

POST OCCUPANCY EVALUATION AND REDESIGN RECOMMENDATIONS FOR STANDING DESKS IN ELEMENTARY CLASSROOM

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Vallecito Elementary in San Rafael, CA has recently implemented standing desks in their classrooms in collaboration with the organization StandUp Kids. This is progressive and nearly unprecedented as of 2016, so we were eager to affirm or improve upon this early iteration of a standing desk classroom. After observing the classroom, conducting interviews, and reading relevant literature, we propose the following revisions.

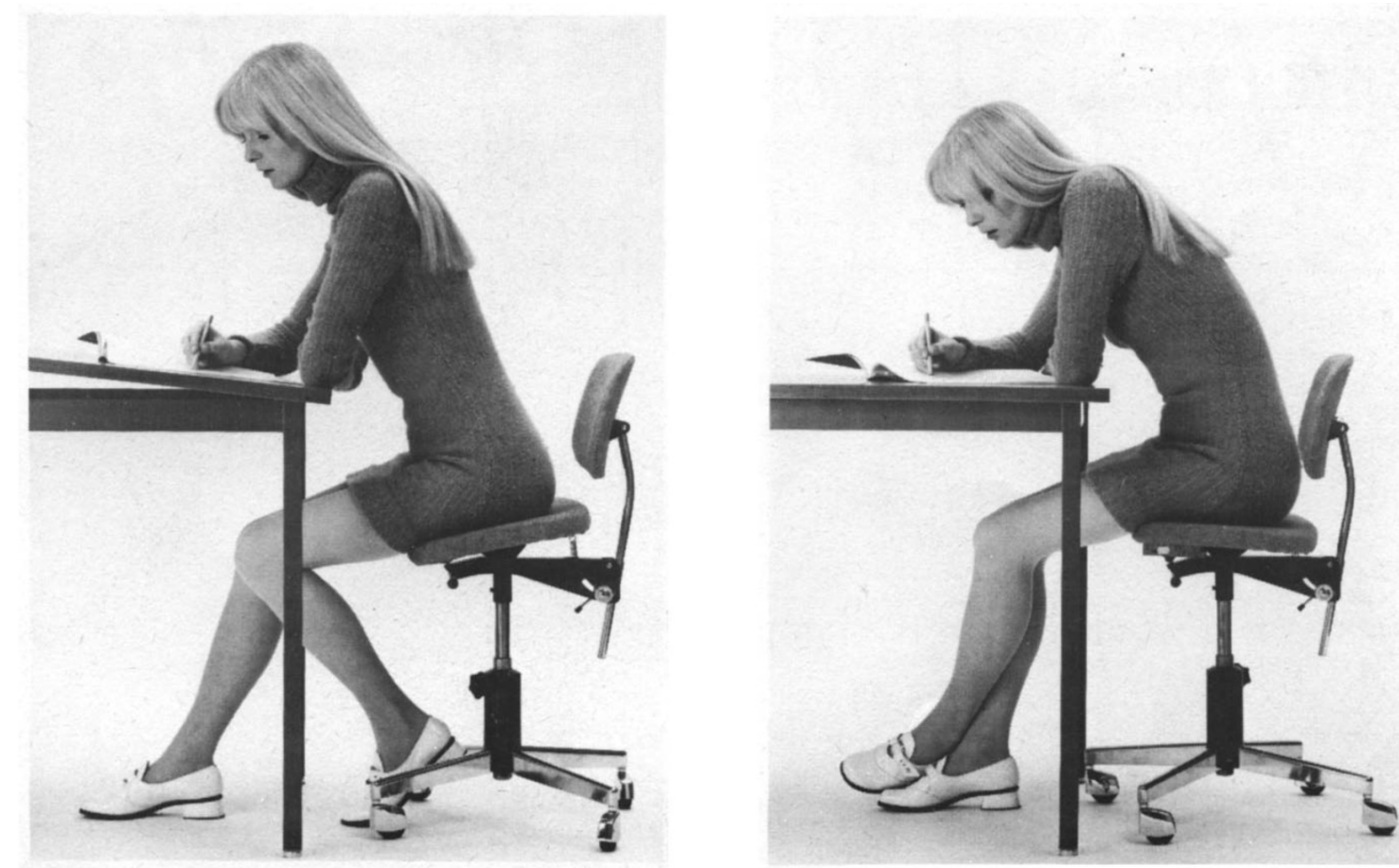
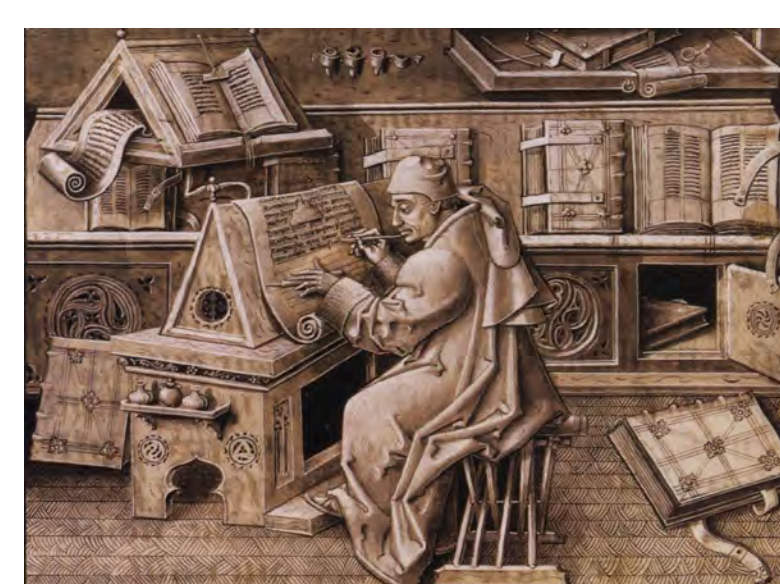


Fig. 10 Fig. 11
A.C. Mandal demonstrated the effect of seat angle on posture in his 1981 work "The Seated Man".

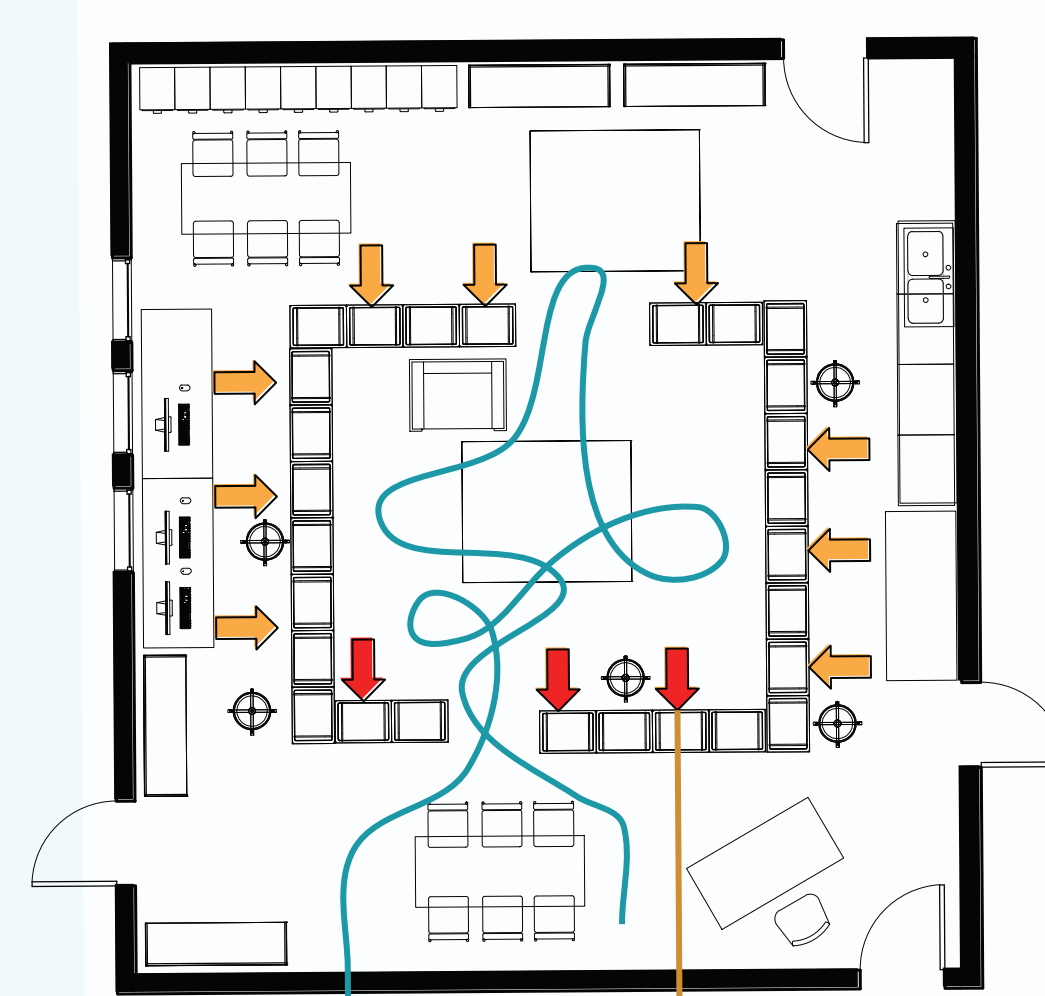
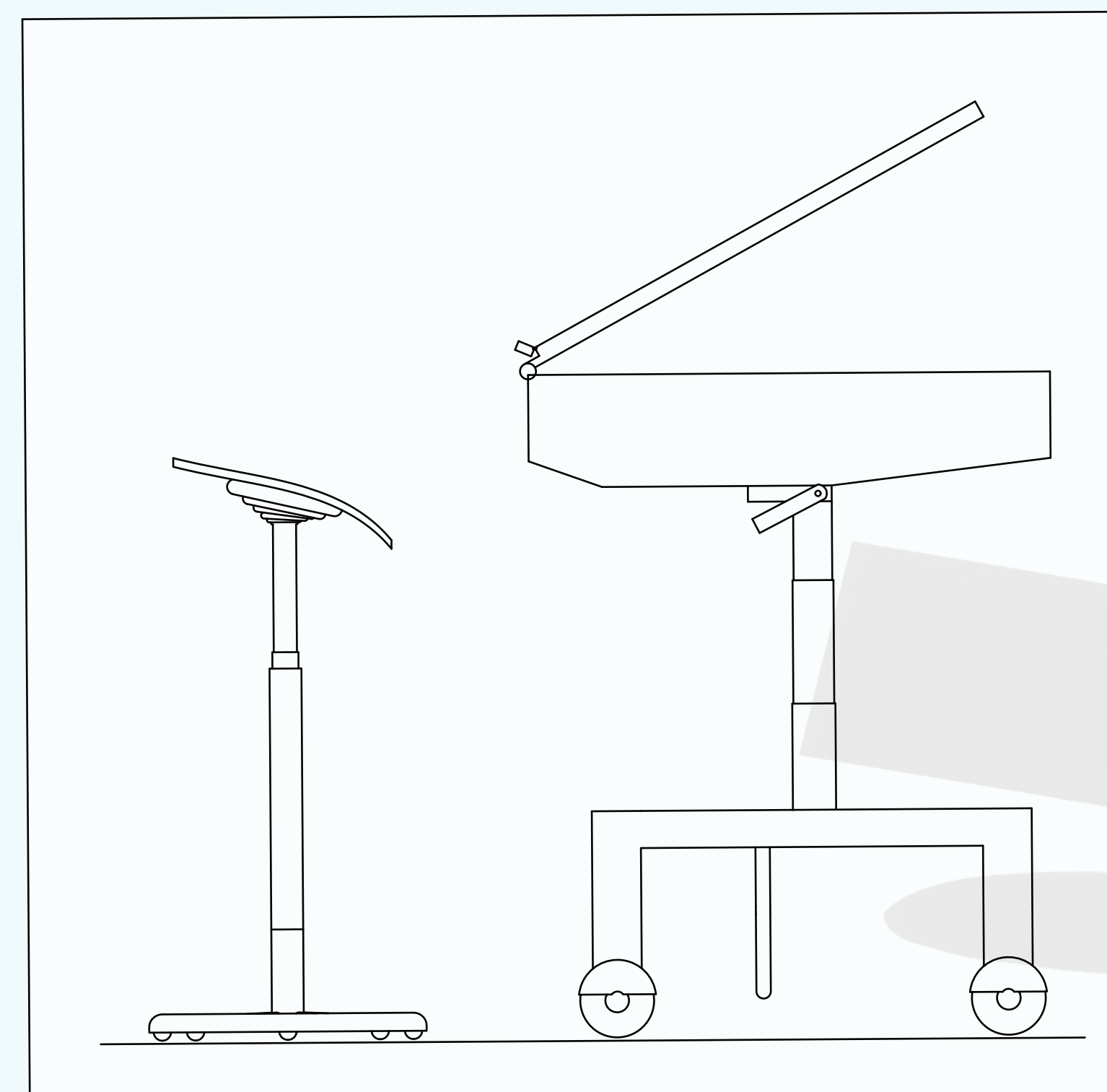
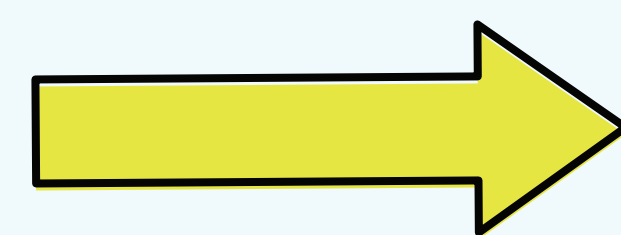


Medieval scribes were on to something...

OBSERVED USER MODIFICATIONS

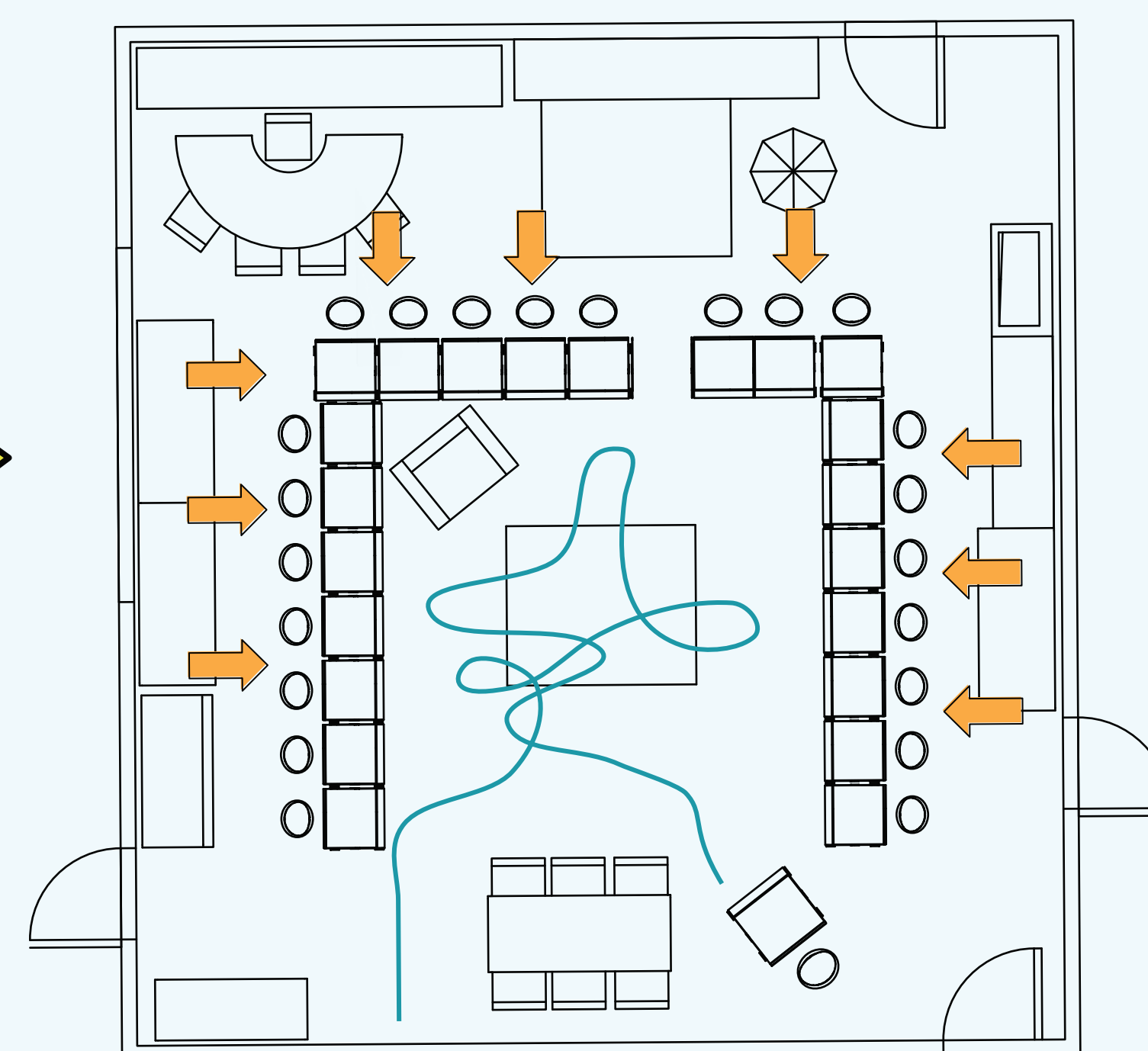
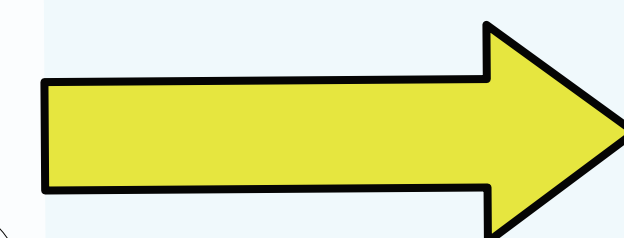


"It brings my eyes closer to my work."



ORIENTATION OF STUDENT

PATH OF TEACHER



EASILY ADJUSTABLE...

...DESK HEIGHT

Teacher explained that the current desks require each of the four legs to be adjusted with a tool. Now the students can adjust on their own.

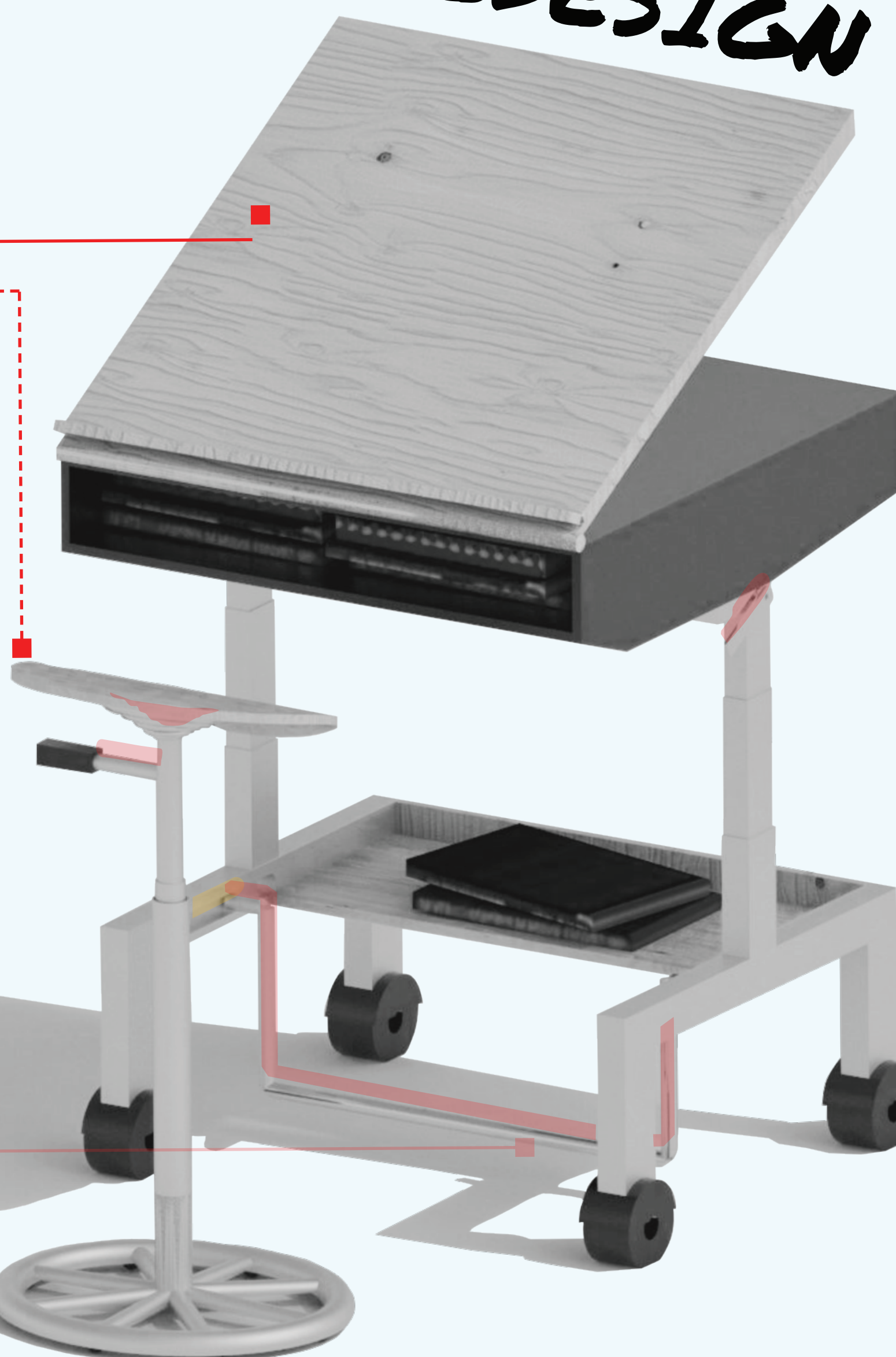
...WORK-SURFACE ANGLE

Allows students to bring their work closer to their eyes, rather than their head to the desk.

...STOOL HEIGHT

Allows each stool to fit each student and their desk. Permits sitter's feet to remain squarely on the ground for proprioceptive benefit and actively supportive legs.

REDESIGN



FORWARD-TILTING SEAT PAN

Allows student to maintain a healthy back, and to rest with active legs. Can thus increase #of stools from 5 (shared to limit time of detriment) to 25.

SEAT ON SPRING

Allows kids to wiggle around side-to-side and front-to-back. Offers movement to hips and spine.

PRIVATE OFFICE

Shelf lowered so it can more invitingly be used as a desk. Fidget bar tucks away to make room.

LARGE WHEELS

Teacher reported that current wheels are somewhat flimsy, hard for kids to move. Kid-friendly wheels means a more moveable classroom.

CHANGE: slightly reduce width of each desk

WHY: so they can all fit in U shape

FUNCTIONAL BENEFIT:

all students can easily observe the teacher

CULTURAL BENEFIT:

inward orientation for all reinforces the unity the class establishes each morning in their Community Circle

RESEARCH SHOWS...

Upward-slanting writing surfaces are beneficial for neck and back health.

Forward-slanting seat pans encourage lumbar lordosis (healthy curve of low back) and decrease thoracic kyphosis (drooping daisy).

Fidgeting of the legs increases blood-flow.

For bibliography and a full report on classroom observations and interviews, email emilyjane_rosen@berkeley.edu