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ISPI
2008 APPLE BARREL
*10 Ways to Better Blended
 Learning for Knowledge
 Workers*

| Strategy | Rationale | Potential Approaches |
|---|---|--|
| 1. Model expert performance using role plays, video, and/or audio. | “You can observe a lot just by watching.” –Yogi Berra | <ul style="list-style-type: none"> ➤ Streaming audio and video. ➤ Comic strip panels. ➤ Guest presenters. |
| 2. Use experts as coaching “narrators.” | Learn from the best. | <ul style="list-style-type: none"> ➤ Separate experts for each topic in novice courses. ➤ Multiple experts for each topic in higher-level courses. |
| 3. Situate learning and performance in authentic settings. | Train how you fight; fight how you train. | <ul style="list-style-type: none"> ➤ Embedded case study. ➤ Online simulation. ➤ Problem-based learning. |
| 4. Teach the mental models, “rules of thumb,” and process controls that guide expert performance. | Learning what experts do in their minds requires making invisible cognitive skills visible. | <ul style="list-style-type: none"> ➤ Graphically depicted mental models in advanced organizers and instructional content. ➤ Stated rules of thumb (heuristics) and process controls (what to do next). ➤ Allow opportunities to practice to mastery—and beyond. |
| 5. Use articulation and reflection loops. | State what you’re thinking and compare it to experts. | <ul style="list-style-type: none"> ➤ Open-ended questions comparing what learner would do to the expert’s response. ➤ Think-alouds during coaching and mentoring. |
| 6. Employ scaffolding to enable learners to perform real tasks until they master them. | Training wheels help you perform immediately. | <ul style="list-style-type: none"> ➤ Long/short leash instruction. ➤ Job aids, including cue cards. ➤ Novice and expert “views” of software. |
| 7. Teach global before detailed skills. | Knowing the big-picture “lay of the land” guides people as they solve problems. | <ul style="list-style-type: none"> ➤ Provided big picture. ➤ Funneled sequences of instruction that place the organization, group, job, mental models, and tasks in context. ➤ Layers of elaboration. |



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| 8. Increase the complexity and diversity of examples over time. | Learn how to respond to what you'll face on the job. | <ul style="list-style-type: none"> ➤ Representative "slam dunk" case study evolves to an open-ended simulation. ➤ On-the-job training assignments grow increasingly complex. |
| 9. Leverage communities of practice before, during, and after training. | Learn how to "play nice" with the people in your neighborhood, broaden your resources, and ensure currency. | <ul style="list-style-type: none"> ➤ Coaching/mentoring. ➤ Wikis, blogs, and forums. ➤ Success stories databases. ➤ Group-based practice activities. |
| 10. Separate what users need to practice from what they need to access. | It takes less time to use information and perform than to practice performance to mastery level. Information and tools that are embedded in the training are difficult to access on the job. | <ul style="list-style-type: none"> ➤ Modularized information, training, and tools. ➤ Job aids and information systems. ➤ "Use" objectives, rather than "recall." ➤ Friendly, intuitive, and consistent interface design that eliminates or minimizes the need for training. ➤ Information and tools embedded on the job and accessible during training, rather than buried in the training. |

Citations

Collins, A. Brown, J. S., & Holum, A. (1991). Cognitive apprenticeship: Making thinking visible. *American Educator: The Professional Journal of the American Federation of Teachers*, 15 (#3), 6-11, 38-46.
 Available at http://www.21learn.org/arch/articles/brown_seely.html

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