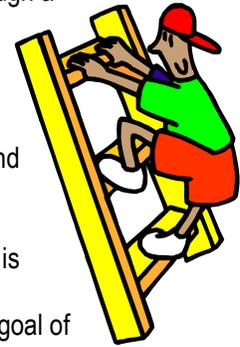


# The Instructional Hierarchy: Linking Stages of Learning to Effective Instructional Techniques

When mastering new academic skills or strategies, the student learner typically advances through a predictable series of learning stages. At the start, a student is usually halting and uncertain as he or she tries to use the target skill. With teacher feedback and lots of practice, the student becomes more fluent, accurate, and confident in using the skill. It can be very useful to think of these phases of learning as a *hierarchy* (See chart below). The learning hierarchy (Haring, Lovitt, Eaton, & Hansen, 1978) has four stages: *acquisition*, *fluency*, *generalization*, and *adaptation*:



1. **Acquisition.** The student has begun to learn how to complete the target skill correctly but is not yet accurate or fluent in the skill. The goal in this phase is to improve accuracy.
2. **Fluency.** The student is able to complete the target skill accurately but works slowly. The goal of this phase is to increase the student's speed of responding (fluency).
3. **Generalization.** The student is accurate and fluent in using the target skill but does not typically use it in different situations or settings. Or the student may confuse the target skill with 'similar' skills. The goal of this phase is to get the student to use the skill in the widest possible range of settings and situations, or to accurately discriminate between the target skill and 'similar' skills.
4. **Adaptation.** The student is accurate and fluent in using the skill. He or she also uses the skill in many situations or settings. However, the student is not yet able to modify or adapt the skill to fit novel task-demands or situations. Here the goal is for the student to be able to identify elements of previously learned skills that he or she can adapt to the new demands or situation.

When the teacher accurately identifies a student's learning stage, the instructor can select instructional ideas that are more likely to be successful *because* these strategies match the student's learning needs.

## Reference

Haring, N.G., Lovitt, T.C., Eaton, M.D., & Hansen, C.L. (1978). *The fourth R: Research in the classroom*. Columbus, OH: Charles E. Merrill Publishing Co.

## Instructional Hierarchy: Matching Interventions to Student Learning Stage (Haring, et al., 1978)

| <i>Learning Stage</i>                                                                                                                                                                     | <i>Student 'Look-Fors'...</i>                                                                                                                                                                                                                                                                                                                                   | <i>What strategies are effective...</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Acquisition:</b><br/>Exit Goal: The student can perform the skill accurately with little adult support.</p>                                                                         | <ul style="list-style-type: none"> <li>• Is just beginning to learn skill</li> <li>• Not yet able to perform learning task reliably or with high level of accuracy</li> </ul>                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• Teacher actively demonstrates target skill</li> <li>• Teacher uses 'think-aloud' strategy-- especially for thinking skills that are otherwise covert</li> <li>• Student has models of correct performance to consult as needed (e.g., correctly completed math problems on board)</li> <li>• Student gets feedback about correct performance</li> <li>• Student receives praise, encouragement for <i>effort</i></li> </ul>                                                                                                                                                                                                                                                     |
| <p><b>Fluency:</b><br/>Exit Goals: The student (a) has learned skill well enough to retain (b) has learned skill well enough to combine with other skills, (c) is as fluent as peers.</p> | <ul style="list-style-type: none"> <li>• Gives accurate responses to learning task</li> <li>• Performs learning task slowly, haltingly</li> </ul>                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Teacher structures learning activities to give student opportunity for active (observable) responding</li> <li>• Student has frequent opportunities to <i>drill</i> (direct repetition of target skill) and <i>practice</i> (blending target skill with other skills to solve problems)</li> <li>• Student gets feedback on <i>fluency</i> and <i>accuracy</i> of performance</li> <li>• Student receives praise, encouragement for <i>increased fluency</i></li> </ul>                                                                                                                                                                                                         |
| <p><b>Generalization:</b><br/>Exit Goals: The student (a) uses the skill across settings, situations; (b) does not confuse target skill with similar skills</p>                           | <ul style="list-style-type: none"> <li>• Is accurate and fluent in responding</li> <li>• May fail to apply skill to new situations, settings</li> <li>• May confuse target skill with similar skills (e.g., confusing '+' and 'x' number operation signs)</li> </ul>                                                                                            | <ul style="list-style-type: none"> <li>• Teacher structures academic tasks to require that the student use the target skill regularly in assignments.</li> <li>• Student receives encouragement, praise, reinforcers for using skill in new settings, situations</li> <li>• If student confuses target skill with similar skill(s), the student is given practice items that force him/her to correctly discriminate between similar skills</li> <li>• Teacher works with parents to identify tasks that the student can do outside of school to practice target skill</li> <li>• Student gets periodic opportunities to review, practice target skill to ensure maintenance</li> </ul>                                  |
| <p><b>Adaptation:</b><br/>Exit Goal: The Adaptation phase is continuous and has no exit criteria.</p>                                                                                     | <ul style="list-style-type: none"> <li>• Is fluent and accurate in skill</li> <li>• Applies skill in novel situations, settings without prompting</li> <li>• Does not yet modify skill as needed to fit new situations (e.g., child says 'Thank you' in all situations, does not use modified, equivalent phrases such as "I appreciate your help.")</li> </ul> | <ul style="list-style-type: none"> <li>• Teacher helps student to articulate the '<i>big ideas</i>' or core element(s) of target skill that the student can modify to face novel tasks, situations (e.g., fractions, ratios, and percentages link to the '<i>big idea</i>' of <i>the part in relation to the whole</i>; 'Thank you' is part of a larger class of <i>polite speech</i>)</li> <li>• Train for adaptation: Student gets opportunities to practice the target skill with modest modifications in new situations, settings with encouragement, corrective feedback, praise, other reinforcers.</li> <li>• Encourage student to set own goals for adapting skill to new and challenging situations.</li> </ul> |