The Dick and Carey Model (1990) is one of the most often-used models for designing and developing effective instruction. The Dick and Carey model is comprised of ten phases:

1. Assess needs to identify goals(s)
2. Conduct instructional analysis
3. Analyze learners and contexts
4. Write performance objectives
5. Develop assessment instruments
6. Revise instruction
7. Develop instructional strategy
8. Develop and select instructional materials
9. Design and conduct formative evaluation of instruction

All phases of this model can be broken down into three categories:

1. Analysis
2. Content Development
3. Evaluation (Stone & Koskinen, 2002)
The Dick and Carey Model relies heavily on Robert Gagne’s domains of learning. (Gagne was an instructional psychologist who perceived learning conditions as building blocks for designing instruction). The Dick and Carey model is pragmatic…it is focused on providing instructional strategies for developing learning and performance solutions. (Roberts, Conn, Lohr, Hunt & Duffy, 2003).

Online learning environments also make use of the Dick and Carey model. Hypermedia instructional systems are designed so that they carry the whole burden of instruction for online learning. They present the instructional objectives and the material to the learners, guide them through activities, test their performance, and provide them with feedback (Vrasidas, 2002).

The web-based training (WBT) model uses the Dick and Carey model as a foundation adding three categories: strategic planning, deployment, and maintenance. Stone & Koskinen, (2002), states that one could argue that these three phases are implicit in the Dick and Carey model, but with WBT, these phases must be overt, critical phases of the design process because they take on more importance. For example, strategic planning involves more than planning your training strategy; it involves planning your technology strategy as well. Similarly, deployment and maintenance involve more than just deploying and maintaining training when technology is involved. You will need to deploy and maintain the technology as well.

As proven by their popularity, there are major benefits to using the Dick and Carey model and other systems orientation models. When items are
developed to measure specific behaviors, they are easier to write and more authentic. Because the work is based on thoroughly analyzed goals and objectives, the process is empirical and easily replicable (Connor, Radcliff, & Gedeon, 2002). They go on to say, “The systematic process also facilitates a high degree of collaboration between content and measurement experts.”

There are drawbacks in utilizing the Dick and Carey model. In a study done by Baylor (2002), there were indications that students may have felt the systematic approach was too prescriptive, and they were thereby more likely to think that it made the instruction and the planning process seem less engaging. The same study suggests that exposure to a constructivist approach adds richness, diversity, meaning, and interest to the process.

The writer has a great appreciation for the Dick and Carey model and uses ISD frequently in her work. The constructivist approach is problematic when teaching specific regulations and medical coding and terminology because of differences in interpretation, and difficulty measuring success.


and item response theory to the problem of measuring information literacy skills. *College & Research Libraries, 63*(6), 528-543.


