all sections of the training despite feeling the second-most prepared to perform their job and found the old method of training to be the most useful.

Again, the greatest variance found in attitude toward the old HD training seems to be based on time at the HD (Appendix X). Those who have been at the HD for 1-2 years rated multiple areas of the old HD training higher than any other group. Management information systems majors tended to rate the training slightly lower than other majors across all criteria.

When looking at this data, it is important to note that there was only one student who fell in the "3-4 year" category and two students who fell in the "< 1 year" category. However, the one student in the "3-4 year" category is 100% of the sample within that category, but the two students in the "< 1 year" category are also well below an appropriate sample size to draw hard conclusions for that group of students.

When asked if students had any "additional comments or opinions on the engagement of the training," the students' comments fell into one of three categories: need to build rapport with coworkers, issues with training material, and comments on the training style.

***Pretest & Embedded Test Results.*** Those pursuing management information systems degrees scored the best on the pretest with engineering and computer science degrees close behind (Table 5). Students who reported an "Other" major on average scored the worst despite feeling the most prepared. However, this is largely because two of the three new hires are classified as an "Other" major. When removed from the sample, the average score is 37, which around the same performance level as other majors.

**Table 5.** Average pretest score based on major where n=19.

| Major | Average Score |
|---|---|
| Computer Science | 36.56 |
| Engineering | 36.00 |
| **Management Information Systems** | **38.50** |
| Other | 27.50 |

Note: Average Score is out of 53

Those who have been at the HD for less than a year, but more than 6 months scored the best out of all other categories of students based on time at the HD (Table 6). Unsurprisingly, new hires scored the worst, but of the current hires, those who have been at the HD 1-2 years and 3-4 years scored the lowest. The 3-4 year student did report the lowest level of understanding, but the students in the 1-2 year bracket reported, on average, feeling a higher level of understanding of the content than their peers.

**Table 6.** Average pretest score based on time at HD where n=19.

| Time at HD | Average Score |
|------------|---------------|
| New Hires | 22.33 |
| 0-6 months | 38.00 |
| **< 1 year** | **42.50** |
| 1-2 years | 33.50 |
| 2-3 years | 37.80 |
| 3-4 years | 33.00 |

Note: Average Score is out of 53

***Posttest.*** Overall, students performed considerably better on the posttest in comparison to the pretest and embedded tests (Appendix Y). The greatest difference in performance was between the pretest and the embedded tests for most lesson subjects. The exception to this was the SIMP section of the project. The SIMP lesson taught students about the help desk's internal ticketing system which is the internal log of all user-to-consultant interactions. The SIMP tests asks students to identify errors in example tickets. There is a possibility that the example tickets in the embedded test had sections that were easier to identify the single error than the posttest where students may have seen more than one error in the example and only asked to identify one. I did not ask students to explain their answer so this is all speculation.

Extrapolating just the new hire data, the new hires performed better on the embedded quizzes and performed slightly worse on the posttest by comparison (Figure 3) which is typical since the embedded tests come right after the information is learned. Information seems to have been learned based on the positive difference between the average scores on the pretest compared to the embedded tests and posttest. One hypothesis as to why new hires performed worse on the "HD Policies & Procedures" and "Schedule & Attendance" lessons is that these two sections require more memorization of facts rather than how to perform a procedure such as writing emails or scheduling a tech. Also, the forum activities emphasized processes which more completely covered the "Email", "SIMP", and "Tech Scheduling" sections whereas the forum activities for "HD Policies & Procedures" and "Schedule & Attendance" covers a small portion of the tested material.

New Hire Pretest, Embedded, and Posttest vs. Lesson
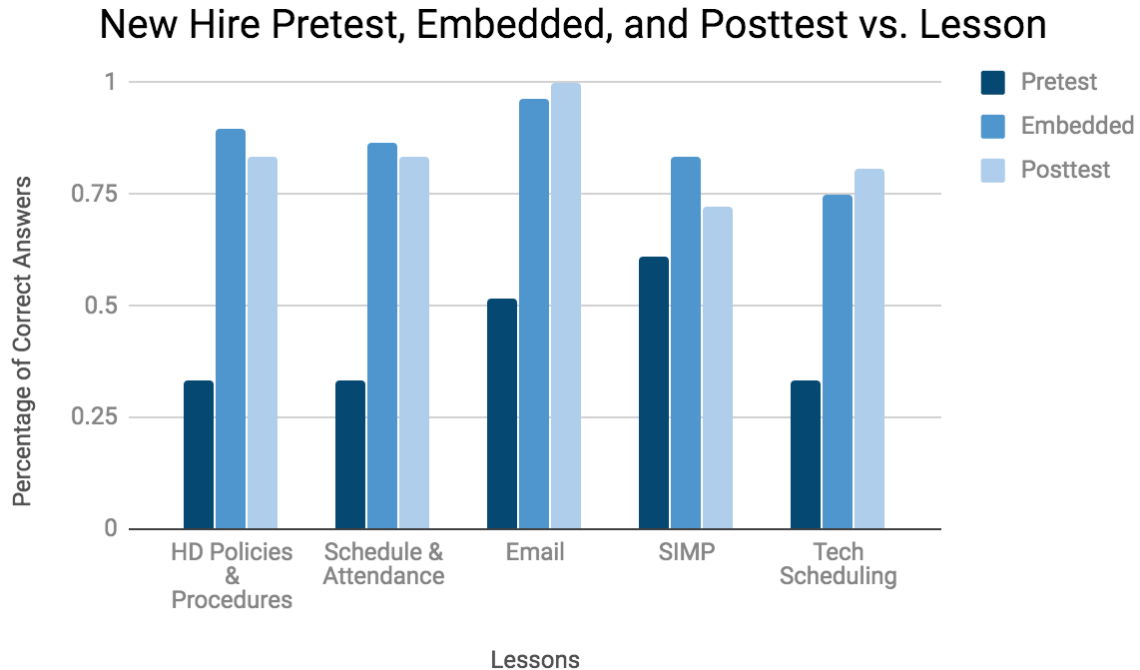


**Figure 3.** Average pretest, embedded tests, and posttests of new hires by lesson where n=19.

This project did display the Dunning-Kruger effect, which is where people of low-ability assess their cognitive ability greater than it actually is. In the Pre-Instruction Survey, current students rated their understanding of all lessons fairly high (on average above 4/5 for every section) (Figure 4). However, students generally performed disproportionally poorly across the majority of lessons in the pretest. After completing instruction, in the retrospective survey, students surprisingly rated their understanding closer to their actual measured understanding of the material.

## Current Hire Pre & Post-Test Average Scores vs. Pre & Post-Survey Understanding Self-Assessment Scores
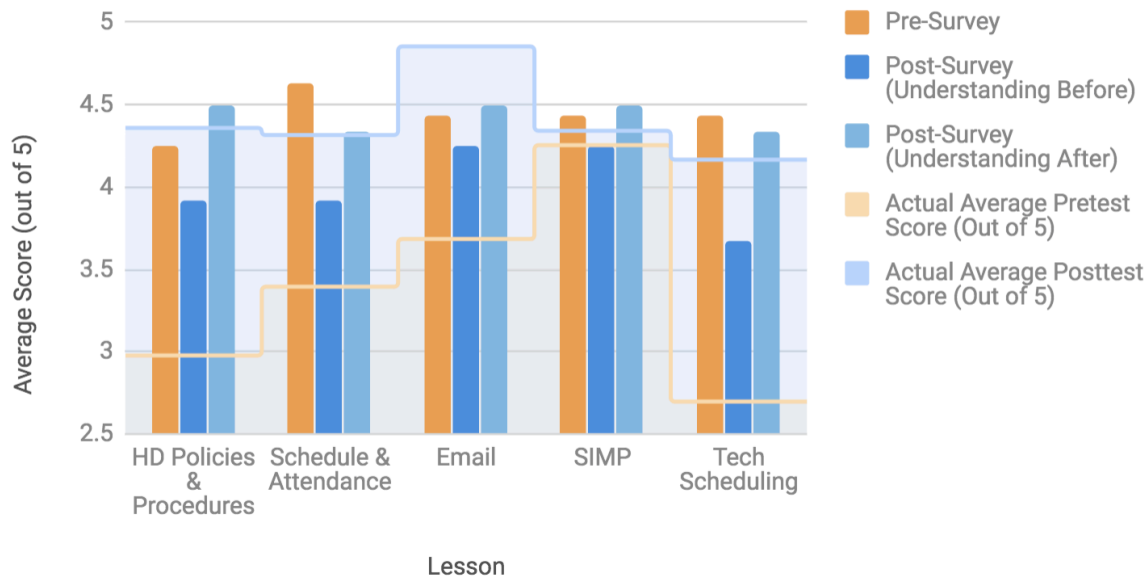


**Figure 4.** Comparing current hire perceived understanding vs. actual understanding of material by lesson where n=16.

**Discussion and Conclusions**

Generally, current hires and new hires seemed to have benefited from the training. Performance between the pretest and posttest was a dramatic increase in both new hires and current hires which implies this form of training positively impacted student understanding of the five lessons covered. The biggest predictor of how well a student performed on the material was based on how long the student has been at the help desk. Despite those in the "< 1 year" category rating their level of understanding and job preparedness lower than any other category, these students performed the best on the pretest. However, because there were only two students sampled in this category, no conclusions can be drawn on whether or not this is a predictive quality of the rest of the population.

In future work, I would like to see if adding multimedia would encourage retention rate of the material as well as encourage more students to complete the program completely. Nineteen out of 33 students finishing the material completely means that students are not reading all of the instructions, getting lost in the navigation of the lessons, or Laulima and Google Forms are not giving the proper feedback to the student on what has or has not been completed. In addition, Laulima has a number of design limitations that did not support the project as well as anticipated.

Overall, the participants performed remarkably well and the results show that this project was worth the time and resource investment to improve the HD training.

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**APPENDIX A**

**Design Process: Backwards Design + Corporate Learning**

# Stage 3

| | Stage 2 |
|---|---|
| **TAM**<br>Transfer of knowledge, acquisition, & meaning-making | |
| Activate the Learning Agenda | Align Resources / Gain Buy-In / Stage 1: Identify Long-Term Goal of Training / Map the "CEO" Agenda |
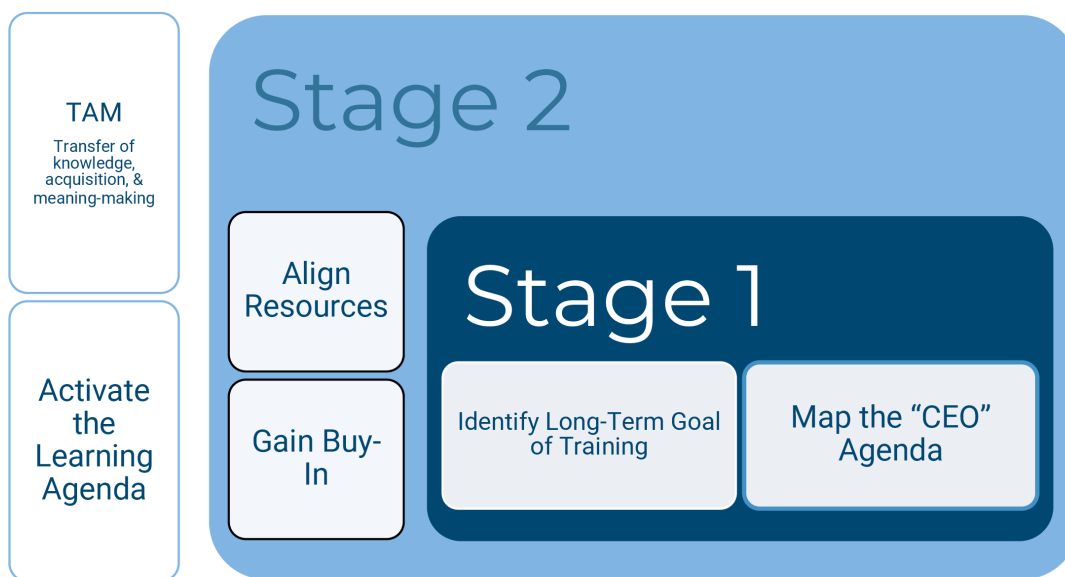
**APPENDIX B**

## Laulima Lessons Page: Instruction



**Introduction**

Welcome to the Help Desk! The following lessons are designed to teach you some of the basic skills necessary to perform your job as a help desk consultant. All lessons will contain a reading from the internal wiki and a quiz. Some lessons will have supporting materials such as activities or instructional videos. Please keep in mind that your performance on the quizzes will not affect your relationship with the Help Desk students or staff. The purpose of the quizzes is to measure the effectiveness of the training and highlight any shortcomings of the training material. That being said, do not reference the wiki when taking the quizzes so we can accurately measure how well the training materials work. Please do your best to complete the other activities completely to the best of your ability.

**ITS Help Desk Training Lessons**

**Before you Begin**
- Welcome to the Help Desk!
  This is a checklist to ensure you are able to access all the required sites.
- Pre-Instruction Demographic & Attitudinal Survey
- Pre-Instruction Pretest

**How To**
- How to Read the Wiki
- How to use UH IMC

**The Lessons**
- Help Desk Policies and Procedures
- Schedule and Attendance Policies
- Email Procedures
- SIMP Procedures
- Tech Scheduling Procedures

**Finishing Up**
- Post-Instruction Posttest
- Post-Instruction Attitudinal Survey

**Introduction**

Welcomes the new hire and explains:

1. What to expect
2. Do not read the wiki when taking the quizzes
3. This is an evaluation of the material— not the student

**APPENDIX C**

<div align="center"><strong>Laulima Lessons Page: Before you Begin</strong></div>

**APPENDIX D**

**Laulima Lessons Page: How To Instruction Pages**

**APPENDIX E**

**Laulima Lessons Page: Individual Lesson Pages**

**APPENDIX F**
**Laulima Lessons Page: Email Procedures Example Wiki**
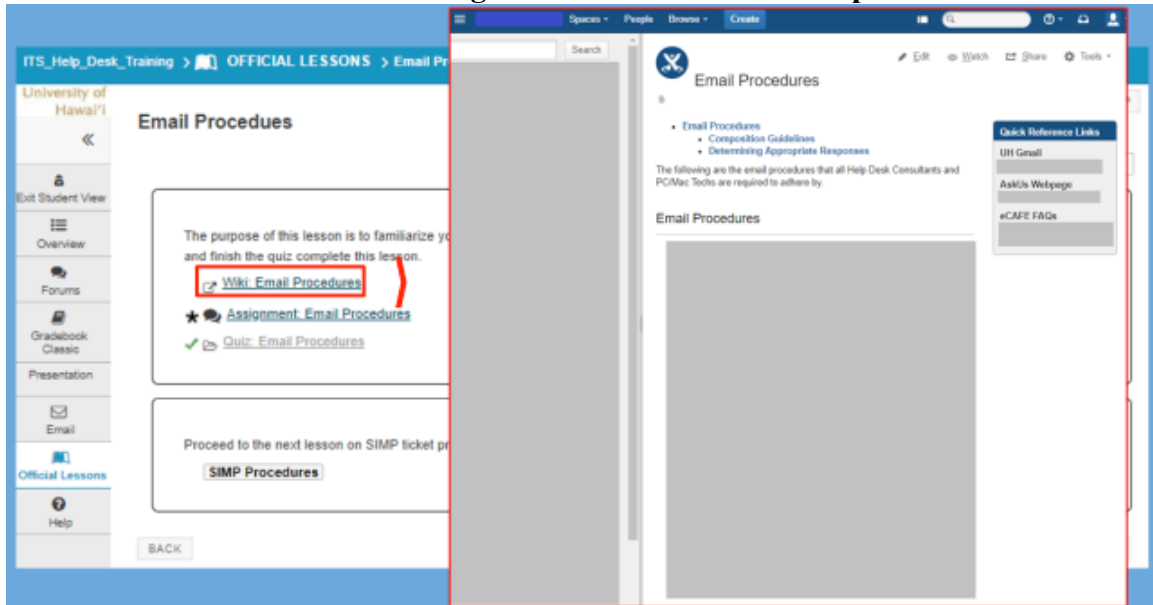


Note: Content redacted for security purposes

**APPENDIX G**

## Laulima Lessons Page: Email Procedures Example Assignment

**APPENDIX H**
**Laulima Lessons Page: Email Procedures Example Embedded Quiz**

**APPENDIX I**
**Laulima Lessons Page: Posttest and Post-Instruction Attitudinal & Retrospective Survey**

**APPENDIX J**

## Laulima Training Lessons

University of Hawai'i

« 

Exit Student View

Overview

Forums

Gradebook Classic

Presentation

Email

**Official Lessons**

Help

**Official Lessons**

PRINT VIEW | INDEX OF PAGES | LINK | HELP

NEXT

### Introduction

Welcome to the Help Desk! The following lessons are designed to teach you some of the basic skills necessary to perform your job as a help desk consultant. All lessons will contain a reading from the internal wiki and a quiz. Some lessons will have supporting materials such as activities or instructional videos. Please keep in mind that your performance on the quizzes will not affect your relationship with the Help Desk students or staff. The purpose of the quizzes is to measure the effectiveness of the training and highlight any shortcomings of the training materials. That being said, do not reference the wiki when taking the quizzes so we can accurately measure how well the training materials work. Please do your best to complete the other activities completely to the best of your ability.

### ITS Help Desk Training Lessons

#### Before you Begin

- Welcome to the Help Desk!
  This is a checklist to ensure you are able to access all the required sites.
- ✓ Pre-Instruction Demographic & Attitudinal Survey
- ✓ Pre-Instruction Pretest

#### How To

- ✓ How to Read the Wiki
- How to use UH IMC

#### The Lessons

- ✓ Help Desk Policies and Procedures
- ★ Schedule and Attendance Policies
- ★ Email Procedures
- ★ SIMP Procedures
- ★ Tech Scheduling Procedures

#### Finishing Up

- ✓ Post-Instruction Posttest
- ✓ Post-Instruction Attitudinal Survey

NEXT

# APPENDIX K
## Pre-Instruction Demographic and Attitudinal Survey Laulima Page

**APPENDIX L**

**Consent Form**

# New Hire: Consent Form
* Required

## Consent to Participate

Aloha! My name is Rachel Pang, a graduate student at the University of Hawai'i at Mānoa (UHM) in the Department of Learning Design and Technology, and I am inviting you to participate in a research study. As part of the requirements for earning my degree, I am doing an instructional design project. The purpose of this instructional design project is to improve the orientation training and assessment of new student workers at the Information Technology Services (ITS) Help Desk (HD). I am asking you to participate because you are a current employee at UH's ITS HD which also means you are at least 18-years-old and are a student enrolled in the UH System.

Project Description – Activities and Time Commitment: If you decide to participate in this research study, you will be asked to fill out two surveys as well as complete five instructional modules throughout the course of the study (approximately January 2018 - February 2018). The types of activities will vary depending on your employment status at the HD. Providing your consent will allow me to use your data as part of my project. Choosing to not take part in this study will prevent your data from being used, but may not exempt you from performing these instructional activities (as directed by staff at the ITS HD).

Voluntary Participation: You can freely choose  whether or not to participate in this survey. There will be no penalty or loss of benefits regardless of your decision. If you do agree to participate, you are free to discontinue your participation at any time.

Confidentiality and Privacy: When results of the study are published, names and other identifiable information will be omitted and your participation will remain confidential. Information collected throughout the course of the study will be kept in a Google Team Drive or Laulima site that only Michael Valentino and I will be allowed to access. In the event of a complaint or problem, other agencies, such as the University of Hawai'i Human Studies Program, may have the right to review anonymized research records for this study.

Benefits and Risks: There will be no direct benefit to you for taking part in this project. However, the findings from this project may help create a better understanding of the wishes and needs of UH student workers and staff at the ITS Help Desk. There is little risk to you for participating in this project.

Questions: If you have any questions or concerns about this study or its implementation, please email me at rkp32@hawaii.edu. You may also contact my advisor Dr. Catherine Fulford at (808) 956-3906. You may contact the UH Human Studies Program at (808) 956-5007 or uhirb@hawaii.edu to discuss problems, concerns and questions, obtain information, or offer input with an informed individual who is unaffiliated with the specific research protocol.  Please visit https://www.hawaii.edu/researchcompliance/information-research-participants for more information on your rights as a research participant.

1. **I have read and understand the information provided to me in my participation in this research study, "Training Student Workers at the UH ITS Help Desk". I also understand my rights as a participant and that my participation in this study is voluntary.** *

   *Mark only one oval.*

   ◯ Yes, I will allow my data to be used as part of the study.     *Skip to question 4.*

   ◯ No, I do not want my data to be used as part of the study.      *Skip to question 2.*

**APPENDIX M**
## New Hire Demographic and Pre-Instruction Attitudinal Survey

## New Hire: Consent Form
* Required

### Consent to Participate

Aloha! My name is Rachel Pang, a graduate student at the University of Hawaiʻi at Mānoa (UHM) in the Department of Learning Design and Technology, and I am inviting you to participate in a research study. As part of the requirements for earning my degree, I am doing an instructional design project. The purpose of this instructional design project is to improve the orientation training and assessment of new student workers at the Information Technology Services (ITS) Help Desk (HD). I am asking you to participate because you are a current employee at UH's ITS HD which also means you are at least 18-years-old and are a student enrolled in the UH System.

Project Description – Activities and Time Commitment: If you decide to participate in this research study, you will be asked to fill out two surveys as well as complete five instructional modules throughout the course of the study (approximately January 2018 - February 2018). The types of activities will vary depending on your employment status at the HD. Providing your consent will allow me to use your data as part of my project. Choosing to not take part in this study will prevent your data from being used, but may not exempt you from performing these instructional activities (as directed by staff at the ITS HD).

Voluntary Participation: You can freely choose  whether or not to participate in this survey. There will be no penalty or loss of benefits regardless of your decision. If you do agree to participate, you are free to discontinue your participation at any time.

Confidentiality and Privacy: When results of the study are published, names and other identifiable information will be omitted and your participation will remain confidential. Information collected throughout the course of the study will be kept in a Google Team Drive or Laulima site that only Michael Valentino and I will be allowed to access. In the event of a complaint or problem, other agencies, such as the University of Hawaiʻi Human Studies Program, may have the right to review anonymized research records for this study.

Benefits and Risks: There will be no direct benefit to you for taking part in this project. However, the findings from this project may help create a better understanding of the wishes and needs of UH student workers and staff at the ITS Help Desk. There is little risk to you for participating in this project.

Questions: If you have any questions or concerns about this study or its implementation, please email me at rkp32@hawaii.edu. You may also contact my advisor Dr. Catherine Fulford at (808) 956-3906. You may contact the UH Human Studies Program at (808) 956-5007 or uhirb@hawaii.edu to discuss problems, concerns and questions, obtain information, or offer input with an informed individual who is unaffiliated with the specific research protocol.  Please visit https://www.hawaii.edu/researchcompliance/information-research-participants for more information on your rights as a research participant.

1. **I have read and understand the information provided to me in my participation in this research study, "Training Student Workers at the UH ITS Help Desk". I also understand my rights as a participant and that my participation in this study is voluntary. ***
   *Mark only one oval.*

   ( ) Yes, I will allow my data to be used as part of the study.     *Skip to question 4.*

   ( ) No, I do not want my data to be used as part of the study.     *Skip to question 2.*

## Do not participate: Create a Nickname

2. **What is your UH username?** *

Since you will not be participating in the study, I need to know who you are so I do not use your assignment (forum posts on Laulima) or survey data. Please write your UH username below. This will be the only time I will ask for any direct, identifiable information.

_____

3. **Create a nickname** *

The purpose of creating a "nickname" is so that we can compare your pre and post-instruction answers. Do not use any identifiable information in your nickname. Please do NOT your UH username or any parts of your name. Please remember the nickname you chose to fill out future surveys in this study.

_____

*Skip to question 5.*

## Participate: Create a Nickname

Thank you for participating in my study! Your data will help me complete my master's project.

4. **Create a nickname** *

The purpose of creating a "nickname" is so that we can compare your pre and post-instruction answers. Do not use any identifiable information in your nickname. Please do NOT your UH username or any parts of your name. Please remember the nickname you chose to fill out future surveys in this study.

_____

## New Student Hire Pre-Instruction Survey

Please fill out the following demographic information and attitudinal survey. Please answer all demographic questions honestly and to the best of your knowledge. The survey should take approximately 5-10 minutes to complete.

5. **Are you a graduate or undergraduate student?** *

*Mark only one oval.*

◯ Undergraduate

◯ Graduate

6. **What is your major?** *

*Mark only one oval.*

◯ Computer Science

◯ Management Information Systems

◯ Engineering

◯ Other

7. **How many jobs (part-time or full-time) have you had in the past?** *

Please enter a number greater than or equal to 0

_____

8. **How many of these jobs were in customer service?** *

Please enter a number greater than or equal to 0

_____

9. **Prior to working at the ITS Help Desk, have you previously worked in IT support?** *

*Mark only one oval.*

◯ Yes

◯ No

10. **How prepared are you to perform your tasks at the help desk?** *

*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Not prepared at all | ◯ | ◯ | ◯ | ◯ | ◯ | Very prepared |

**APPENDIX N**
## Current Hire Demographic and Pre-Instruction Attitudinal Survey

## Current Hire: Consent Form

## Consent to Participate

Aloha! My name is Rachel Pang, a graduate student at the University of Hawaiʻi at Mānoa (UHM) in the Department of Learning Design and Technology, and I am inviting you to participate in a research study. As part of the requirements for earning my degree, I am doing an instructional design project. The purpose of this instructional design project is to improve the orientation training and assessment of new student workers at the Information Technology Services (ITS) Help Desk (HD). I am asking you to participate because you are a current employee at UH's ITS HD which also means you are at least 18-years-old and are a student enrolled in the UH System.

Project Description – Activities and Time Commitment: If you decide to participate in this research study, you will be asked to fill out two surveys as well as complete five instructional modules throughout the course of the study (approximately January 2018 - February 2018). The types of activities will vary depending on your employment status at the HD. Providing your consent will allow me to use your data as part of my project. Choosing to not take part in this study will prevent your data from being used, but may not exempt you from performing these instructional activities (as directed by staff at the ITS HD).

Voluntary Participation: You can freely choose  whether or not to participate in this survey. There will be no penalty or loss of benefits regardless of your decision. If you do agree to participate, you are free to discontinue your participation at any time.

Confidentiality and Privacy: When results of the study are published, names and other identifiable information will be omitted and your participation will remain confidential. Information collected throughout the course of the study will be kept in a Google Team Drive or Laulima site that only Michael Valentino and I will be allowed to access. In the event of a complaint or problem, other agencies, such as the University of Hawaiʻi Human Studies Program, may have the right to review anonymized research records for this study.

Benefits and Risks: There will be no direct benefit to you for taking part in this project. However, the findings from this project may help create a better understanding of the wishes and needs of UH student workers and staff at the ITS Help Desk. There is little risk to you for participating in this project.

Questions: If you have any questions or concerns about this study or its implementation, please email me at rkp32@hawaii.edu. You may also contact my advisor Dr. Catherine Fulford at (808) 956-3906. You may contact the UH Human Studies Program at (808) 956-5007 or uhirb@hawaii.edu to discuss problems, concerns and questions, obtain information, or offer input with an informed individual who is unaffiliated with the specific research protocol.  Please visit https://www.hawaii.edu/researchcompliance/information-research-participants for more information on your rights as a research participant.

1. **I have read and understand the information provided to me in my participation in this research study, "Training Student Workers at the UH ITS Help Desk". I also understand my rights as a participant and that my participation in this study is voluntary.** *
   *Mark only one oval.*

   ( ) Yes, I will allow my data to be used as part of the study.    *Skip to question 4.*

   ( ) No, I do not want my data to be used as part of the study.    *Skip to question 2.*

## Do not participate: Create a Nickname

2. **What is your UH username?** *

Since you will not be participating in the study, I need to know who you are so I do not use your assignment (forum posts on Laulima) or survey data. Please write your UH username below. This will be the only time I will ask for any direct, identifiable information.

_____

3. **Create a nickname** *

The purpose of creating a "nickname" is so that we can compare your pre and post-instruction answers. Do not use any identifiable information in your nickname. Please do NOT your UH username or any parts of your name. Please remember the nickname you chose to fill out future surveys in this study.

_____

*Skip to question 5.*

## Participate: What is your nickname?

Thank you for agreeing to participate in this study. Your data will be invaluable for my masters project.

4. **Create a nickname** *

The purpose of creating a "nickname" is so that we can compare your pre and post-instruction answers. Do not use any identifiable information in your nickname. Please do NOT your UH username or any parts of your name. Please remember the nickname you chose to fill out future surveys in this study.

_____

## Current Student Hire Demographic Survey

Please fill out the following demographic information and attitudinal survey. Please answer all demographic questions honestly and to the best of your knowledge. The survey should take approximately 5-10 minutes to complete. Your answers will remain anonymous.

5. **Are you a graduate or undergraduate student?** *

*Mark only one oval.*

- ( ) Undergraduate
- ( ) Graduate

6. **What is your major?** *

*Mark only one oval.*

- ( ) Computer Science
- ( ) Management Information Systems
- ( ) Engineering
- ( ) Other

7. **How many months have you been working at the HD?** *

Your badge has your starting month and year.
*Mark only one oval.*

- ( ) 0-6 months
- ( ) < 1 year
- ( ) 1-2 years
- ( ) 2-3 years
- ( ) 3-4 years

## Current Training Experience

The purpose of this section is to recall and evaluate the current training methods. This will help us see if we are meeting expectations and addressing fundamental problems with current training methods. Please be as honest as possible as your answers will help us create better training material. This is not a test on your ability. This is an assessment of the current training methods at the help desk.

8. **Explain what you remember of your new-hire training at the help desk.** *

Explain what you remember doing, how long you were in training, who trained you, and what tasks you did. Answer this question to the best of your ability.

_____

_____

_____

_____

_____

9. **How would you rate the usefulness of the current HD training?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Not useful at all | ( ) | ( ) | ( ) | ( ) | ( ) | Very useful |

10. **How well did the current method of training prepare you for your job?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Not prepared at all | ( ) | ( ) | ( ) | ( ) | ( ) | Very well prepared |

## Understanding

11. **How would you rate your understanding of the following sections of the wiki?** *

*Mark only one oval per row.*

|  | 1 (do not understand at all) | 2 | 3 | 4 | 5 (understand very well) |
|---|---|---|---|---|---|
| HD Policies and Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Schedule & Attendance Policies | ◯ | ◯ | ◯ | ◯ | ◯ |
| Tech Scheduling Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| SIMP Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Email Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |

## Engagement

12. **Please respond to the following statements on a scale of 1-5 in relation to how you were trained.** *

*Mark only one oval per row.*

|  | 1 (not at all) | 2 | 3 | 4 | 5 (very much) |
|---|---|---|---|---|---|
| I was comfortable with the training | ◯ | ◯ | ◯ | ◯ | ◯ |
| What I needed to do in my training was clear | ◯ | ◯ | ◯ | ◯ | ◯ |
| I enjoyed the training | ◯ | ◯ | ◯ | ◯ | ◯ |
| I was satisfied with the format of the training | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training is motivating | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training was effective | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training was efficient | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training was engaging | ◯ | ◯ | ◯ | ◯ | ◯ |
| The training helped me build rapport with my coworkers | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training is easy | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training is challenging | ◯ | ◯ | ◯ | ◯ | ◯ |
| I had a good foundational knowledge of the material after training (let 3 be "no change") | ◯ | ◯ | ◯ | ◯ | ◯ |

13. **Do you have any additional comments or opinions on the engagement of the training? If yes, please explain.** *

_____

_____

_____

_____

_____

**APPENDIX O**

**Laulima Forum: Layout**

ITS_Help_Desk_Training > 💬 FORUMS

University of
Hawaiʻi

«

👤
Exit Student View

☰
Overview

💬
**Forums**

📖
Gradebook Classic

Presentation

✉
Email

📖
Official Lessons

❓
Help

WATCH      % LINK   ? HELP

## Forums

**New Hire Training**

Scenarios and assignments for new hire training.

💬 **Schedule and Attendance Policies**  94 unread  of 95 messages

This assignment will allow you to practice what you have read in the Schedule and Attendance Policies section of the wiki. Click on "View Full Description" to view instructions.

▶ View Full Description

💬 **Email Procedures**  85 unread  of 85 messages

This assignment will allow you to practice what you have read in the Email Procedures section of the wiki. Click on "View Full Description" to view instructions.

▶ View Full Description

💬 **SIMP Procedures**  64 unread  of 64 messages

This assignment will allow you to practice what you have read in the SIMP Procedures section of the wiki. Click on "View Full Description" to view instructions.

▶ View Full Description

💬 **Tech Scheduling Procedures**  64 unread  of 64 messages

This assignment will allow you to practice what you have read in the Tech Scheduling Procedures section of the wiki. Click on "View Full Description" to view instructions.

▶ View Full Description and Attachment(s)

**APPENDIX P**

## Laulima Forum: Instruction Example

**Schedule and Attendance Policies**

This assignment will allow you to practice what you have read in the Schedule and Attendance Policies section of the wiki. Click on "View Full Description" to view instructions.

▾ View Full Description

**Instructions**

Reference the Schedule and Attendance Policies section of the wiki.

**For Poster**

Click on the "Start a New Conversation" (in the upper left) and use your name as the title and copy the six scenarios in the body of the post. Answer the scenario questions as if you were writing an email or a comment. Write your answers below the copied scenario. Consult the internal wiki for information on how you should write your emails and comments. Use the rubrics below to assess the quality of your responses. When finished, ask one help desk student to revise and comment on your scenario answers. These revisions and suggestions should be text replies to your original post. Afterward, revise your answer based on the feedback you received and ask a different help desk student to check your revised answer. You may submit another revised response after the second student provides feedback. After at least two revisions, let Mike Valentino know that your post is ready for review.

**For Commenter**

Use the rubrics below to guide you in providing meaningful feedback to the original poster. Copy and paste them in your reply and provide a score for the original poster to understand where he or she needs improvement. Provide supplemental comments on how the original poster can improve their email or comment. Make reference to specific sections of the wiki if possible. Try to guide the original poster toward the correct answer rather than outright answering the scenario for them. Your feedback to the original poster is an assessment of your knowledge of the content. **Provide feedback in the form of a score based on the rubric for each email and comment by the original poster**.

## APPENDIX Q

## Laulima Forum: Scenario Example

**Scenarios**
**Email Scenarios**

You may use the following example email as a template to write your answers to the appropriate email scenarios. Change all appropriate sections with information based on the wiki.

To: ███████████████

CC:

Subject: Example Email

Hello HD,
[Your message here]

Sincerely,
[Your name]

1. You wake up feeling ill and cannot make it to your scheduled shift. Use the date and times of your next scheduled shift to draft the email.
2. You have a doctor's appointment next week and you need to leave early from your shift next week to make it to the appointment on time. Use a date and time of a shift next week to draft the email explaining you will need to leave an hour early.
3. There is a problem with the HD Support Page and you cannot clock-out of your current shift. Use today's date and your scheduled end time to draft an email.


**Comment Scenarios**

1. Your scheduled shift is supposed to start at 1:00 PM. You beat traffic and arrived to work at 12:30 PM. You speak with Jay, and he says you can clock-in early since they could use the coverage. You are about to clock-in at 12:34 PM. Do you need to write a comment? If yes, what would your clock-in comment be? If no, explain.
2. There was minor traffic and you are about to clock-in at 8:03 AM when your shift was supposed to start at 8:00 AM. You already called in letting the help desk know you'll be a little late and you are within grace period. Do you need to write a comment? If yes, what would your clock-in comment be? If no, explain.
3. Your request for time off for your doctor's appointment has been approved by Justin (see time and date from the Email #2 scenario above). You are clocking out from your shift on time to leave for that appointment. Do you need to write a comment? If yes, what do you write in the comment section for your clock-out? If no, explain.

**APPENDIX R**

## Laulima Forum: Rubric Example

**Grading Rubrics**
**Rubric for Emails**

| | 1 Point | 2 Points | 3 Points | Score |
|---|---|---|---|---|
| **Recipient** | Email address does not exist or is completely wrong. Needs serious revision. | Email needs to be addressed to additional address(es) or email address is sent to a HD list or employee, but not the correct address is used. Needs minor revision. | Email is addressed to the correct email address(es). | |
| **Body** | Email is confusing. There is a lot of information missing. The message is not understandable if you did not know the scenario. Needs major revision. | Some information is missing. The message is somewhat understandable even if you did not know the scenario. Needs minor revision. | Email contains all the information required. The message is easily understandable even if you did not know the scenario. Does not need any revision. | |
| | | | **Total:** | **/6** |

**APPENDIX S**

**Post-Instruction Attitudinal Survey for New Hires**

# New Student Hire Post-Instruction Survey

Thank you for completing the instruction. The purpose of this survey is to provide feedback on the instructional materials. Please be as honest and thorough as possible as your feedback will help us better the learning process for future new hires. This survey will take approximately 15-20 minutes. Your answers will remain anonymous.

* Required

1. **What is your nickname? ***
   Please enter the nickname you have been using for the purpose of this study.

   _____

2. **In at least one paragraph, explain your experience with the help desk training. ***
   Explain what you learned, what you had to do, and who you worked with to the best of your knowledge.

   _____

   _____

   _____

   _____

   _____

3. **How would you rate the usefulness of the training process? ***
   *Mark only one oval.*

   |  | 1 | 2 | 3 | 4 | 5 |  |
   |---|---|---|---|---|---|---|
   | Not useful at all | ◯ | ◯ | ◯ | ◯ | ◯ | Very useful |

4. **After this instruction, how prepared do you think you are to perform the duties required of your position? ***
   *Mark only one oval.*

   |  | 1 | 2 | 3 | 4 | 5 |  |
   |---|---|---|---|---|---|---|
   | Not prepared at all | ◯ | ◯ | ◯ | ◯ | ◯ | Very prepared |

5. **After this instruction, how confident are you that you can perform this job well and on your own? ***
   *Mark only one oval.*

   |  | 1 | 2 | 3 | 4 | 5 |  |
   |---|---|---|---|---|---|---|
   | Not confident at all | ◯ | ◯ | ◯ | ◯ | ◯ | Very confident |

6. **What aspects of the training were most effective?** *
Please explain in at least one paragraph.

_____

_____

_____

_____

_____

7. **What aspects of the training did you like?** *
Please explain in at least one paragraph.

_____

_____

_____

_____

_____

8. **What aspects of the training were ineffective?** *
Please explain in at least one paragraph.

_____

_____

_____

_____

_____

9. **What aspects of the training did you dislike?** *
Please explain in at least one paragraph.

_____

_____

_____

_____

_____

10. **Would you suggest any changes to the training that you think would be useful for new hires? If so, what changes?** *
Please explain in at least one paragraph.

_____

_____

_____

_____

_____

11. **Rate your current understanding of your responsibilities as outlined in the Help Desk Policies and Procedures section of the wiki?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Do not understand at all | ◯ | ◯ | ◯ | ◯ | ◯ | Understand very well |

12. **Rate your current understanding of your responsibilities as outlined in the Schedule and Attendance Policies section of the wiki?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Do not understand at all | ◯ | ◯ | ◯ | ◯ | ◯ | Understand very well |

13. **Rate your current understanding of your responsibilities as outlined in the Tech Scheduling Procedures section of the wiki?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Do not understand at all | ◯ | ◯ | ◯ | ◯ | ◯ | Understand very well |

14. **Rate your current understanding of your responsibilities as outlined in the SIMP Procedures section of the wiki?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Do not understand at all | ◯ | ◯ | ◯ | ◯ | ◯ | Understand very well |

15. **Rate your current understanding of your responsibilities as outlined in the Email Procedures section of the wiki?** *
*Mark only one oval.*

|  | 1 | 2 | 3 | 4 | 5 |  |
|---|---|---|---|---|---|---|
| Do not understand at all | ◯ | ◯ | ◯ | ◯ | ◯ | Understand very well |

16. **Additional Comments**

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**APPENDIX T**
**Post-Instruction Attitudinal Survey for Current Hires**

# Current Student Hire Post-Instruction Survey

Thank you for completing the instruction. The purpose of this survey is to provide feedback on the new instructional materials. Please be as honest and thorough as possible as your feedback will help us better the learning process for future new hires. This survey will take approximately 15-20 minutes. Your answers will remain anonymous.

* Required

1. **What is your nickname?** *
   Please enter the nickname you have been using for the purpose of this study.

   _____

2. **In at least one paragraph, explain your experience with the new help desk training.** *
   Explain what you did: what activities did you perform, who did you work with, etc. Explain to the best of your knowledge.

   _____
   _____
   _____
   _____
   _____

3. **How would you rate the usefulness of the new HD training?** *
   *Mark only one oval.*

   |  | 1 | 2 | 3 | 4 | 5 |  |
   |---|---|---|---|---|---|---|
   | Not useful at all | ◯ | ◯ | ◯ | ◯ | ◯ | Very useful |

4. **Do you feel any more or less prepared for your job? (Let 3 be "No change")** *
   *Mark only one oval.*

   |  | 1 | 2 | 3 | 4 | 5 |  |
   |---|---|---|---|---|---|---|
   | Less prepared | ◯ | ◯ | ◯ | ◯ | ◯ | More prepared |

5. **Given the option, would you prefer the old or new method of HD training?** *
   *Mark only one oval.*

   ◯ Old method      *Skip to question 7.*
   ◯ New method      *Skip to question 7.*
   ◯ A combination of both
   ◯ Another model

## HD Training Method Explanation

When asked, "Given the option, would you prefer the old or new method of HD training", you said that you would either have a combination of the old and new training method or another model of training.

6. **Please elaborate on your reasoning behind your answer to the previous question** *

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## Understanding

7. **How would you rate your understanding of the following sections of the wiki BEFORE going through the new training?** *

_Mark only one oval per row._

|  | 1 (did not understand at all) | 2 | 3 | 4 | 5 (understand very well) |
|---|---|---|---|---|---|
| HD Policies and Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Schedule & Attendance Policies | ◯ | ◯ | ◯ | ◯ | ◯ |
| Tech Scheduling Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| SIMP Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Email Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |

8. **How would you rate your understanding of the following sections of the wiki AFTER going through the new training?** *

_Mark only one oval per row._

|  | 1 (did not understand at all) | 2 | 3 | 4 | 5 (understand very well) |
|---|---|---|---|---|---|
| HD Policies and Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Schedule & Attendance Policies | ◯ | ◯ | ◯ | ◯ | ◯ |
| Tech Scheduling Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| SIMP Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |
| Email Procedures | ◯ | ◯ | ◯ | ◯ | ◯ |

9. **Do you have any additional opinions or comments about how the new training affected your understanding of the material in any way? If yes, please explain.** *

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## Engagement

10. **Please respond to the following statements on a scale of 1-5 in relation to how you felt about the new training.** *

*Mark only one oval per row.*

| | 1 (not at all) | 2 | 3 | 4 | 5 (very much) |
|---|---|---|---|---|---|
| I was comfortable with the new training | ◯ | ◯ | ◯ | ◯ | ◯ |
| What I needed to do in the new training was clear | ◯ | ◯ | ◯ | ◯ | ◯ |
| I enjoyed the new training | ◯ | ◯ | ◯ | ◯ | ◯ |
| I was satisfied with the format of the new training | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the training is motivating | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the new training was effective | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the new training was efficient | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the new training was engaging | ◯ | ◯ | ◯ | ◯ | ◯ |
| The new training helped me build rapport with my coworkers | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the new training is easy | ◯ | ◯ | ◯ | ◯ | ◯ |
| I think the new training is challenging | ◯ | ◯ | ◯ | ◯ | ◯ |
| I have a better foundational knowledge of the material after training (let 3 be "no change") | ◯ | ◯ | ◯ | ◯ | ◯ |

11. **Did you find anything else engaging or disengaging within the new training? If yes, please explain.** *

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# Usefullness

12. **Please respond to the following statements on a scale of 1-5 in relation to how you felt about the new training.** *

*Mark only one oval per row.*

| | 1 (not useful) | 2 | 3 | 4 | 5 (very useful) |
|---|---|---|---|---|---|
| Reading the wiki articles | ◯ | ◯ | ◯ | ◯ | ◯ |
| Having materials in various formats (video, text, activities, etc.) | ◯ | ◯ | ◯ | ◯ | ◯ |
| Laulima forum activities | ◯ | ◯ | ◯ | ◯ | ◯ |
| Receiving feedback from your coworkers on the forum activities | ◯ | ◯ | ◯ | ◯ | ◯ |
| The instructional videos | ◯ | ◯ | ◯ | ◯ | ◯ |
| Quizzes (taking the quiz and receiving feedback) | ◯ | ◯ | ◯ | ◯ | ◯ |

13. **Did you find anything else in the new training useful or not useful? If yes, please explain.** *

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## Opinions, Comments, and Suggestions

14. **(Check all that apply) I learned something new in the following lessons:** *
   *Check all that apply.*

   ☐ Help Desk Policies and Procedures

   ☐ Schedule and Attendance Policies and Procedures

   ☐ Tech Scheduling Procedures

   ☐ SIMP Procedures

   ☐ Email Procedures

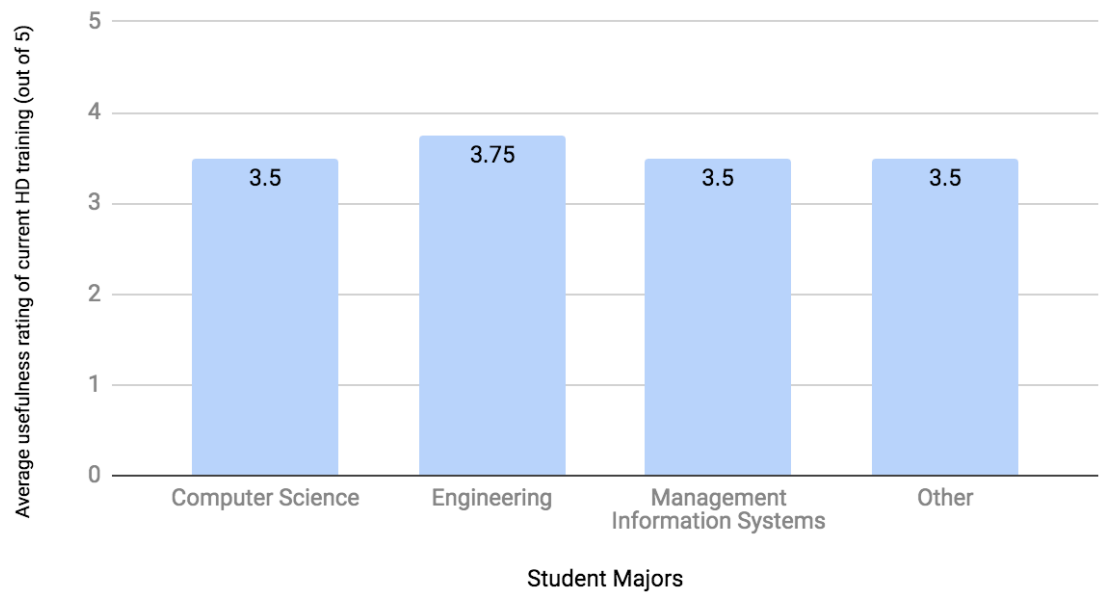15. **Do you have any suggestions for improving the training? If yes, please explain.** *

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16. **Do you have any other opinions or comments?** *
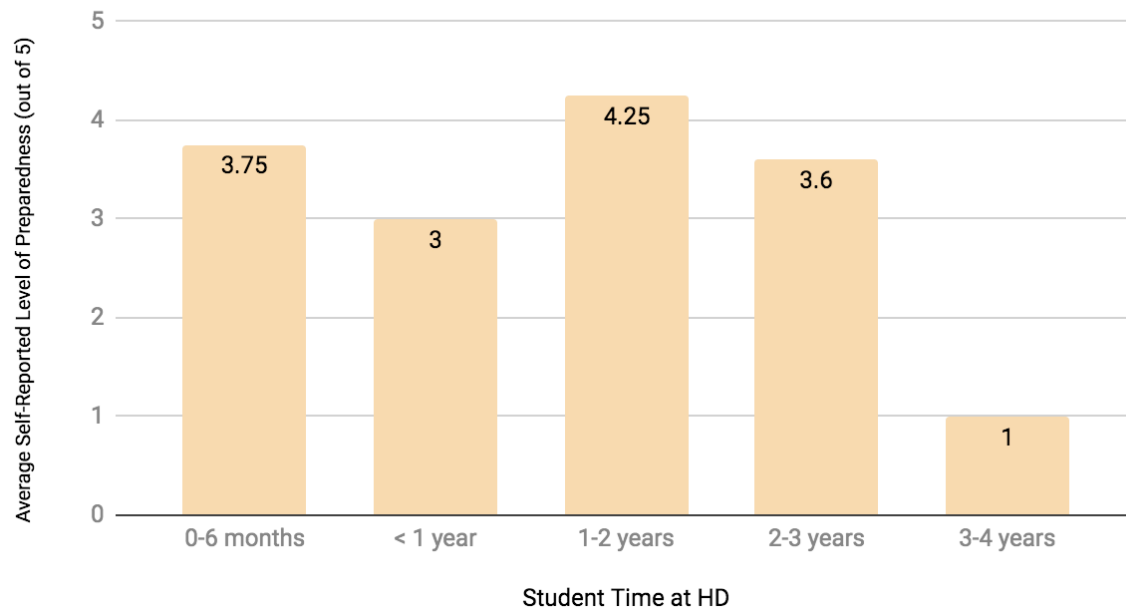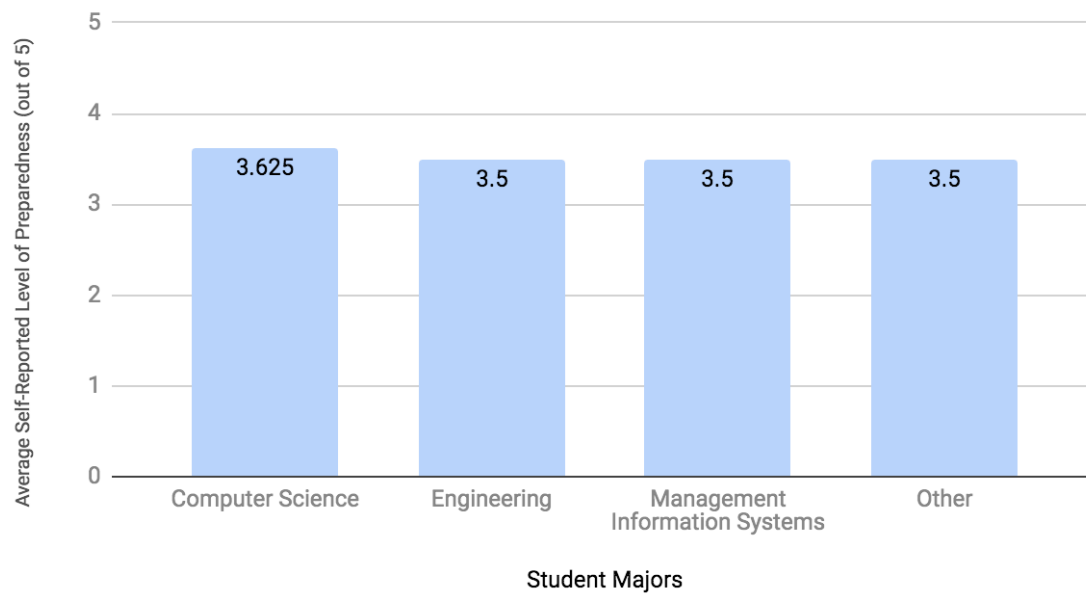
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**APPENDIX U**
**Pre-Instruction Usefulness Rating of Old HD Training where n=16**

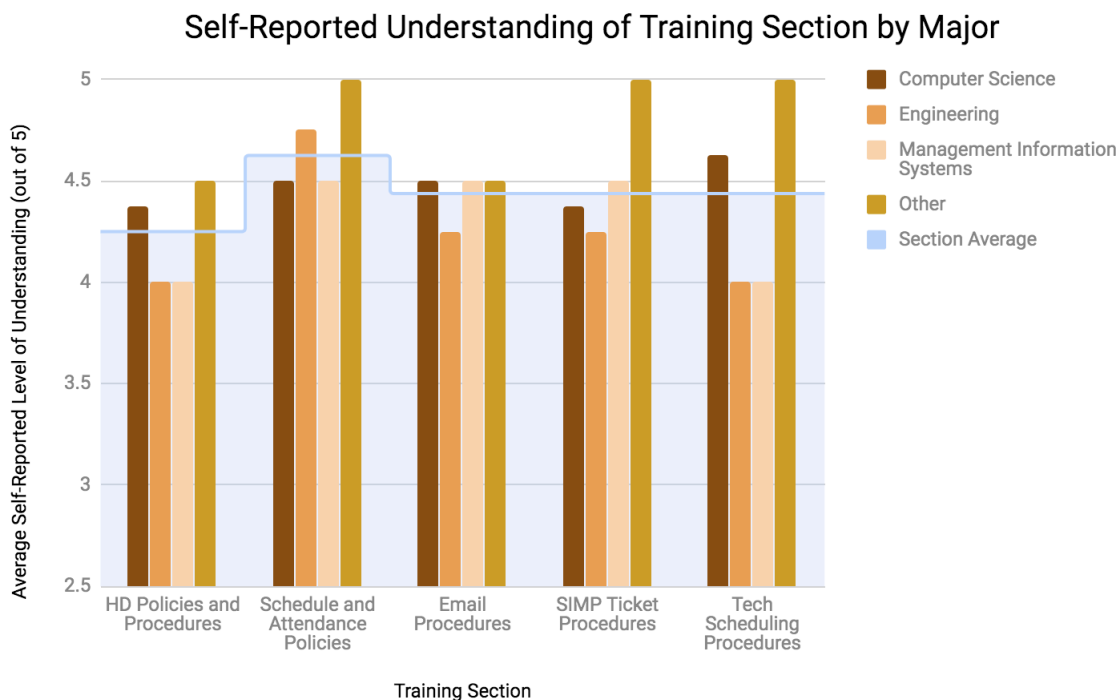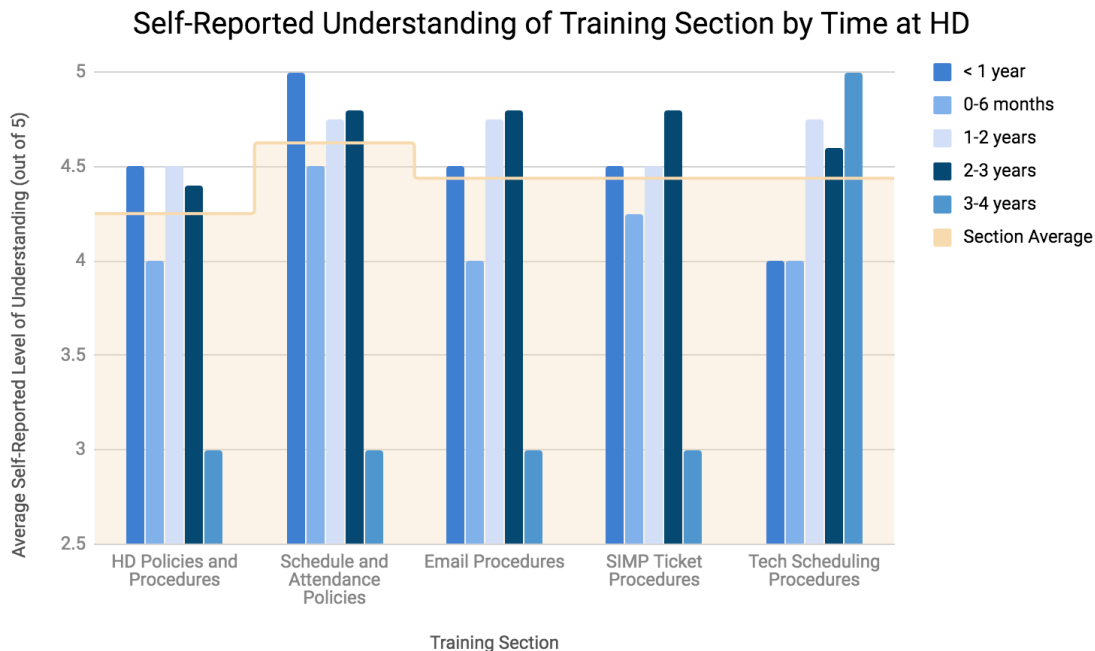## Usefulness Rating of Old HD Training vs. Time at HD
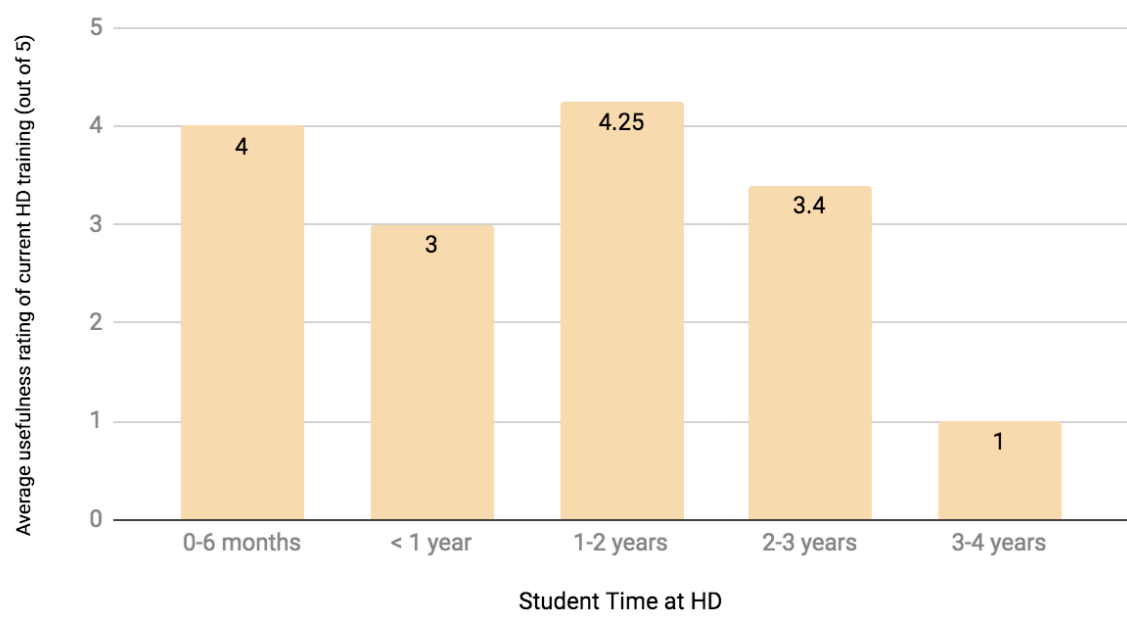


## Usefulness Rating of Old HD Training vs. Major

**APPENDIX V**

**Current Hire Pre-Instruction Level of Preparedness where n=16**

## Level of Preparedness vs. Time at HD



## Level of Preparedness vs. Majors

**Appendix W**
**Current Hire Pre-Instruction Self-Reported vs. Actual Level of Understanding of**
**Training Sections where n=16**

**Appendix X**

**Current Hire Pre-Instruction Attitude Toward Old HD Training where n=16**

## Average Attitude Toward Old Training Based on Years at HD



## Average Attitude Toward Old Training Based on Major

**APPENDIX Y**

**Pretest, Embedded Test, and Posttest of All Students by Lesson where n=19**



Pretest, Embedded, and Posttest Average Scores vs. Lessons