Development and Evaluation of the CSULB College Skills Course

Report Write-Up

PSY 689 (Practicum in Human Factors): Uyen Bui

12/18/20

# **Table of Contents**

[**Project Briefing Template** 2](#_Toc58940536)

[**Project Overview:** 2](#_Toc58940537)

[**Project Team:** 4](#_Toc58940538)

[**Using Technologies to Support Your Project:** 5](#_Toc58940539)

[**Project Work Plan** 5](#_Toc58940540)

[**Proposed Timeline of Deliverables** 5](#_Toc58940541)

[**Resource Requirements & Projected Costs:** 6](#_Toc58940542)

[**Key Project Management Questions:** 7](#_Toc58940543)

[**Outcomes** 8](#_Toc58940544)

[**CSULB Resources Added** 8](#_Toc58940545)

[**Summary of Findings** 12](#_Toc58940546)

[**Accessibility Evaluation** 12](#_Toc58940547)

[**Summary of findings** 14](#_Toc58940548)

[**Usability and Quality Evaluations** 15](#_Toc58940549)

[**Summary of Findings** 17](#_Toc58940550)

[**Summary of Recommendations for Gooru** 18](#_Toc58940551)

# **Project Briefing Template**

**Document History:** Each time the document version is changed, record the author, date and a brief description of change.

|  |  |  |  |
| --- | --- | --- | --- |
| VERSION | DATE | AUTHOR | DESCRIPTION |
| 2.0 | 09/24/20 | Uyen Bui | Updated project and team contact information |
| 3.0 | 10/1/20 | Uyen Bui | Updated description of people served, project goals, use case, activities |
| 4.0 | 10/14/20 | Uyen Bui | Updated project title, project descriptions, project goals, use case, project team, resources, schedule of deliverables |
| 5.0 | 10/30/20 | Uyen Bui | Updated project team, story of hope, project goals, project schedule of deliverables, project expected date of completion |
| 6.0 | 11/12/20 | Uyen Bui | Updated objectives, activities, project support team members, project work plan, dependencies, measures of success, added how to report outcomes |
| 7.0 | 12/3/20 | Uyen Bui | Updated objectives, technologies, activities, support team members, added draft of outcomes |
| 8.0 | 12/12/20 | Uyen Bui | Updated story of hope, objectives, technologies, project costs team members, schedule, dependencies, outcomes |

## **Project Overview:**

|  |  |
| --- | --- |
| **Title of Your Project** | Development and Evaluation of the CSULB College Skills Course |
| **Start Date** | 9/9/20 |
| **Expected Date of Completion** | 12/18/20 |
| **Brief Description of the People Served and**  **Project** | Dr. Rick Lumadue will be providing assignments, supervision, and necessary training. Due to COVID-19, all activities and communications will have to be done remotely (email and Zoom meetings as necessary). I (Uyen Bui) will be working alongside Dr. Rick Lumadue and Jessica Blay to develop a CSULB version of the College Skills course. I will be curating and compiling CSULB resources for the course as well as performing accessibility and usability evaluations on the course to ensure the material is presented in an easy-to-understand matter while also being effective in teaching its material. By performing usability evaluations, I will be able to evaluate and improve the instructional design of the course. Compiling CSULB resources will make the course more unique and applicable to CSULB students, rather than just being a general course. The people served will be CSULB faculty, student services staff, and incoming first generation freshmen. CSULB faculty and student services staff will be able to provide incoming freshmen with a user-friendly course to help them adjust to college and gain the skills needed to graduate in a timely manner. |
| **Story of Hope in a use case format** | The end users of the CSULB College Skills course will be low-income first-generation incoming freshmen to CSULB. As the students are first generation college students, they do not have parental figures or siblings to refer to regarding the college experience, which may make it difficult to adjust to college life. Additionally, these students are hoping to attend CSULB. With an accessible and usable course, the students will be able to attain useful and relevant college skills and thus feel less worried about adjusting to college. With inclusive language in the courses, students will feel represented and be able to better connect with the material being taught. Teachers of students in the course will be able to view their students’ progress in real time and provide appropriate feedback and suggestions, leading to better engagement and understanding of their students. Making the course more accessible will allow disabled students to access the material as well and improving usability will ensure students are not confused or frustrated when navigating each lesson in the course. Improving accessibility and usability through the use of pre-existing checklists and/or rubrics will provide students and teachers with a better overall experience when learning and teaching the material from the College Skills course, leading to better college preparedness.  From a monetary perspective, both the university and students will save money from the implementation of this CSULB College Skills course. The university will have higher student retention rates since students will use the skills they obtain from the course to succeed rather than fail in their classes. More students will be enrolled and more tuition will be paid to the university. Additionally, the information provided by the College Skills course can replace the work done by some CSULB staff, which can save the university money in terms of labor costs. On the student side, since students will be succeeding in rather than failing their classes, they will not spend money and time to retake classes. Perhaps students will even be able graduate earlier than expected, which will save them tuition. Essentially, students will stay enrolled in the universities and graduate in a timely manner. |
| **Goals** | Incoming first-generation college students at CSULB will be able to obtain college skills from a usable and accessible College Skills course that has great instructional design to complete their degree in a timely manner. If this CSULB College Skills course is successful, the College Skills course can be adapted to other universities. This will spread Gooru’s name, and may lead to some universities or even companies providing funds to Gooru to create additional educational projects. |
| **Objectives:** | One objective is to improve the instructional design of the CSULB College Skills course by identifying current accessibility, usability, and quality issues by 12/4/20. By addressing those issues, the course will meet accessibility standards from SkillsCommons, usability standards from Nielsen, and quality criteria from eQOOL. Another objective is to make the course specific to CSULB |
| **Activities** | I will add to the course materials from the Gooru College Skills course onto the CSULB College Skills course. Prior to evaluations, I will investigate and experiment with the course to have a feel for the various functions (from a teacher perspective). Eventually, I will perform accessibility and usability evaluations on the College Skills courses through the use of pre-existing checklists and heuristics. Accessibility will be evaluated using the SkillsCommons Accessibility Checkpoints and usability will be evaluated through a select number of Nielsen’s usability heuristics and severity ratings and eQOOL criteria. I will also compile and curate resources from the CSULB website to |

## **Project Team:**

**Executive Sponsor(s)** – Community leaders who provide the financial, political, and/or social support for the project and the achievement of the longer term goals.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Email | Phone | Organization |
| Dr. Prasad Ram |  |  | Gooru |
| Dr. Gerry Hanley | Gerry.hanley@csulb.edu | 562-335-3347 | CSULB and Gooru |
|  |  |  |  |

**Project Leader(s)** – Project leaders who will plan and implement the project by managing the people, resources, funding, and collaborations to achieve the objectives of the project.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Email | Phone | Organization |
| Uyen Bui | Uyen.bui@student.csulb.edu | (310)-760-1058 | CSULB |
| Dr. Rick Lumadue | rlumadue@skillscommons.org | 214-927-3400 | Gooru |
|  |  |  |  |

**Support Team Members**: People who commit to complete the work of the project on time

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Email | Phone | Organization |
| Jessica Blay | Jessica.blay@student.csulb.edu | (408)-512-4473 | CSULB |
| Maria Fieth |  |  | Gooru |
| Srinivasan HP |  |  | Gooru |
| Sharath Krishnan |  |  | Gooru |

**Project Partners**: People who are members of other organizations that are collaborating with the team members to achieve the objectives and longer term goals of the project.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Email | Phone | Organization &  Responsibilities |
| The Learning Center | TLC-Info@csulb.edu | <https://csulb.zoom.us/j/4377398397> (Zoom) | CSULB, provides video resources for College Skills Course |
| Dr. Gerry Hanley | Gerry.hanley@csulb.edu | 562-335-3347 | CSULB, provide feedback and tips for project ideas, check project progress |
| PSY 689 classmates |  |  | CSULB, provide feedback and tips for project ideas |

|  |  |
| --- | --- |
| **Project Governance** | Who makes the major decisions and how are they made?  Dr. Lumadue will make the major decisions. I will propose my project and activities to Dr. Lumadue, and he will be the one to approve or disapprove my project. If he approves, adjustments could be made to the activities as well. |

## **Using Technologies to Support Your Project:**

|  |  |
| --- | --- |
| Google Chrome – Use this browser to access Gooru, College Skills courses, and the sandbox for the CSULB College Skills course | No |
| Microsoft Word, Excel – Use this for performing evaluations (usability, accessibility) in an organized manner | No |
| Navigator Platform | Yes—1 hour explanation from Dr. Lumadue and 3 hours experimenting and familiarizing self with tool. |

## **Project Work Plan**

### **Proposed Timeline of Deliverables**

|  |  |  |
| --- | --- | --- |
| **Due Date** | **Deliverables: Products and/or Services** | **Person(s) Responsible** |
| 9/23/20 | General assessment of College Skills courses (survey) | Uyen Bui |
| 10/7/20 | Compile CSULB resources, replace PDF logos with CSULB logo, upload resources and PDFs to Gooru for Units 1-2 | Uyen Bui |
| 10/21/20 | Compile CSULB resources, replace PDF logos with CSULB logo, upload resources and PDFs to Gooru for Units 3-5 | Uyen Bui |
| 10/28/20 | Compile CSULB resources, replace PDF logos with CSULB logo, upload resources and PDFs to Gooru for Unit 6, double-check previous uploads | Uyen Bui |
| 11/4/20 | Complete accessibility evaluation of CSULB College Skills resources from Units 1-3 | Uyen Bui |
| 11/11/20 | Complete accessibility evaluation of CSULB College Skills resources from Units 4-6. Begin writeup of findings | Uyen Bui |
| 11/18/20 | Complete writeup of accessibility evaluation findings. Begin constructing grading rubric for combined usability and quality evaluation of College Skills course. | Uyen Bui |
| 11/25/20 | Complete grading rubric for combined usability and quality evaluation. Begin evaluating College Skills course. | Uyen Bui |
| 12/2/20 | Complete usability and quality evaluation of College Skills course. | Uyen Bui |
| 12/3/20 | Complete writeup of compiled CSULB resources. | Uyen Bui |
| 12/4/20 | Combine compiled resources, accessibility evaluation, and usability and quality evaluation writeups. Turn in report draft to Dr. Hanley. | Uyen Bui |
| 12/18/20 | Turn in final report to Dr. Hanley and Dr. Lumadue. | Uyen Bui |

### **Resource Requirements & Projected Costs:**

|  |  |  |
| --- | --- | --- |
| **TYPE OF RESOURCE** | **NOTE** | **COST** |
| Uyen Bui | Student from PSY 689 class working on this project as part of class requirements | 40 hours per month, approximately 120 hours for the whole semester |
| Dr. Lumadue | Supervising times | 8-16 hours per month, approximately 24-48 hours for the whole semester |
| Jessica Blay | Will be working on the same team but a different project | 40 hours per month, approximately 120 hours for the whole semester |
| Travel | No travel | $0 |
| Phone | Phone bill is paid each month | $15 each month, $45 for the whole semester |
| Training | Gooru (gooru.org)/Navigator platform | 4 hours training/familiarizing, $1400 laptop, $10 mouse, $250 external monitor—all needed for training |
| Training | No training | $0 |
| Facilities | No facilities | $0 |
| Technologies | Gooru (gooru.org)/Navigator platform | $1400 laptop, $10 mouse, $250 external monitor—all needed to access technologies. Gooru technology is free to access. |
| Other Activities | N/A | $0 |
| Other Fees | N/A | $0 |
| Other Expenses | Cell phone—needed to check emails, message support team members | $600 |

### **Key Project Management Questions:**

|  |  |
| --- | --- |
| **Dependencies** | What activities must be completed by others for project to |
|  | proceed? |
|  | * Need to schedule meetings with Dr. Lumadue * Compile CSULB resources so Jessica can create assessments at the end of each lesson * Need to create a grading rubric based off of Nielsen’s usability heuristics and eQOOL to evaluate usability and quality of the College Skills course * Complete accessibility/usability and quality evaluations to move to the next/compile reports * Need to turn in a final report draft to Dr. Hanley to receive feedback * Need to review feedback from Dr. Hanley to complete final report |
|  |  |
| **Communication Plan** | How will you communicate the plans and outcomes of the project to people who you need to support your project? (e.g. meetings, emails, newsletters, online community, social media, etc.)   * Send emails to Dr. Lumadue for clarification/status updates on project * Schedule meetings with Dr. Lumadue to discuss progress of project and future assignments |
| **Measures of Success** | What are the visible indicators that your project is successful?   * Meets SkillsCommons Accessibility Checkpoints * Meets select Nielsen heuristics and eQOOL criteria * First generation incoming freshmen reliably complete the course, do well, and are satisfied with the course (gathered feedback) |
| **Project Completion:** | How will you celebrate, recognize, and report on the achievements of your Project?   * Receive a good supervisor evaluation from Dr. Lumadue * Gather feedback from some users (quick survey feedback) * Report success in the final report and oral presentation for PSY 689 |

# **Outcomes**

## **CSULB Resources Added**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Lesson** | **Name and Type of Resources Added** | **Number of Resources Added** | **Total Number of Resources Added for Unit** |
| **Unit 1** | **Lesson 1** | * CSULB Campus Resources (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB List of Campus Resources (webpage) * CSULB COVID-19 Information and Resources (webpage) * CSULB Student Information During COVID-19 (webpage) * CSULB Educational Opportunity Program (webpage) * CSULB GenExcel Mentoring Program (webpage) * CSULB University Center for Undergraduate Advising (webpage) * CSULB Campus Map (image) | 8 (1 PDF, 6 webpages, 1 image) | **15 (3 PDF, 12 webpages)** |
| **Lesson 2** | * CSULB Communication and College (PDF reupload, replaced SkillsCommons logo with CSULB logo) * Acceptable use of CSULB Electronic Communications (webpage) * CSULB Email and Office 365 Apps (webpage) * CSULB Email Safety (webpage) | 4 (1 PDF, 3 webpages) |
| **Lesson 3** | * CSULB College Major Exploration (PDF reupload, replaced SkillsCommons logo with CSULB logo) * Choosing a Major at CSULB (webpage) * CSULB Declaring and Changing Majors (webpage) | 3 (1 PDF, 2 webpages) |
| **Unit 2** | **Lesson 1** | * CSULB Responsibilities, Values, Goals (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Student Support Services (webpage) * CSULB Learning Center (webpage) | 3 (1 PDF, 2 webpage) | **8 (3 PDF, 3 webpages, 2 videos)** |
| **Lesson 2** | * CSULB Goals (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Degree Planner (webpage) * CSULB Academic Coaching – Success Strategies (video) | 3 (1 PDF, 1 webpage, 1 video) |
| **Lesson 3** | * CSULB Time Management (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Academic Coaching – Time Management (video) | 2 (1 PDF, 1 video) |
| **Unit 3** | **Lesson 1** | * CSULB Effective Listening (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Academic Coaching – Live Lectures (video) * CSULB Academic Coaching – Recorded Lectures (video) | 3 (1 PDF, 2 videos) | **11 (4 PDF, 2 webpages, 5 videos)** |
| **Lesson 2** | * CSULB Note-taking Strategies (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Academic Coaching – Note-taking Form (PDF) * CSULB Note-taking Services (webpage) * CSULB Shark Bite – Note-taking Tips (video) | 4 (2 PDF, 1 webpage, 1 video) |
| **Lesson 3** | * CSULB Information Retention (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Academic Coaching – Learning Style (webpage) * CSULB Academic Coaching – Beyond Memorization (video) * CSULB Shark Bite – Say it Out Loud (video) | 4 (1 PDF, 1 webpage, 2 videos) |
| **Unit 4** | **Lesson 1** | * CSULB Importance and Types of Tests (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Testing Accommodations (webpage) * CSULB Testing Department (webpage) * CSULB Off-Campus Test Information (webpage) | 4 (1 PDF, 3 webpages) | **13 (3 PDF, 10 videos)** |
| **Lesson 2** | * CSULB Effective Test Preparation (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Shark Bite – Study Groups (video) * CSULB Academic Coaching – Study with Peers Online (video) * CSULB Academic Coaching – Maximizing Peer Study (video) * CSULB Academic Coaching – Multiple Exam Prep (video) | 5 (1 PDF, 4 videos) |
| **Lesson 3** | * CSULB Testing Strategies (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Academic Coaching – Tips for Online Exams (video) * CSULB Shark Bite – Test-taking Anxiety (video) * CSULB Shark Bite – Test-taking Tips (video) | 4 (1 PDF, 3 videos) |
| **Unit 5** | **Lesson 1** | * CSULB Critical, Creative and Practical Thinking (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Shark Bite – Connecting Concepts (video) * CSULB Academic Coaching – Applied Learning (video) | 3 (1 PDF, 2 videos) | **6 (3 PDF, 3 videos)** |
| **Lesson 2** | * CSULB Problem Solving (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Decision Making (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Choosing a Major – Decision-Making Process (video) | 3 (2 PDF, 1 webpage) |
| **Unit 6** | **Lesson 1** | * CSULB Career Exploration (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Career Development Center (webpage) * Careers Related to CSULB Majors (webpage) * CSULB Career/Major Assessments (webpage) | 4 (1 PDF, 3 webpages) | **16 (3 PDF, 10 webpages, 3 videos)** |
| **Lesson 2** | * CSULB Career Preparation (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Career Timeline (webpage) * CSULB Clarifying Career/Major Goals (webpage) * CSULB Career Workshops (webpage) * CSULB Career Counseling (webpage) | 5 (1 PDF, 4 webpages) |
| **Lesson 3** | * CSULB Job Search Preparation (PDF reupload, replaced SkillsCommons logo with CSULB logo) * CSULB Preparing for the Job Search (webpage) * CSULB Job Search Resources (webpages) * CSULB Candid Career Videos (webpage) * CSULB CareerLINK - Request Appointments & Events (video) * CSULB CareerLINK - Searching Jobs & Job Alerts (video) * CSULB CareerLINK - Upload Documents & Interviews (video) | 7 (1 PDF, 3 webpages, 3 videos) |

### **Summary of Findings**

A total of 69 resources was added to the CSULB College Skills course. Of the 69 resources, 19 were PDF documents, 27 were webpages, and 23 were videos. All of the webpages, videos, and 2 out of 19 PDF documents can be found on the CSULB website. The remaining 17 PDF documents were taken from the original Gooru College Skills course and reuploaded with CSULB logos in place of SkillsCommons logos. Resources were added to the course based on relevance to the competency of each lesson.

Since this project only took place over the course of a semester, one month was dedicated to the compilation and curation of CSULB resources. No additional testing or evaluating was done to determine whether 69 resources is an inadequate, adequate, or excessive amount for the CSULB College Skills course. In the future, a clear set of guidelines or evaluation process could be developed to determine the appropriate number of resources to be added, as an excessive number of resources could unnecessarily increase the length of the course.

## **Accessibility Evaluation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Lesson** | **Lesson Scores** | **Failed Checkpoints** | **Unit Scores** |
| **Unit 1** | **Lesson 1** | 6/8 | 9B, 10A | **19/28** |
| **Lesson 2** | 7/10 | 9B, 10A, 12B |
| **Lesson 3** | 6/10 | 4A, 9B, 10A, 12A |
| **Unit 2** | **Lesson 1** | 8/10 | 9B, 10A | **20/30** |
| **Lesson 2** | 7/10 | 9B, 10A, 12B |
| **Lesson 3** | 5/10 | 3B, 9B, 10A, 12A, 12B |
| **Unit 3** | **Lesson 1** | 7/10 | 9B, 10A, 12B | **18/30** |
| **Lesson 2** | 6/10 | 4A, 9B, 10A, 12B |
| **Lesson 3** | 5/10 | 3B, 4A, 9B, 10A, 12B |
| **Unit 4** | **Lesson 1** | 5/8 | 3B, 9B, 10A | **16/26** |
| **Lesson 2** | 5/9 | 3B, 9B, 10A, 12B |
| **Lesson 3** | 6/9 | 9B, 10A, 12B |
| **Unit 5** | **Lesson 1** | 6/10 | 3B, 9B, 10A, 12B | **11/18** |
| **Lesson 2** | 5/8 | 3B, 9B, 10A |
| **Unit 6** | **Lesson 1** | 5/8 | 3B, 9B, 10A | **15/24** |
| **Lesson 2** | 5/8 | 3B, 9B, 10A |
| **Lesson 3** | 5/8 | 4A, 9B, 10A |

**Entire Course Score for Checkpoints 1A-C:** 2/3

* **CSULB Accessibility Policy and Statement:**
  + <https://www.csulb.edu/academic-technology-services/accessibility-policy-statement>
  + <https://www.csulb.edu/information-technology/accessible-technology/accessibility-statement>
* **Failed checkpoints:** 1C

**Total Accessibility score:** 101/159

Notes:

* The resources of each unit and lesson were evaluated using the SkillsCommons Accessibility Checkpoints.
* The entire course was used when evaluating checkpoints 1A-C.
* Checkpoints 3A, 4B, 4B1, 6A-C, 7A, 9A, 10B, 11A-C, 12C, 14A, 15A-C were skipped in all evaluations due to time constraints. Additional checkpoints were skipped if not applicable to the resources in a certain lesson (e.g. 12. Multimedia).
* Non-skipped checkpoints that required assistive technology were evaluated using Google Chrome Text to Speech and Adobe Acrobat Pro DC Read Out Loud
* Due to time constraints, each subsection of a checkpoint was counted as 1 point. If one resource did not entirely meet standards, the resources failed that subsection of the checkpoint. If there were no subsections, the resources also failed the checkpoint if one did entirely not meet standards. This easily shows where accessibility issues lie (even if minor) within the course.
* Only the textbook and PDF resources from the original Gooru College Skills course were evaluated for color contrast (9B).

### **Summary of findings**

* The most commonly failed checkpoints were:
  + Text Color Contrast 9B – 17 times
  + Language Markup 10A – 17 times
  + Multimedia Transcript 12B – 9 times
  + Adjusting Font 3B – 8 times
* All of the lessons failed the Text Color Contrast 9B checkpoint. There were 1 to 8 text-background color combinations across all materials in a lesson that had a contrast ratio of less than 4.5:1. If the resource can be edited, it is recommended to adjust these colors to ensure all text-background color combinations meet an adequate level of contrast. Refer to the full SkillsCommons Accessibility Checkpoints grading sheets for the specific failing text-background color combinations.
* All of the lessons failed the Language Markup 10A checkpoint. In particular, Adobe Acrobat Pro DC could not detect the primary language for a number of PDF resources and PDF textbook from the original Gooru course. Refer to the SkillsCommons Accessibility Checkpoints grading sheets for the specific failing resources.
* 9/17 lessons failed the Multimedia Transcript 12B checkpoint. Transcripts were not provided for all video content. Refer to the SkillsCommons Accessibility Checkpoints grading sheets for the specific videos lacking transcripts.
* 8/17 lessons failed the Adjusting Font 3B checkpoint. The backgrounds of certain resources could not be changed completely to a high contrast text-background color combination in Adobe Acrobat Pro DC. If possible, adjust the PDF resources to allow proper changing of text and background colors. Refer to the SkillsCommons Accessibility Checkpoints grading sheets for the specific videos lacking transcripts.

The current accessibility score for the course is 101/159 (65.2%) using the current grading criteria. By addressing the aforementioned failed checkpoints, the score could rise to 152/159 (95.6%). Additionally, knowing the commonly failed checkpoints in advance will allow other universities to prioritize and ensure their own materials meet these checkpoints. Alternatively, as this grading criteria took an “all or nothing” approach, these results could be used as a basis for another round of scoring to see if the issues identified are severe enough to require adjustments.

## **Usability and Quality Evaluations**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Severity Rating Score** | | | | |
| **Heuristic** | 0 | 1 | 2 | 3 | 4 |
| Visibility of system status | **x** |  |  |  |  |
| Match between system and real world |  |  | **x** |  |  |
| User control and freedom |  |  |  | **x** |  |
| Consistency and standards |  | **x** |  |  |  |
| Error prevention |  |  |  | **x** |  |
| Aesthetic minimalist design | **x** |  |  |  |  |
| Help and documentation |  |  |  | **x** |  |

|  |
| --- |
| **Severity Ratings** |
| 0 = I don't agree that this is a usability problem at all |
| 1 = Cosmetic problem only: need not be fixed unless extra time is available on project |
| 2 = Minor usability problem: fixing this should be given low priority |
| 3 = Major usability problem: important to fix, so should be given high priority |
| 4 = Usability catastrophe: imperative to fix this before product can be released |

* A severity rating of 1-2 is considered a “minor barrier.” Users will need a short amount of time to return to their task.
* A severity rating of 3 is considered a “major barrier.” Users will need a moderate amount of time to return to their task.
* A severity rating of 4 is considered a “showstopper.” Users will need outside assistance or intervention to be able to return to their task.

|  |  |  |  |
| --- | --- | --- | --- |
| **Heuristic Violated** | **Description of Issue** | **Severity Rating and Explanation** | **Recommendation** |
| Match between system and real world | The terms “collection,” and “offline activity may not be familiar to incoming CSULB freshmen. | The issue is severity 2. All units in the course use these terms, but CSULB freshmen will most likely be able to quickly figure out what the terms mean from the contexts in which they are used. | Change the terms “collection,” “offline activity,” and “usage report” to more familiar terms. Suggestions are “collection of resources,” and “assignments” or “activities.” Alternatively, create a course tutorial/overview that explains these terms. |
| User control and freedom | Users cannot return to previous questions in the assessments—they can only move forward to the next question. | The issue is severity 3. In all assessments, users cannot return to the previous question and therefore are not given a chance review and change their answers before submitting. | Allow users to return to the previous questions in assessments to double-check their responses. Alternatively, have a page before submitting answers that shows all of the users’ current responses and allow them to change responses on that page. |
| Consistency and standards | After reviewing all resources in a collection, users can view a “usage report” that shows how long they spent reviewing each resource. However, when users click on the “usage report,” the title displayed is “collection report.” | The issue is severity rating 1. “Collection report” is displayed as the title for all usage reports in the course, but CSULB freshmen will most likely either not notice the difference or assume the two terms are synonymous. | Display “usage report” for both titles, or display “usage report of collection” for both if the specification is needed. |
| Error prevention | Users could accidentally continue onto the next section of the online and PDF versions of the textbook even though they are only instructed to read, for example, section 1.4. | The issue is severity 3, since all units use the textbook, increasing the possibility users will come across this issue. If users keep performing this error, they will waste time in the course. | Deactivate the “next section” and “previous section” buttons in the online and PDF versions of the textbook. |
| Help and documentation | There is no clearly marked help documentation throughout the course. | The issue is severity 3, since there should be some help documentation in case students become confused on what to do next in the course or something is not clear. | Include help documentation in the course. This could be in the form of a course tutorial or overview before students start using the course, or help could be scattered throughout the course off to the side of resources, activities, and assessments. |

|  |  |  |  |
| --- | --- | --- | --- |
| **eQOOL** | **Met** | **Not met** | **Recommendations** |
| **Section 1: Course Overview and Introduction** |  |  |  |
| 1.1 \*Instructor uses course environment to provide clear and detailed instructions for students to begin accessing all course components, such as syllabus, course calendar, assignments, and support files |  | **x** | Include "Start here"/"Welcome" button that leads to a course overview/tour. This will allow students to familiarize themselves with the format and materials offered by the course. |
| 1.3 \*Course description includes the purpose and format of the course, as well as prerequisite knowledge and competencies, if applicable. |  | **x** | Include a description of the College Skills course that covers the purpose and format of the course as well as whether any previous knowledge or skills are needed. |
| **Section 2: Assessment of Student Learning** |  |  |  |
| 2.1 \*All student learning outcomes are specific, well-defined, and measurable. | **x** |  |  |
| 2.3 \*The learning activities (including graded assignments as well as ungraded activities) promote the achievement of the student learning outcomes. | **x** |  |  |
| 2.4 \*The assessment instruments (e.g., rubrics) are detailed and appropriate to the student work and respective outcomes being assessed. This includes assessing modes of online participation and contributions. | **x** |  |  |
| **Section 7: Technology for Teaching and Learning** |  |  |  |
| 7.4 \*Instructor provides clear information regarding access to the technology and related resources required in the course. |  | **x** | Include information on which technologies are necessary to access resources in the course. |

Note: The CSULB College Skills course was evaluated using the “preview” function on Gooru. The course may appear differently to actual students of the course.

### **Summary of Findings**

* There are currently no showstoppers (Nielsen severity rating = 4) within the CSULB College Skills course.
* It may be beneficial to include a course overview/tutorial to ensure students are familiar with the language, resources offered, and navigation within the CSULB College Skills course. This will help the course overcome two barriers—violation of “Match between system and real world” and “Help and documentation.”
* The remaining major barriers within the course (Nielsen severity rating = 3) include violation of “Error prevention” and “User control and freedom.” Disabling features that allow students to go off-track in their assignment and allowing students to revisit questions during assessments will help overcome these barriers. Addressing these issues will prevent students from feeling frustrated and discouraged with the course, as they will feel more in control and focused.

## **Summary of Recommendations for Gooru**

* How to deploy the College Skills Course
  + At CSULB
    - After addressing the current issues with the College Skills Course and performing quality assurance tasks, include the course with other student support services.
    - Include the College Skills Course as a resource in the Educational Opportunity Program (EOP), as the program provides services to first-generation, low-income students.
    - Ask professors who teach introductory level courses to include the College Skills Course as a resource in their first day lecture and syllabus.
  + At other institutions
    - Address any additional issues from the deployment of the CSULB College Skills course, if applicable, and then include the course with other student support services.
    - Same as with CSULB—include the College Skills Course as a resource for first-generation, low-income student programs and ask introductory level course professors to include the course as a resource in their first day lectures and syllabus.
* How to improve accessibility of College Skills Course
  + Ensure text and background colors of all resources have a contrast ratio of 4.5:1.
  + Ensure all audio resources have a text transcript.
  + Ensure all resources have language markup that indicate the primary language.
  + Ensure text and background colors of all resources can be adjusted to have high contrast colors.
* How to improve usability and quality of College Skills Course
  + Ensure users are able proceed backwards as well as forward in course assessments.
    - Include an option to check all answers before submitting.
  + Disable options to move to different sections of the textbook when unnecessary to prevent users from going off-task.
  + Include a course overview or tutorial that allows users to familiarize themselves with the College Skills course.
    - In the tutorial, include the purpose and format of the course and inform users of any required technologies to access resources.
  + Include clearly marked help and documentation throughout the course in case users become lost or do not know what to do next.