

Studio: Train a Pose Model

40 minutes

Project studios (optional extension sessions)

Built in Teachable Machine

Outcome 2.8

WHAT THIS LESSON DOES

Students train, test and improve a pose-recognition model in Teachable Machine using tilt-left, tilt-right and no-tilt body positions, then export a shareable link for the next session.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
2.8	Identify different AI models and how they apply in coding, from generative AI and code assistants to recommendation systems, classifiers and agents.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Train, test and improve a pose-recognition model with your own body positions (LO 2.8)
- Explain how it differs from the image model you trained before

BEFORE THE BELL

- Devices ready, browsers open, students able to reach Teachable Machine and allow webcam access
- Check that webcams work and that classroom lighting is even enough for clear pose samples
- Plan where students will save the shareable model link (school drive note, email to self, or class link list)
- No earlier project file is needed; this part starts fresh

WHAT YOU NEED

Item	Qty	Per	If you do not have it
tablet or laptop with Teachable Machine	1	pair	run the lesson on the IWB with students taking turns

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HOW THE LESSON RUNS

4 min	introduction	Start: what we're building
3 min	content	How the model learns
3 min	content	Open Teachable Machine
3 min	content	Create a Pose Project
2 min	content	Create the Classes
5 min	content	Add Images to the Tilt Left Class
2 min	content	Add Images to the Tilt Right Class
2 min	content	Add Images to the No Tilt Class
3 min	content	Train the Model
2 min	content	Test the Model
3 min	content	Export your Model
2 min	content	Conclusion
3 min	content	Make sense: what worked, what broke
2 min	content	Reflect
1 min	summary	What you covered

TEACHING MOVES

- Model one clear tilt-left sample on the board so students see full body in frame, steady pose, and how to delete blurry shots
- Stress balanced sample counts across the three classes before the first train
- Build in a short fool-the-model moment after the first test, then send pairs back to add better examples and retrain
- Name debugging when the preview mislabels a pose: students change the data, retrain, and check again

WHAT TO WATCH FOR

- Webcam blocked or not allowed: help students grant permission and refresh if the preview stays blank
- Classes mixed up or renamed inconsistently: check labels read Tilt Left, Tilt Right, No Tilt before training
- Weak or uneven samples (hands only, motion blur, far too few in one class): delete poor images, add clearer ones, retrain

DIFFERENTIATION

- Support: pair students, fix the camera framing together, and aim for a small steady set of clear samples per class before training
- Extension: deliberately fool the model with edge poses, then add targeted samples and retrain until preview is stable
- Extension: note one clear difference between this pose model and an image model ready for class discussion