

# An Integrated Instructional Design Approach for Fostering Lasting Behavioral Change

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Seemingly good instruction sometimes yields mediocre results. Even the most carefully and systematically designed instruction can fail to achieve desired learner outcomes. Or, if these outcomes are achieved initially, they are not sustained. In such situations, learners are frequently identified as the culprits, usually for their lack of motivation, effort, or willingness to change. With this perspective, instructional designers are stymied.

Adhering to a traditional instructional systems design (ISD) approach may not be sufficient to develop instruction that fosters learning and lasting behavioral change, particularly in situations in which learners are resistant to change or where new behaviors must be integrated into their day-to-day life.

For example, leadership training aimed at moving managers from authoritarian to team-oriented approaches often produces lackluster results in spite of the presumed quality of the instruction itself. Although trainees may learn a great deal about management styles and leadership techniques, they frequently fail to demonstrate these techniques in the workplace. Other examples include financial management courses designed to achieve personal fiscal responsibility, parenting programs aimed at teaching more effective child rearing practices, and communication courses intended to improve interpersonal relationships. These are common areas where actual outcomes often fall short of expectations. In situations such as these, an integrated approach may be necessary to design instruction that produces desired results.

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This article describes an integrated instructional design approach that addresses cognitive, attitudinal, and behavioral aspects of learning. The approach is based on three theoretical frameworks: instructional systems design, social learning theory, and the stages of change framework provided in the Transtheoretical Model of Change (Prochaska, Norcross, & DiClemente, 1994).

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## Instructional Systems Design

Conventional instructional systems design theory forms the foundation of the integrated approach. For example, Dick and Carey's (1990) model provides a framework for the systematic design of instruction. The following steps are involved: (1) identification of instructional goals, (2) instructional analysis, (3) identification of entry behaviors and learner characteristics, (4) development of performance objectives and test items, (5) determination of an instructional strategy, (6) development of materials, (7) formative evaluation (pilot testing), (8) revision, and (9) summative evaluation.

Application of this framework provides an efficient and effective means of creating instruction which ensures that students obtain the knowledge and skills they require. Careful adherence to a systematic approach is important to develop the cognitive substructure of behavioral change. Clearly stated instructional goals and performance objectives, coupled with appropriately sequenced content and instructional activities as well as carefully matched test items and assignments, are a necessity. Such an approach ensures that learners acquire requisite skills and knowledge as they progress through the course or training program. But these elements may not be sufficient to effect behavioral change, especially lasting behavioral change. Consideration of other theoretical frameworks to guide instructional design may also be required to achieve this goal.

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## Social Learning Theory

Social learning theory (e.g., Bandura, 1977a) addresses how social and personal competencies can evolve out of the social conditions within which learning occurs. A thorough analysis and understanding of the learner's social context is an important component of creating instruction that promotes and sustains behavioral change. Building a supportive social and instructional environment within which learning occurs and behavioral change can be demonstrated is an important consideration. The following strategies are suggested:

- **"Normalizing" experience.** The process of behavioral change can involve significant changes in self-concept and even extreme emotional reactions. Course content, examples, and activities should be provided to help students

recognize that such reactions are "normal" and that others share their experience.

- **Identifying barriers.** What internal and external factors could potentially hinder learners from successfully achieving the desired behaviors? Negative attitudes or personal beliefs may be barriers to change. For example, in the case of a personal financial management course, beliefs such as "money is power" may need to be examined and dispelled. Similarly, team-based leadership may be hindered by attitudes reflecting high needs for control. Addressing such attitudes may enhance the likelihood of achieving the desired outcomes. Examination of the learners' social or environmental context may reveal other potential barriers. For example, workplace policies or lack of communal areas may hinder management training programs aimed at promoting team building. Lack of spousal support may hinder attempts to change parenting styles or financial management practices. To address these barriers, instruction should include content, activities, and support strategies to help students overcome these obstacles.
- **Building on existing social supports.** Consider existing factors that could support behavior change. Are there resources that could buttress students' efforts to learn and change their behavior? Instruction can be designed to capitalize on these assets. For example, students in a communications course could engage in exercises in which they identify trusted individuals to provide feedback on their efforts to use their new skills, thus creating a more supportive social environment.
- **Developing social skills.** Learning how to behave appropriately in a new situation or how to behave differently in a familiar situation also must be considered. For example, a common reason why individuals are hesitant to attempt a new behavior pertains to not knowing what to expect, or fear of embarrassment over saying or doing the wrong thing. Students should be provided with concrete information and a range of examples and activities to help them develop the social skills they need to demonstrate the desired behavior. Particularly worrisome situations especially need to be addressed, such as what to say or do if problems arise, questions are raised, conflict occurs, or resistance is encountered.

Inducing self-efficacy is another important strategy. Self-efficacy (Bandura, 1977b) pertains to the learners' conviction that they can successfully execute a behavior, and involves a prediction of how effective or competent their behavior will be. Efficacy expectations affect the extent to which a learner will use the newly acquired behavior in difficult situations, the amount of

effort that will be expended, and how long the behavior will persist in the face of obstacles and frustrations. Efficacy expectations can be influenced in a variety of ways.

Two primary strategies for inducing self-efficacy are verbal persuasion and vicarious experience through the use of live and symbolic modeling. For example, course content may emphasize the advantages of engaging in the desired behavior and include personal testimonials in the form of examples. Such elements are designed to persuade students that they too can be successful, and entice them to attempt behavioral change.

Instructional elements that model the behavior may also increase confidence and enhance self-efficacy. Activities may be included in which students observe others engaged in the desired behavior. Such examples provide a model to follow and reduce the need for more risky trial-and-error attempts to learn the new behavior. Similarly, activities can be included in which students engage in the behavior in low-risk situations, such as through role-playing and simulations.

To further support self-efficacy, early success experiences should be built into the design of the course. Students need to engage in activities in which they have a high likelihood of success, e.g., answering practice questions that are carefully matched to the content and objectives of a preceding section, or gathering information readily accessible within their workplace or immediate environment. These experiences contribute to students' self-confidence and comfort in their role as learners, as well as in their role as potential practitioners of a new behavior.

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### Stages of Change Framework

The third theoretical framework underlying the integrated instructional design approach is the Transtheoretical Model of Change and the concept of readiness for change (Prochaska, DiClemente, & Norcross, 1992; Prochaska, Norcross, & DiClemente, 1994). This theory addresses how people change health-related behaviors. It has been applied to numerous areas, such as alcohol and drug abuse, smoking, eating and exercise habits, HIV/AIDS prevention, and weight loss. The model describes five stages of change. Each stage has optimal processes most likely to promote change. In the Transtheoretical Model, change is perceived along a continuum, in which individuals move through predictable stages throughout the change process. Each stage has specific tasks, which must be completed before moving on to the next stage. The stages are described below:

1. **Pre-contemplation.** People in the pre-contemplation stage usually have no intention of changing their behavior, and typically deny they have a problem (hence the term "denial" which

is frequently applied to this stage). The main task of the pre-contemplation stage is for the individual to become aware of their behavior (or lack thereof). The most effective strategy is to increase the individual's perception of the risks and problems with the current behavioral stage.

2. **Contemplation.** In this stage, people acknowledge they have a problem and are seriously thinking about solving it. They have not yet made a commitment to take action to change their behavior. Contemplators struggle to understand their problem, to see its causes, and to evaluate possible solutions. The main task of this stage is for the individual to gain information and understanding of his or her behavior, and to weigh the pros and cons of the problem and its solution. The most effective strategy is to "tip the decisional balance" (the pros and cons) in favor of change.
3. **Preparation.** People in the preparation stage are planning to take action. The individual may be committed to action, but still feels ambivalent about making a change. This ambivalence must be resolved. The main task of this stage is to develop a plan for change. The most effective strategy is to help the individual develop a plan that is acceptable, appropriate, and effective.
4. **Action.** The action stage is where people actually change their behavior. They engage in activities or change their environment in order to alter their problem behavior. Many people, erroneously, equate action with change. It is only one stage, and change will not occur (or last) unless the other stages are completed as well. The main task of the action stage is demonstrating behavior. The most effective strategy for individuals in this stage of the change process is to provide encouragement and support to enhance the individual's sense of self-efficacy.
5. **Maintenance.** During the maintenance stage, the gains attained during the action and other previous stages are consolidated. The individual typically struggles to prevent lapses and relapses. Although maintenance is sometimes viewed as a static stage, it is a critical continuation, not an absence, of change. The main task is to stabilize the behavior and avoid relapse. The most effective strategy is to help the individual maintain the change in behavior.

The stages-of-change framework described above allows an instructional goal to be conceptualized as a continuum of behavior, rather than as a singular, terminal behavior. Performance may be perceived on a continuum, ranging from considering changing one's behavior to actually doing so, from making a few tentative first steps to being an expert performer. A

course or training program may be designed to move students along the milestones that reflect this continuum of performance.

Instructional analysis and the determination of an instructional strategy should also consider the learner's stage of readiness for change. For example, as a course or program continues, students may be presented with content and progressively more challenging experiences to increase the breadth and depth of their performance. To illustrate, a persuasive discussion of the benefits of a desired behavior or a "pros and cons" exercise may be included for individuals in the contemplation stage of change process. For those in the preparation stage, content may be presented about what to expect and how to conduct themselves as they practice the new behavior, and activities may be included to help students develop an action plan. Activities may be included for those in the action or maintenance stages to enhance their application of the new behavior, for example, to assume leadership, peer support, or "train the trainer" activities.

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## Conclusion

The integrated instructional design approach described in this article involves cognitive, social, and behavioral aspects of learning. Although its application is broad in scope, it may be particularly useful in instructional situations in which behavioral change must be integrated into the learner's lifestyle or where resistance to change may be encountered. When lasting behavior change is the goal, instructional designers need to consider the learner's stage of readiness for change as well as the creation of a supportive environment that promotes the likelihood of the behavioral change, and design instruction accordingly. □

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