Underserved Population:

1.a Affinity Diagram

1.b List of attributes:
1. Comprehension ability
2. Restrictive behavior
3. Ability to follow instructions
4. Fine motor skills
5. Concentration level
1. c List of data sources and which label they ended up under

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Attribute(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Anna Merrill, Anxiety and Autism Spectrum Disorders. [<a href="https://www.iidc.indiana.edu/pages/autism-spectrum-disorders">https://www.iidc.indiana.edu/pages/autism-spectrum-disorders</a>]</td>
<td>Concentration levels, Restrictive behaviour</td>
</tr>
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<td>Source</td>
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1.d - Persona Skeletons:

Skeleton #1
Girl, age 7-9

**Comprehension ability**
- Finds easy to read books with more pictures and symbols
- Understands things better if explained with some analogy
- Develops interest in learning if it’s speed is slow with some revision and activities

**Ability to follow instructions**
- Often gets confused while following a sequence of instructions given in one go
- Find challenges in interpreting gestures and responding to them
• Expects simple and specific stepwise instructions and acknowledgement after each step
  
  **Concentration Level**
• Gets stuck with some thought or question and loses focus from the activities in progress
• Finds difficulty concentrating when multiple things are happening in the context she is present
• Loses focus easily if any activity is not engaging with multiple acknowledgements

**Skeleton #2**
**Boy, age 5-9**
  
  **Restrictive Behaviors**
• Feels hard to transition from one web page to another.
• Becomes very agitated if the themes of a web page changed.
• Only interested in 3-5 movies and watch them over and over again.

  **Fine Motor Skills**
• Has difficulty in movement and motor planning.
• Has slight trouble with pointing, grasping, and withholding on to or letting go of objects.

  **Concentration Level**
• Can keep his attraction on things he likes and hard to focus on things that don't interest him.
• Easily gets distracted by background noise, bright lights, and hunger.

**Skeleton #3**
**Boy, age 6-7**
  
  **Comprehension Ability**
• Likes to read books with few numbers of words on each page and limited pictures
• Likes to revisit problems to understand concepts better
• Develops deeper understanding if a new concept is introduced and related to something he already knows and likes

  **Restrictive Behavior**
• Will often be agitated enough to give up on a website if features aren’t in similar places across pages
• Will only watch one TV show and often gets distracted during new episodes
• Must go to bed, wake up, and eat meals at the same time every day otherwise he will be extremely agitated

  **Concentration Level**
• See bullet 2 under Restrictive Behavior
• Can only do one thing at a time, for example he can’t work on homework with the TV on
• Often can talk for hours on subjects he is passionate about and fixates on them, but subjects he is not passionate about he will barely give the time of day

1.e - Prioritized Persona Skeletons:
Mainstream Population:

2.a, 2.b - Assumptions:
Our mainstreamer can grasp new information quickly and process reading passages. They do not restrict behavior and are good with change. Our mainstreamer is able to follow simple step-by-step directions. They have high-functioning high motor skills. They are able to focus on their current task. Our mainstreamer would be using our software because it provides an engaging way for students to learn the content while satisfying various learning styles through the usage of videos, descriptions, and pictures.

2.c Persona skeletons:

Skeleton #1:
Girl, age 7-9
Comprehension Ability
- Likes to read books about 400-550 words in length
- Can read a passage and comprehend the words
- Can connect situations happening in stories to previous situations
Concentration Level
- Can focus fully on one task at hand
- Cannot multitask, finds it overwhelming
- Finds simple tasks boring
Ability to Follow Instructions
- Can complete more complicated tasks, like making a peanut butter and jelly sandwich

Skeleton #2:
Boy, age 5-7
Fine Motor Skills
- Hand movements are stable and not shaky
- Can manage any task requiring dexterity
- Can use a computer mouse without problem
Restrictive Behavior
- Good with change
- Likes new and different things, constantly finding new websites to go on

**Ability to Follow Instructions**
- Can complete up to 2-3 step tasks
- Can follow simple game rules

2.d - Prioritized Persona skeletons

<table>
<thead>
<tr>
<th>Persona Skeleton</th>
<th>Priority</th>
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<tbody>
<tr>
<td>Skeleton 1</td>
<td>1</td>
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<tr>
<td>Skeleton 2</td>
<td>2</td>
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