

## How Adults Learn - Review Guide

The principles of **adult learning theory**, or **andragogy**, prescribe the types of learning activities and environment that maximizes adults' learning potential. *GA instructors should use the following as a checklist when planning their lessons to ensure that it aligns with best practices for teaching adults.*

### The Basics

In the 1980s, Malcolm Knowles popularized **andragogy** (the method and practice of teaching adult learners). The basic premise is that adults need to be **active learners**; they need to *do* in order to learn.

WHAT ADULTS NEED	WHAT THIS MEANS FOR YOUR LESSON
<b>1. Opportunities for Self-Direction</b> <i>Adults need guidance in the beginning, but they eventually want to direct their own learning and be self-sufficient.</i>	<p><b>Break tasks down into simpler steps.</b> This will give students a procedure to follow on their own, outside of class.</p> <p><b>Include both mechanical and strategic thinking steps:</b></p> <ul style="list-style-type: none"> <li>• <i>Mechanical steps</i> (i.e. how to use Twitter) are easier to learn on one's own.</li> <li>• <i>Strategic thinking steps</i> (i.e. how to determine if a Twitter campaign is right for your startup) tend to be more opaque because they outline how to think about a problem and are often not written down by experts, to whom such knowledge is routinely accessed. (i.e. Twitter gurus don't need to write down how they determine if a campaign is right for a client).</li> </ul> <p><b>Suggest next steps at the end of the lesson.</b> If students want to learn more or are interested in related topics, what should they do? How can they continue to self-direct their own learning?</p>
<b>2. Opportunities to draw on life experiences</b> <i>Adults need to relate new learnings to past experiences. They are not blank slates. They have tons of prior knowledge that should be recognized and utilized.</i>	<p><b>Involve students to select methods, materials and resources for instruction.</b> Use the beginning of the course or lesson to ask students what they are most interested in learning. During the course or lesson, continue to check in regarding the relevance and pace of instruction. Throughout the course or lesson, ask students to share their own experiences and determine as a group which examples and skills are most critical to learn.</p> <p><b>Allow for student choice.</b> As often as possible, allow students to select the context, topic, industry, or company on which an assignment or project can be based. This enables students to capitalize on their prior knowledge. The result is that they're more engaged and can extend prior and new learnings.</p> <p><b>Use examples that relate to prior knowledge.</b> The advantage you have with adults is that you can relate complex relationships and systems to ones they already know about, facilitating a quicker understanding of new material.</p>
<b>3. Relevant</b> <i>Adults are most interested in learning skills that are immediately relevant to their work and/or personal lives. In other words, they're interested in learning knowledge or skills that can be immediately applied.</i>	<p><b>Take inventory of your students' backgrounds.</b> Where are most coming from? At what point are they at in their professional careers and lives? What do they already know about the topic or skill? Determining the group's starting point with a simple poll, friendly quiz, or a get-to-know-you activity allows you to understand your audience and adapt learning activities accordingly.</p> <p><b>Tweak assignments and classroom culture to make them more authentic.</b> Authentic learning experiences mirror tasks students will be asked to do in the real world. The more authentic you can make your classroom (e.g. simulating the industry/environment in which students will apply skills) and assignments (e.g. making them tasks which students would be asked on the job), the more relevant and interesting they are to students. The result is higher engagement.</p>

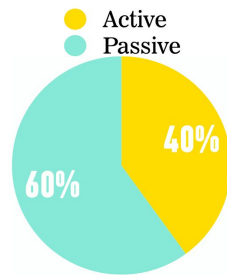
<p><b>4. Problem-centered learning</b>  <i>Adults are motivated to learn when they face problems that they can't solve on their own. Learning is a means to an end: to solve the problem.</i></p>	<p><b>Center the lesson around a problem.</b> Focusing the lesson on “how to acquire more new-to-file emails” or “increasing site traffic” is more useful than “marketing strategies using Facebook.” Help students solve problems.</p> <p><b>Drive the lesson toward creating a deliverable or something students can use.</b> Identifying tangible outcomes of your lesson enables you to help students.</p>
<p><b>5. Social</b>  <i>Adults thrive in collaborative settings where teamwork is valued and leveraged to motivate group achievement. Social environments encourage peer learning &amp; value past learning experiences.</i></p>	<p><b>Create a cooperative environment for learning in the classroom.</b> Competitive environments tend to silo the exploratory nature of learning and mimic the negative effects of adults’ professional lives. Instead, creating a collaborative environment enables adults to make mistakes; mistakes and prior experiences are a key component that drive high-impact learning in adults.</p> <p><b>Authentic learning environments are social environments.</b> Communities of practice can have a powerful effect on outcomes. Not only does it feel good to go through a program as part of a group (with support from and for others), but this social experience better simulates the type of work environments that adults are used to. Better yet, it can also accelerate the results. We liken this to the networking effect: A phenomenon whereby a good or service becomes more valuable when more people use it.</p> <p><b>Give students a say in their own learning experience.</b> Seek feedback on instructional methods and input when making class decisions &amp; topic choices.</p>
<p><b>6. Active learning</b>  <i>Adults learn by doing. Experience - including mistakes - provides the basis for learning.</i></p>	<p><b>Cut the theory.</b> While a minimal amount may be necessary to explain the ‘why’ behind a concept or skill, the lesson should focus on how students can apply the information to the task at hand and in their own lives.</p> <p><b>Limit lecture &amp; plan for student activities.</b> Lecturing makes students passive and does not give them a chance to try using the new skills themselves.</p> <p><b>Distinguish between active and passive learning.</b></p> <ul style="list-style-type: none"> <li>• <b>Recognize instructional ratios.</b> Instructional ratios indicate what percent of time <b>active learning</b>, or student-led activities, are happening. When students work in small groups (ST-SG) or individually (silent work or SW), they are leading the activity and learning most actively. On the other hand, <b>passive learning</b> happens when only one person engages in learning. This can be seen when the teacher is talking to the whole class (TT-WG), such as during lecture, and when the instructor calls on one student to answer a question during a discussion (ST-WG). In both cases, it’s only guaranteed that one person is learning - the one who is talking.</li> <li>• <b>Set yourself up for active learning success.</b> No more than 60% of class time should be instructor-led. For high-impact learning to take place, at students should have the opportunity to practice the skills they’re learning at least 40% of time.</li> </ul> <p><b>Video Clips of Instructor Ratio in Action:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Teacher Talk (TT)</a> - Jeff K., WDI, TT for whole clip.</li> <li>• <a href="#">Student Talk- Whole Group (ST-WG)</a> - Kyle Lee, GA Career Coach (32:16 - 34:29)</li> <li>• <a href="#">Student Talk- Small Group (ST-Sg)</a> - Damien DeCuir, GA Instructional Coach (5:37- 6:23)</li> <li>• <a href="#">Independent/Silent Work</a> - Matt Huntington, WDI (~12:00-16:00)</li> </ul> <p>[See images, incl.]</p>

## Instructor Ratio Overview

The Ideal Ratio of Instruction vs. Student Application

**60 : 40**

In other words, adult learners need to be actively learning for about 40% of the time.



## Instructor Ratio Breakdown

### TT Teacher Talking

- Lecture
- Demonstration
- Code Along (if students are mostly silent and copying)

### AV Audio / Visual

- Watch a video

### ST - SG Students Talking *small groups*

- Pair programming
- Graded lab (if done in pairs)

### ISW Independent Student Work

- Quiz
- Graded lab (if independent)

### ST - WC Students Talking *whole class*

- One-to-many questioning
- Cold Calling
- Class discussion
- Code along (if instructor asks questions)

### NIT Non-Instructional Time

- Announcements
- Restroom break

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## Instructor Ratio: Active Learning

Instructional Ratio:  
What research has shown

