CURRICULUM DESIGN CASE STUDY

Eastern Ergonomics: Caregiver Injury Prevention

Ben Couch

Role	Sole designer and author
Audience	Direct care staff in senior living, and the in-house trainers who teach them
Format	Instructor-led, in three tiers: a 2-hour CEU, a 4-hour Level 1 course, and a Level 2 train-the-trainer program
Materials	Two learner workbooks, a 23-page teacher's manual, and online resource libraries for learners and instructors

The problem

In 24 years directing national training for Watermark Retirement Communities, one of the country's largest senior living operators, I watched us lose caregivers to back and shoulder injuries that ended jobs, drove up workers' compensation costs, and left communities short-staffed. The transfer training they had received taught the steps but never how to move a body, theirs or the resident's, so the steps fell apart the first time a resident shifted weight unexpectedly. That's when people got hurt.

What I built

Eastern Ergonomics takes body mechanics from over forty years of my martial arts practice and turns them into eight principles a caregiver can use during a transfer. I built it in three tiers so that a client can start small and then build its own capacity: a 2-hour CEU that covers the core principles, a 4-hour Level 1 course on all eight, and a Level 2 program that trains the client's own staff to teach the course.

Design decisions

Rules short enough to remember mid-transfer. Each principle is a rule a caregiver can recall with a resident's weight already in motion, such as feet always pull; hands always push; and move in steps, not slopes. The explanation exists to make the rule make sense; the rule is what goes back to the floor.

Caregivers learn to move themselves before they move anyone else. The sequence builds posture, breathing, balance, and movement before it mentions the person being transferred. Caregivers who use their own bodies well adjust to each resident more easily, and the teacher's manual tells instructors why the order matters.

Every concept has a drill people can feel. Body mechanics can't be learned from a page, so every principle comes with an exercise to practice, many of them done with a partner. In one, two people hold a wooden dowel between their centers of gravity and walk together without dropping it, which only works when both of them move from the center. Explanation builds knowledge; practice and coaching are what change behavior.

A manual that builds teachers, not a script. Level 2 covers how to teach before what to teach. Every principle in the workbook then has a matching manual page with teacher's notes, demonstrations, and key points that explain the design intent, along with a materials checklist and an instructor video library.

Practice after the class ends. Learners leave with access to a resource library of refresher videos and documents, so the skill has support once they are back on the floor.

Results

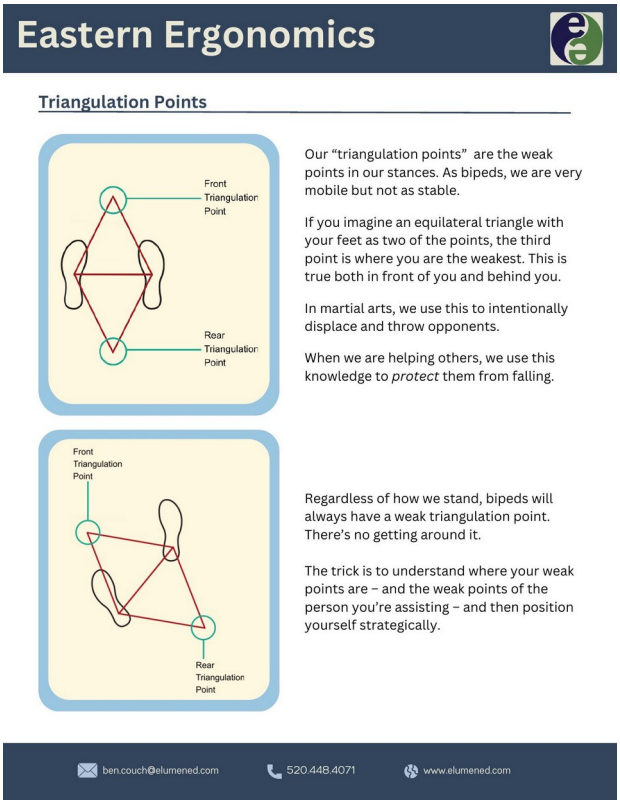
Four client organizations have brought the program in, and six people have completed Level 2 certification to become qualified instructors in their own right.

> *"All I was doing was hurting my back and in turn, he was landing on the floor… Just last night, I realized that I am actually [transferring] him the way Ben showed me."*
>
> Jill Anderson, family caregiver, after a one-on-one coaching session
>
> *"The Eastern Ergonomics training was engaging, practical, and easy to apply."*
>
> Tom Neuman, Seniors Helping Seniors

EXCERPTS

One principle, two audiences

Every principle in the learner workbook has a matching page in the teacher's manual. The learner gets the rule and a picture. The instructor gets the reasoning and what to watch for in practice.



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Triangulation Points

Our "triangulation points" are the weak points in our stances. As bipeds, we are very mobile but not as stable.

If you imagine an equilateral triangle with your feet as two of the points, the third point is where you are the weakest. This is true both in front of you and behind you.

In martial arts, we use this to intentionally displace and throw opponents.

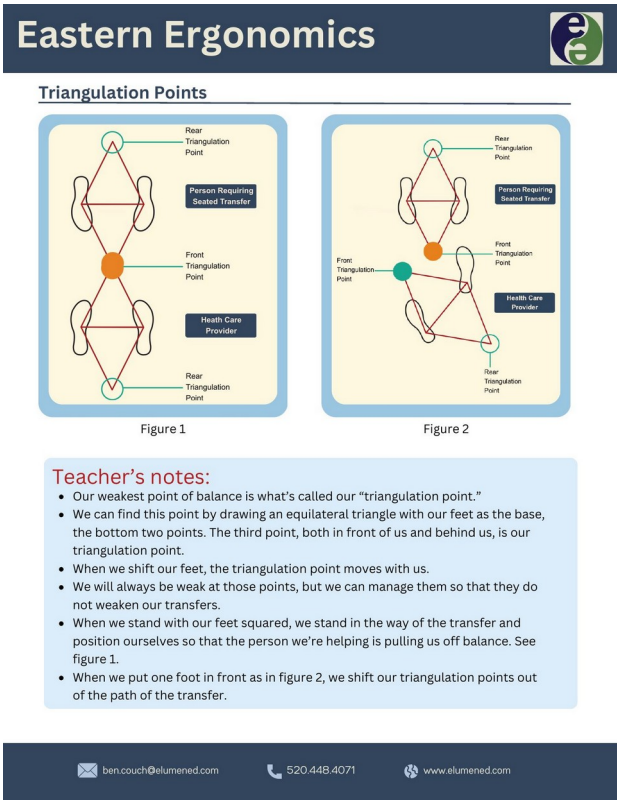
When we are helping others, we use this knowledge to *protect* them from falling.

Regardless of how we stand, bipeds will always have a weak triangulation point. There's no getting around it.

The trick is to understand where your weak points are – and the weak points of the person you're assisting – and then position yourself strategically.

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Learner's page, Level 1 workbook. *The concept and one picture, short enough to recall mid-transfer. A martial artist uses triangulation points to unbalance an opponent; here the same knowledge keeps a resident from falling.*



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Triangulation Points

Figure 1

Figure 2

Teacher's notes:

- Our weakest point of balance is what's called our "triangulation point."
- We can find this point by drawing an equilateral triangle with our feet as the base, the bottom two points. The third point, both in front of us and behind us, is our triangulation point.
- When we shift our feet, the triangulation point moves with us.
- We will always be weak at those points, but we can manage them so that they do not weaken our transfers.
- When we stand with our feet squared, we stand in the way of the transfer and position ourselves so that the person we're helping is pulling us off balance. See figure 1.
- When we put one foot in front as in figure 2, we shift our triangulation points out of the path of the transfer.

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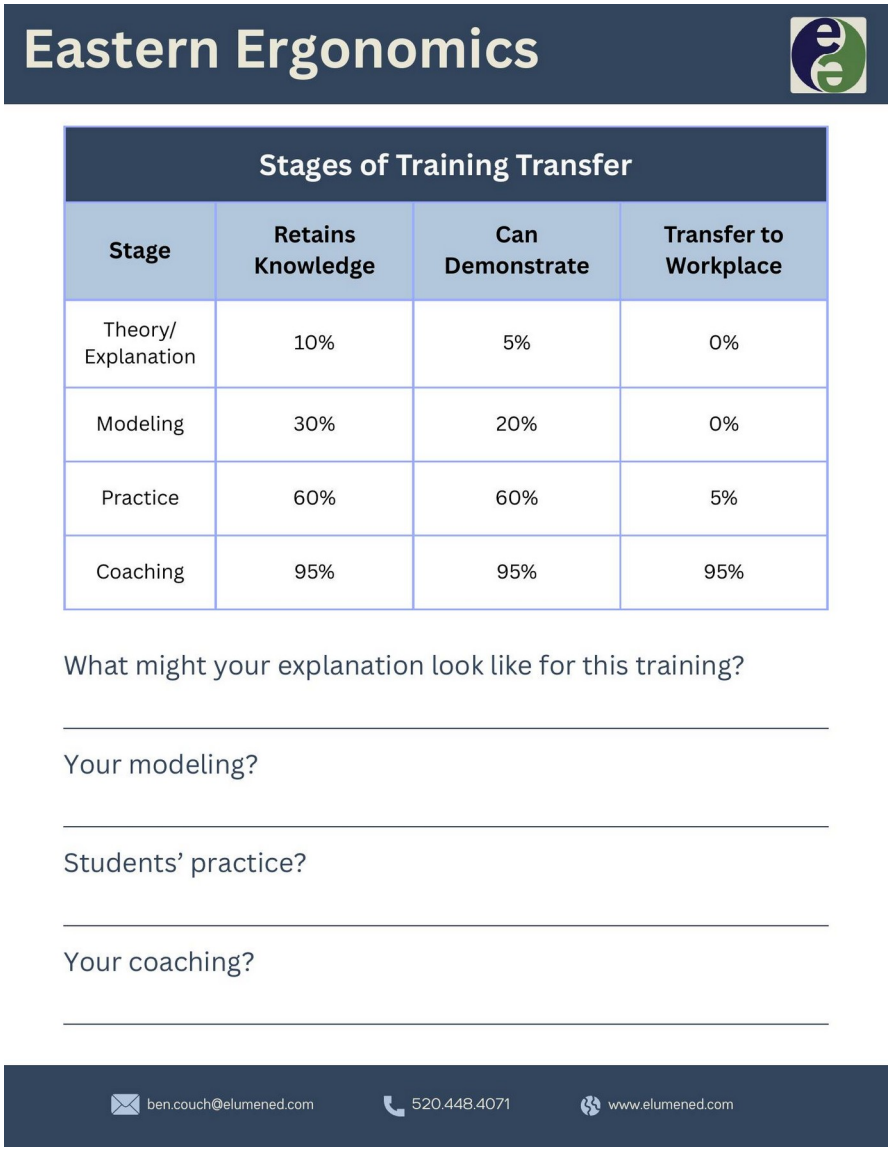
The matching teacher's manual page. *It shows the instructor what to look for in the transfer itself: the squared stance that puts the caregiver's weak point in the resident's path (Figure 1), and the correction, one foot stepped forward (Figure 2).*

EXCERPTS

Teaching the teachers

Before the Level 2 teacher's manual covers any content, it asks new instructors to plan their own explanation, modeling, practice, and coaching against the stages of training transfer, adapted from Joyce and Showers. Their research is the reason the course is built around drills and coaching rather than lecture: explanation and modeling alone carried almost nothing back to the job, while practice paired with coaching carried nearly all of it.

The manual also tells new instructors to expect an implementation dip, the stretch when teaching something new feels worse before it gets better, and it gives them support to get through it: an instructor video library and direct access to me for questions they can't yet answer.



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Stages of Training Transfer			
Stage	**Retains Knowledge**	**Can Demonstrate**	**Transfer to Workplace**
Theory/ Explanation	10%	5%	0%
Modeling	30%	20%	0%
Practice	60%	60%	5%
Coaching	95%	95%	95%

What might your explanation look like for this training?

Your modeling?

Students' practice?

Your coaching?

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Teacher's manual, opening section. Instructors write their own plan for each stage before they teach.

The subject is caregiving, but the method works for any skill that has to show up on the job. I start with the behavior that needs to change, build practice and coaching into the design rather than adding them at the end, and leave the client with instructors who can keep teaching without me.