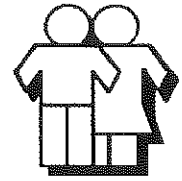


## Benefits of DI Program Design

- Design of DI guarantees that students who are at mastery will learn what is in the next lesson.
- Design guarantees that the students who are not at mastery will get farther behind.
- If taught to mastery, students retain information over the summer:
  - Document performance at end of year.
  - Start next year no more than four lessons behind where they were at end of preceding year.
- The design permits teachers to achieve reliable progress if they teach to mastery -- projections can be made accurately.
- The design requires teachers to individualize instruction. The teacher cannot teach to mastery without referring to student performance. Decisions are based on each student's behavior.

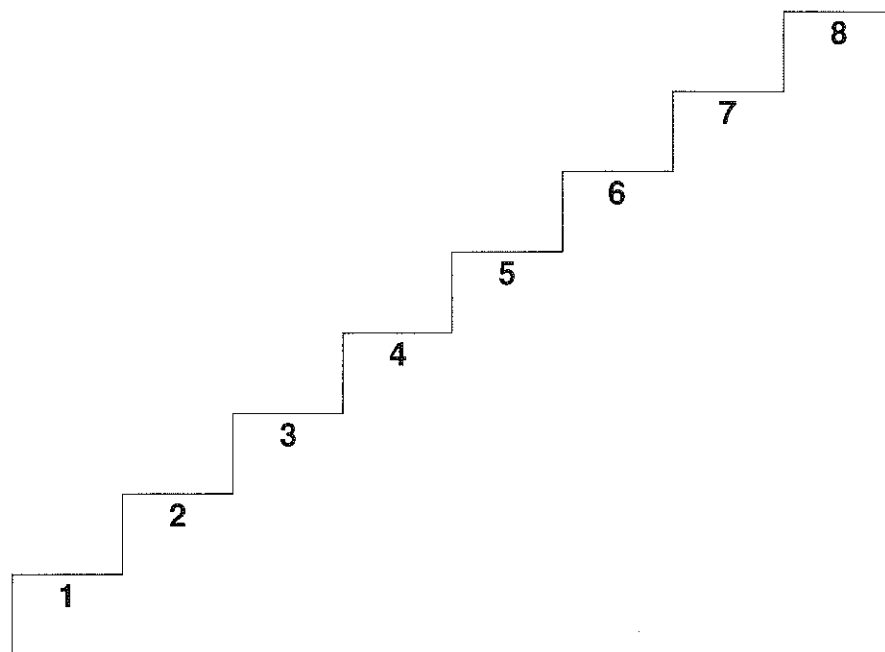


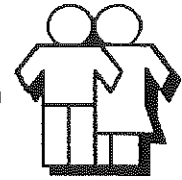
## Direct Instruction Program Design

### Features that Support Mastery

1. New parts of a lesson account for only 10 – 15 percent of the total lesson.
2. The design is somewhat like a staircase. Students who are placed appropriately move successfully through the program; however, the design potential is obliterated if students are not at mastery on each step.

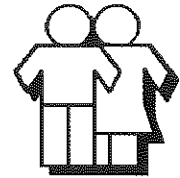
### Mastery Teaching Staircase





## Facts about Learning

- Unfamiliar learning may require hundreds of trials.
- When parallel items are later presented, students learn them with fewer and fewer trials.
- Low performers must achieve a very high mastery rate—well over 90% first time correct because the material is unfamiliar.
- Higher performers do not have to achieve as high a criterion of mastery because the material is familiar.
- Once something is learned, it is either retained or relearned with a fraction of the number of trials needed to teach it earlier.



## **Mastery Versus Challenges**

1. Students take longer to achieve mastery if they make more mistakes while learning.
2. Students learn less thoroughly if they are presented with material that is too difficult rather than material that is easy.
3. There is a place for challenging content, after all the component skills are taught to mastery.



## Criteria and Procedures for Measuring Mastery

First-time correct procedures are the primary indicator of mastery. Four criteria allow **precise** interpretation of correct-response performance.

1. Students should be at least 70% correct on anything introduced for the first time.
2. Students should be at least 90% correct on parts of the lesson introduced earlier.
3. At the end of the lesson, students should be 100% firm on ALL tasks and activities.
4. The rate of errors should allow the teacher to complete the lesson in the allotted time.

Mastery can also be measured through delayed tests, that is, selected tasks that are presented again later in the lesson or in the day.