

Tutorial: Approaches To Teaching: Traditional Training versus Apprenticeship

[See also Tutorials on [Instructional Routines](#), [Errorless Learning](#), [Instructional Pacing](#), [Learning Trials](#)

WHAT IS THE TRADITIONAL TRAINING MODEL OF TEACHING (PERFORMANCE-ORIENTED TEACHING)?

Traditionally, teaching routines involve the following sequence of steps:

1. identifying a learning task
2. modeling the target behavior for the learner
3. demanding/requesting performance from the learner, possibly with cues or prompts to facilitate successful performance
4. providing corrective feedback (in the event of failure) or motivational feedback (in the event of success) to the learner after he or she performs

Most teachers routinely teach by asking questions (or demanding other types of performance) and then giving feedback. This type of teaching is very popular and can be successful for many students.

The following categories of students are NOT good candidates for teaching that highlights performance (remembering that even a simple question is a performance demand).

1. Anxious students: For students who are anxious, this style of teaching can be extremely problematic *because it highlights performance demands, which cause anxiety*. At the core of all such teaching, however pleasant and supported it may be, is the demand for performance. Performance demands typically induce anxiety in every human being, but particularly in students who are anxious and who frequently fail when required to perform.

2. Students with a significant history of failure: Students who are discouraged or depressed because of a substantial history of failure should experience as much success in school as possible. Apprenticeship teaching can be used to guarantee success, whereas performance-oriented teaching leaves more room for student failure.

3. Students with serious memory problems: For students with serious memory problems, errors often "stick" more readily than correct responses (perhaps because of the emotionality associated with errors). Thus errorless learning is preferable for these children versus performance-oriented teaching that opens the door to errors.

4. Manipulative students: Students who like to manipulate adults are given opportunities to manipulate when they are asked to perform.

5. Oppositional and defiant students: For students who are *defiant*, performance-oriented teaching can be dangerous because it *creates many opportunities for defiance*. It is far better for teachers to reduce the opportunities for defiance than to have to react to repeated acts of defiance.

WHAT IS THE APPRENTICESHIP MODEL OF TEACHING (SUPPORT-ORIENTED TEACHING)?

The alternative model of teaching is that associated with apprenticeship, which has the following sequence of components:

1. A meaningful task is identified.
2. The teacher makes sure the student knows exactly what the learning target looks like (e.g., via modeling, visual supports, etc.).

3. The teacher invites the learner to *participate as a collaborator* as much as possible (without demanding performance – that is, “we work as a team to ensure that the learning task is completed successfully”).
4. The student acts independently only when fully ready to do so.

The learning occurs not as a product of “model+plus+performance demand+plus+feedback/reinforcement”, but rather as a product of *supported participation*, with the learner accepting more and more responsibility as competence and confidence grow. In apprenticeship learning, there need be no errors – or associated anxiety and need to escape.

The simplest form of apprenticeship teaching occurs in the following math teaching routine:

Teacher: We need to figure out which of these piles is more; can we do it as a team?
 Student: OK
 Teacher: OK: there are 7 here and 4 here – I think this is more – what do you think?
 Student: yes
 Teacher: We did it! 7 is more than 4; let’s say it together;
 Both: “7 is more than 4”
 Teacher: great; ready to do one alone? or do you want to do it as a team again??
 etc

This is contrasted with a direct question, which may elicit anxiety in some students **[See Tutorial on Anxiety]** and defiance in others **[See Tutorial on Oppositionality]**. The teaching routines of Direct Instruction programs are organized around this routine of errorless learning – errorless because the student does the task with somebody else long enough to be confident when asked to do it alone. Furthermore, errors are “pre-corrected” – that is, if a teacher expects that the student will have difficulty, then the teacher offers the support needed to ensure that the student will be successful. When Direct Instruction teaching routines are well implemented, the students experience no anxiety – and learning can be fun. **[See Tutorial on Errorless Learning]**

Apprenticeship learning is used in many important types of teaching in which errors are unacceptable (e.g., resident surgeons learning surgery; apprentice plumbers, electricians, auto mechanics, and others learning their trades). It is also standardly used by parents in their interaction with young children. It is the approach to teaching that has been used throughout history and across cultures when the teachers know that the learning is extremely important and that errors need to be avoided. It is a teaching style that is used less commonly than performance-oriented teaching in schools; however, it is quite easy to implement. For example, in OT a block design task can be introduced as “We are going to take some of these blocks and make something that looks like this picture. C’mon, we can do this together.” And then the student could be given more responsibility as he gains skill and confidence.

It is interesting to reflect on the fact that Direct Instruction programs – often thought to be purely performance oriented – use a teaching routine much like that described here as apprenticeship learning.

THE 90 - 90 RULE

A good rule of thumb in teaching students who are anxious, discouraged, or defiant, or who have a serious memory problem is the 90-90 Rule:

1. Ask the student to perform (e.g., to answer a question) only if you are **at least 90% certain that the student will be successful**. If you are not 90% certain, then provide the supports necessary to ensure that the student will be successful.
2. Make certain that **the student is successful in at least 90% of learning trials** (e.g., answering questions) over the course of the day. Students with disability often fail at an alarmingly high rate of failure, explaining much of their anxiety and negative behavior.

WHY IS APPRENTICESHIP TEACHING PARTICULARLY IMPORTANT FOR MANY STUDENTS WITH TBI?

Many students with TBI have severe memory problems, and therefore should not be forced to make errors in their learning (because errors “stick”). Many students with TBI are anxious and have a history of failure since the injury, particularly in relation to their standards of success from before the injury. And many students with brain injury have a long history of manipulateness or oppositionality. For all of these reasons, students with brain injury are often strong candidates for apprenticeship style teaching.

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