

Labeling Guidelines

Behavior Vector Definition

For each image, we define a labeling vector that describes the student's study state. The vector is composed of discrete parameters, labeled according to the rules below.

1. Gaze

Describes the student's gaze direction relative to the camera/screen.

Possible values:

- Camera- looking at the camera or the screen
- Not_Camera- not looking at the camera (sideways, down, another screen)
- Eyes_Closed- eyes closed

General definition:

- "Looking at camera"- the person looks toward the screen or the camera
- "Averted gaze"- the person looks elsewhere

Rules:

- Decide based on both head direction and eye direction.
 - If head and eyes contradict, the eyes determine the label.
 - If the eyes are not clearly visible, use head direction.
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2. Headphones

Indicates whether the student is wearing headphones. Label strictly based on clear visual evidence (no guessing).

Possible values:

- With_Headphones - headphones are visible
- Without_Headphones - no headphones
- Unknown- cannot determine (ears are hidden/occluded)

Rules:

- Label only what is visible in the image.
 - Do not assume headphones if the ears are hidden.
 - All types of headphones count (in-ear, over-ear, headset).
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3. Environment

Describes the type of setting the student is in.

Possible values:

- Indoor- inside a room / home
- Outdoor- outside (street, café, open public place)

Rules:

- A Zoom virtual background does not count as the environment.
 - Consider only the real background visible in the frame.
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4. Background Privacy

Indicates whether there are additional people in the background.

Possible values:

- Private - no people in the background
- Public - real, clearly visible people in the background

Rules:

- Count a person if you can see a body, shoulders, or a clear human silhouette.
 - Very blurred or ambiguous figures are not counted.
 - If unsure, label as Private.
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5. Object in Hand

Indicates whether the student is holding an object in their hands, and if so-what.

Possible values:

- Phone - phone
- Pen - pen / pencil
- Cup - cup / bottle
- Other - another object
- None - empty hands
- Unknown - hands are not visible in the frame

Rules:

- An object counts only if a hand is actually holding it.
- An object lying on a desk/table does not count.
- If the hands are not in the frame at all, label Unknown.
- Do not guess the object type if it is not clear.