

BBB Introduction: Blind Modeling



This is one of several introductory activities that engages participants in thinking about universal design and designing for all learners. This exercise can help get students out of their comfort zone and begin thinking about designing for an end user who is blind or visually impaired. It prompts students to think about what an object feels like as opposed to what it looks like (e.g., an object may look like a dog but may not feel like a dog). Students will also gain a greater appreciation for how texture can influence what an object is interpreted to be when touched.

Tags: Art 3-D Printing Shapes Maker Education

Grades: Pre-K to 12+ | **Duration:** Up To 1 Hour

Supplies: Clay or Wikki Stix, kitchen mats, blindfolds

Step #1: Pick a theme

As a group, pick a theme to serve as the focus for modeling. Some ideas could be: Animals (Zoo, Pets, 4 legged...), Ecosystems (Underwater, Desert, Rainforest...), Favorite Books (The Very Hungry Caterpillar, The Dot, Goodnight Moon...). The class theme will help connect the different models and will provide a context for interpreting other students' models by touch.

Step #2: Distribute Materials

Give each student:

- A blindfold
- A kitchen cutting mat (to minimize mess)
- Approx, 1 cup of clay or 4-6 Wikki Stix

Step #3: Modeling time

Give students approximately 10 minutes to model their object.

When they're finished modeling, have them keep their blindfolds on for Step 4.



Step #4: Critique

Exchange each student's model with that of another student, and have each student try to figure out what the other student's object is.

Give everyone a minute or two to make a prediction before removing their blindfolds.

Step #5: Wrap Up & Reflection

Have students reflect on their experience and discuss:

- Which features of the model worked well?
- Which features were challenging to discern or understand?
- How might the design of the object be improved?

From these discussions, generate a list of criteria or 'best' practices to use when creating an accessible design.

Some examples include:

- The object is large enough to be easily felt
- Key features of the object are emphasized
- The object has a clear outline
- The texture contributes to one's understanding of what the object is

Instructor Tip:

The group discussion is an excellent opportunity to crowd-source some 'rules' or guidelines that the class can follow when designing their projects:

- Accentuate important details (e.g., what distinguishes a lion from an elephant?)
- When in doubt, make it larger; anything too small to feel will be too small for a blind student to 'see'
- Sometimes you may want to just model a piece of something (e.g., a leaf from a tree) and sometimes the story may call for a representation of the entire thing (e.g., the full tree, including trunk, branches and leaves...)

- Avoid adding too much detail to one page; too much clutter will be distracting and challenging to understand
 - Context is important
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