Analysis Report

Understanding Common Roots, Prefixes, and Suffixes

Prepared for EME6613 Spring Semester 2022

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Overview

This course will teach and reinforce the basic understanding of common roots, prefixes, and suffixes for the purpose of understanding the meaning of unknown words. This knowledge will strengthen adult learners with low literacy skills as they prepare for the GED exam. This skill will improve basic adult work-life activities, like resumé building, to aid in career-readiness and also prepare adult learners for success in postsecondary education.

According to the GED Testing Service (2015), educators should focus on High Impact Indicators in their instruction. High Impact Indicators are skills that build the foundation to develop necessary skills to pass the GED. The Language Arts Indicator R.4.1/L.4.1 requires learners to "determine the meaning of words and phrases as they are used in a text, including determining connotative and figurative meanings from context" (p. 2). To accomplish this skill, learners need to understand strategies to determine the meaning of unknown words in a text such as the use of common prefixes, suffixes, and root words to determine meaning.

In addition, The College and Career Readiness Language Standards also state in CCR Anchor 4 that learners need to "determine or clarify the meaning of unknown and multiple-meaning words and phrases, choosing flexibly from an array of strategies" (Pimentel, 2013, p. 37). The second strategy listed for Anchor 4 is to "determine the meaning of the new word formed when a known prefix is added to a known word" (p. 37). As the purpose of the College and Career Readiness Standards is to prepare learners in adult education for postsecondary education and the career world, it is important for adult learners to understand the strategy of using prefixes, suffixes, and root words to identify the meaning of unknown words to prepare for higher education and career training.

Targeted learners for this course are adult learners who are currently working to pass the GED. Targeted learners may also be searching for employment. This course will be divided into four modules estimated to take 1 hour each to complete making the entire course approximately 4 hours in length.

This course will be accessed through the learning management system Canvas as an online, self-guided course. The instructor will have set office hours and be available to the students upon request.

The following analysis outlines a goal analysis for this course. In addition, it includes a subordinate skills analysis for the use of root words, prefixes, and suffixes to determine meaning. Finally, it includes a learner and context analysis for the course.

Goal Analysis

As seen below in Figure 1, when given appropriate instruction and tools, adult learners will learn how to determine the meaning of unknown words and write new words by using understood root words, using understood prefixes, using understood suffixes, and using a combination of understood root words, prefixes, and suffixes.

The goal statement was identified by Melanie Amrich, Brandi Martinez, Cynthia Buckley, Noelle Frantz, Kelly Fisher, Jasmine Pierce. Our SMEs include: Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker).

> *Goal Statement: Given appropriate instruction and tools, adult learners preparing for the GED exam will be able to determine the meaning of unknown words and write new words using three common strategies in an online reading course.*

This statement is classified as an **intellectual, rule application skill** according to Gagne's taxonomy.

Tools included in the Canvas courseware are free to students and available on mobile, PC, and Mac devices. Students will watch videos, listen to audio, and complete activities and discussions.

Additionally, research strongly suggests that these skills will improve life skills. This goal will help students in real life reading across different contexts (lease agreements, bills, paperwork for buying a new car) as well as technical terminology. However, this course will not include an assessment of these outcomes.

The goal analysis identifies four major steps needed for the learner to successfully carry out the goal statement. The subsequent section will focus on the skills needed for each

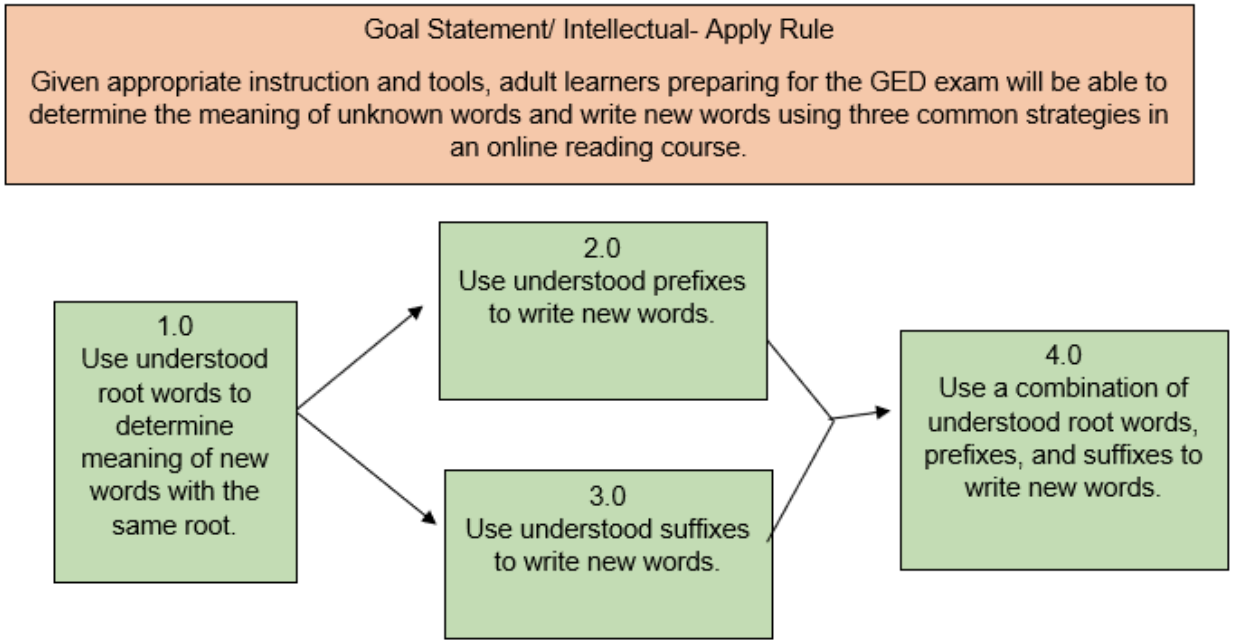


Figure 1: Goal Statement/ Intellectual - Apply Rule

Subordinate Skills Analysis

Figure 2 provides an outline of the subordinate skills associated with the first step: adult learners will use understood root words to determine meaning of new words with the same root. This will be accomplished by first defining what a root word is, what a prefix is, and what a suffix is. Adult learners will then locate the root in a word with a prefix and/or suffix. The application of these strategies will result in understanding new root words. These skills were deemed appropriate by our SMEs.

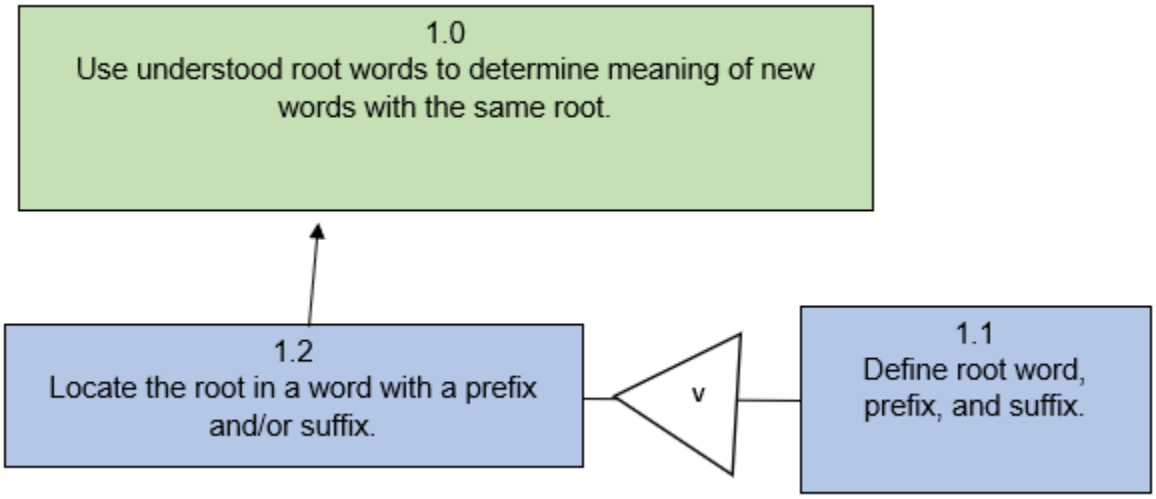


Figure 2: Subordinate Skill Analysis for Step 1

Explanation of Figure 3

Figure 3 provides an outline of the subordinate skills associated with the second step: adult learners will use understood prefixes to determine meaning and write new words. This will be accomplished by first recalling three common prefixes identified by our SMEs. Adult learners will then identify the meaning of the new word with the prefix attached followed by writing words with prefixes once given a definition. By applying these strategies, learners will understand prefixes to determine the meaning of new words and write those new words. These skills were deemed appropriate by our SMEs.

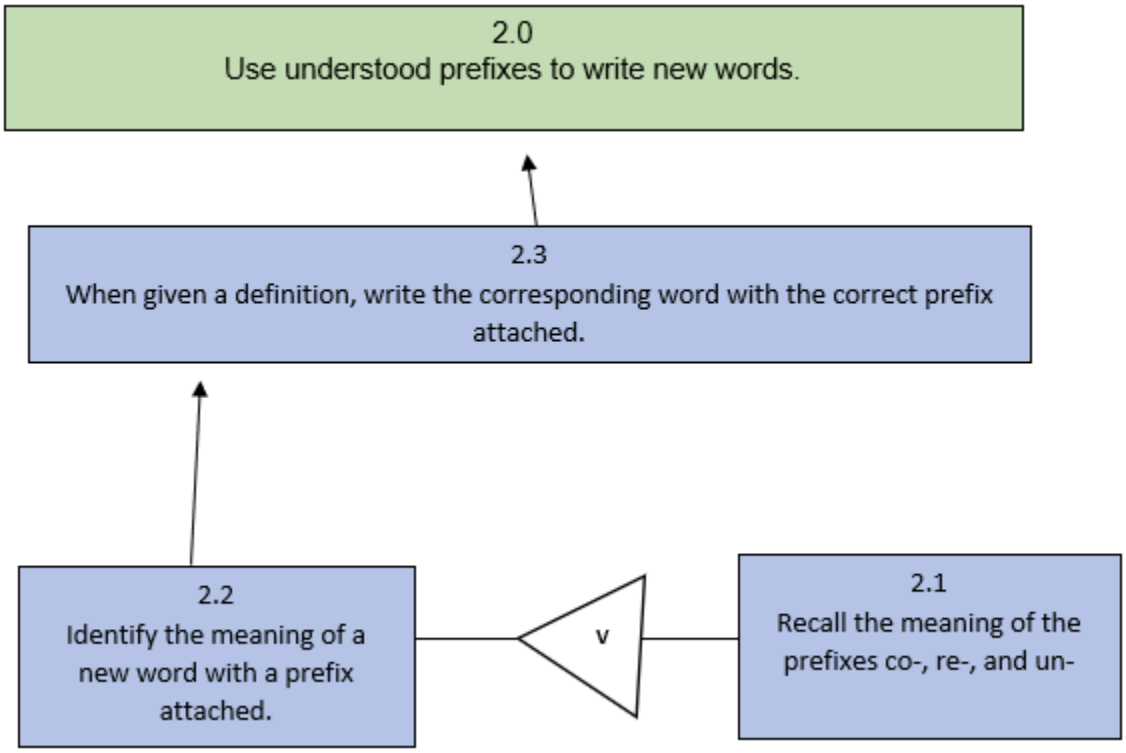


Figure 3: Subordinate Skills Analysis for Step 2

Explanation of Figure 4

Figure 4 provides an outline of the subordinate skills associated with the third step: adult learners will use understood suffixes to determine meaning and write new words. This will be accomplished by first recalling three common suffixes identified by our SMEs. Adult learners will then identify the meaning of the new word with the suffix attached followed by writing words with suffixes once given a definition. By applying these strategies, learners will understand suffixes to determine the meaning of new words and write those new words. These skills were deemed appropriate by our SMEs.

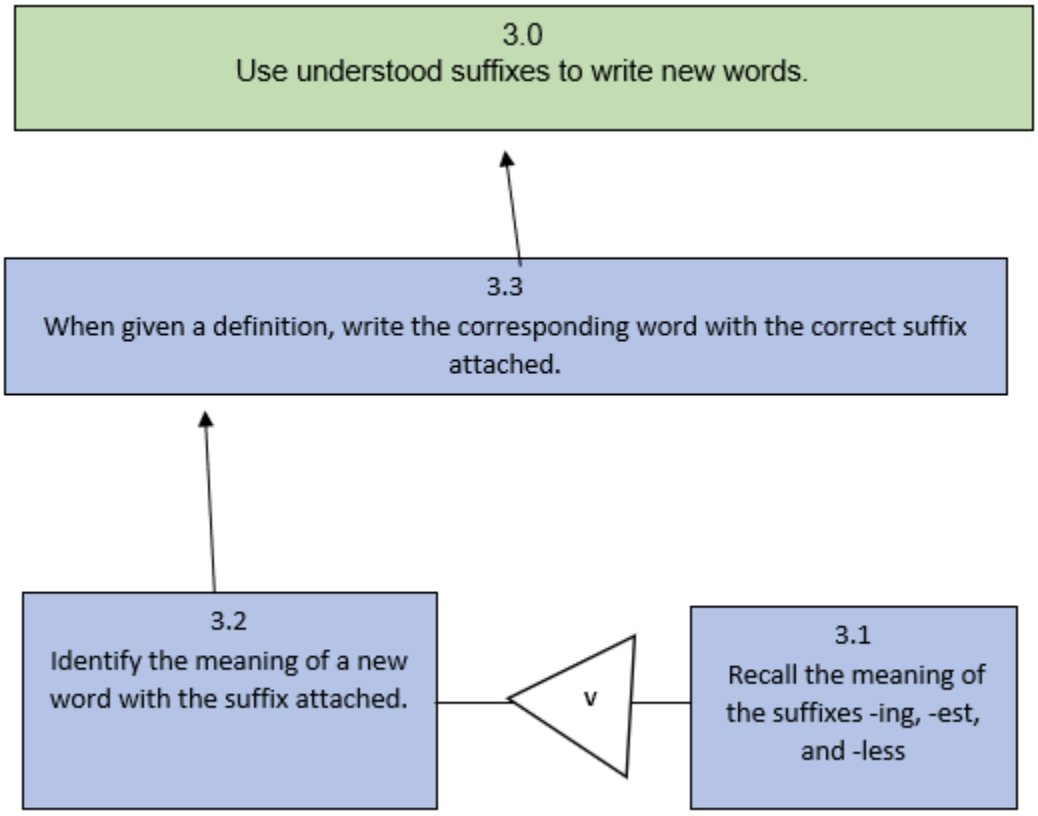


Figure 4: Subordinate Skills Analysis for Step 3

Learner Analysis

Learner characteristics examined. (example has tables to explain)

Learners are young adults, ages 17-20, who are preparing for the GED. Entry-level skills need to be basic 5th-grade literacy skills. They prefer self-guided digital courses. Learners are working toward High School Certifications and GED's in non-traditional paths. This means that some of the learners will have high anxiety about learning due to past failures and struggles with traditional school. The learners may also be raising families or working to support themselves. These learners prefer succinct and direct learning opportunities that do not include excessive assignments that they perceive as busy work. Learners enjoy social interactions so the use of Canvas discussion tools would be acceptable to them, however, group work could be perceived as busy work. Since the outcomes of the objectives of this course do not include group attitudes, group work will not be included in this course.

How data was collected.

The team researched common GED skills that can help to promote successful GED completion. Additional information came from discussions between the team members (Melanie Amrich, Brandi Martinez, Cynthia Buckley, Noelle Frantz, Kelly Fisher and Jasmine Pierce) who are either current teachers or former teachers. Interviews were also conducted with Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker).

Are we interviewing or asking questions to a GED provider or GED exam provider?

Table 1: Learner Analysis

Information Categories	Data Sources	Learner Characteristics	Implications for Design, Delivery and /or Evaluation
Entry Skills	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Performance and Learning Setting:** The Performance and learning setting are both in Canvas. According to our interviews, the targeted learners have experience in canvas in their education experience at traditional school and/or GED services.	**Performance and Learning Setting:** Knowledge of and experience in the use of canvas, along with a basic literacy level of 5th grade allow the instructors to begin with the targeted material outlined in the course.
Prior Knowledge of Topic Area	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana	Learners were exposed to the topic in grade school, but were unable to master the topic at the time.	Based on learner characteristics, the instruction will begin at a 5th grade level.

	Alvarez (GED exam taker), GED Service, and Target Learner		
Attitude Toward Content	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	Interviews with SME identified engagement was key for a positive attitude toward the subject matter.	Interactive and engaging material needs to be created.
Attitude Toward Delivery System	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	Learners have a preference of working online and completing self-guided instruction. Interactive material is the preferred method of delivery - color changing, animations.	Based on learner characteristics we will be providing instruction using modules on Canvas. This will allow students to complete instruction at their own pace which will allow. We will create engaging interactive material.
Academic Motivation (ARC)	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	Interview with SME identified academic motivation as a personal goal for future work life.	
Educational and Ability Levels	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Educational Levels:** According to interviews, education levels range between 5th and 12th-grade literacy levels. **Ability Levels:** Learners will have similar ability levels in the use of canvas and educational courses.	**Educational Levels:** Coursework will be appropriate to all levels when based on the lowest level of learners' ability (5th grade). **Ability Levels:** Curriculum will be built with respect to the differing social-economic levels of the students.
General Learning Preferences	**Attitude Data:** Learner Interviews, SME interview **Interviews:** Target Learners	Interviews with SME identified collaborative work as the preferred learning style if applicable - review games and competitions were also high on the list.	Since this is a self-paced course, collaboration might be difficult.
Attitudes Toward Organization	**Attitude Data:** Learner Interviews, SME interviews **Interviews:** Target Learners	Interview with SME stated giving a reason for learning gets learners motivated to learn regardless of who or what the method of delivery is.	The purpose of this content will be explicitly stated as well as how this will be applicable to real life.

General Group Characteristics	**Attitude Data:** Learner Interviews **Interviews:** Target Learners, SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	Target learners who are working on alternative paths to High School Certificates prefer to learn in a self-guided, flexible learning atmosphere. Instructors with clear understandings of the learner's struggles life struggles will be more successful when they demonstrate understanding, positive attitudes, quick positive responses, and clear instructions, and mentor mentality	Course work will include game-like functions and avoid excessive “busy work” as many of the learners are working and may also be raising families.

Performance Context Analysis

Outline performance site aspects (example has a table that lists information categories, data sources, performance site characteristics, and implications for design delivery and/or education)

Course work be employed include discussions, assignments, quizzes, and group workspaces. Data for the performance context analysis came from interviews with SMEs Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez. Additional information came from discussions between the team members (Melanie Amrich, Brandi Martinez, Cynthia Buckley, Noelle Frantz, Kelly Fisher and Jasmine Pierce) who are either current teachers or former teachers.

The course will be designed to be delivered on Canvas. Course work will include teacher-created interactive lessons, video, audio, and outside sources with permission from the authors as needed. Canvas and Google Document tools will be employed with learner preferences in mind. They will include a wide variety of interactive activities and color changing effects.

Table 2: Analysis of Performance Context

Information Categories	Data Sources	Performance Site Characteristics	Implications for Design, Delivery and /or Evaluation
Managerial / supervisory support	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Managerial Support:** **Reward System:** Personal reward of not looking up information online and readily solving problems.	**Managerial Support and Nature of Supervision: Reward System:** There is no implication.
Physical aspects of the site	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Facilities/Resources:** The course will be fully online. Canvas tools will be used. Students will be able to attend online using mobile services, or chrome, Firefox, and Safari browsers. **Equipment:** **Time:**	**Facilities/Resources/Equipment:** There is no need for physical facilities. All tools will be provided for free through Canvas. **Time:**
Social aspects of the site	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service,	**Supervision**: **Interaction**: Instructors are aware of the potential negative learner perceptions and will reach out at regular intervals to create a warm and approachable persona.	**Supervision: Interaction:** The course will provide opportunities to practice tests and activities. Canvas has built-in opportunities to provide feedback to students and will be optimized.

	and Target Learner		
Relevance of skills to the workplace.	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Meet identified needs:** Learners will acquire the necessary skills to help them understand new vocabulary on the GED. **Current/Future applications:** Strategies will be utilized when reading future documents, forms etc.	**Meet identified needs:** The course will provide opportunities to practice tests and activities. Canvas has built-in opportunities to provide feedback to students and will be optimized. **Current/Future applications:** According to research, the course skills will provide a strong base for GED passing scores as well as future success in careers and personal life skills.

Explanation of Table 3

The Learner Context Analysis describes the characteristics of the learner and the place where they will be learning. As this course is self-guided, learners in this course will work in the place that is most comfortable for them.

The course will be designed to meet common learner characteristics and preferences. Learners in our course may have anxiety and lack self-confidence due to previous failures in traditional education. This course will provide warm, approachable instructors who will reach out at specific intervals. Instructors will take full advantage of the built in tools that Canvas provides.

It is reasonable to assume that learners may be working full and/or children, therefore they show a distinct preference to direct and succinct instructional material that does not meet their definition of “busy-work”.

Table 3: Analysis of learning Context

Information Categories	Data Sources	Learning Site Characteristics	Implications for Design, Delivery and /or Evaluation
Site compatibility with instructional needs.	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Instructional strategies**: Course work will be online using canvas tools including discussions, assignments, teacher-created video and audio, and external video. **Delivery approaches**: Delivery is available to the student at the time of their choosing through the self-guided course. **Time**: There will be 4 modules that will take the student approximately 1 hour each. **Personnel**: One instructor will be provided.	**Instructional strategies/ Delivery approaches**:: Canvas Course work will be self-guided and include color-changing effects, discussions, and interactive learning opportunities. **Delivery approaches**: Delivery is available to the student at the time of their choosing through the self-guided course. **Time**: There will be 4 modules that will take the student approximately 1 hour each. **Personnel**: One instructor will be provided.
Feasibility for simulating workplace	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service,	**Supervisory characteristics:** Instructors are trained to work with students who may have some anxiety about learning. **Physical characteristics:** Activities will avoid excessive “busy work” and strive to give the	**Supervisory characteristics:** Instructors are trained to work with students who may have some anxiety about learning. **Physical characteristics:**

	and Target Learner	learner the feeling of being encouraging and attainable. **Social characteristics:** Learners prefer limited social and group activities.	**Social characteristics:** Group work will not be included in this course due to the learner's preference and its lack of impact on the specific objective being taught. Social impacts can still be included in course discussion tools.
Site compatibility with learner needs.	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Location (distance):** Target learners can access materials from any location through a computer or mobile device. **Conveniences:** All learning can take place when and where the learner is most comfortable. **Space:** The targeted learner can use their own device or free computers at libraries. **Equipment:** A computer is required, a mouse and keyboard are recommended. Mobile device webcams and speakers or earbuds are also recommended.	**Location / (distance)/ Conveniences/ Space/ Equipment:** All materials, tools and supplies are online within Canvas The online space offers the convenience of allowing the target learner to complete tasks wherever it is most convenient.
Number/nature of sites.	**Interviews:** SME Jo-Ellen Griffin, Laura May (Language Arts SME) and Mariana Alvarez (GED exam taker), GED Service, and Target Learner	**Facilities / Equipment / Resources:** The needed resources are already in possession of most learners. Local Libraries also provide these resources. **Constraints:** Students who must use would lose some flexibility to work at their convenience.	**Facilities / Equipment / Resources:** The needed resources are already in possession of most learners. Local Libraries also provide these resources. **Constraints:** Students who must use would lose some flexibility to work at their convenience.

Additional Information: Learners who need internet access are encouraged to reach out to their local school district, community centers, and libraries. These institutions often provide free access and can also provide information on student discounts for personal services.

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