Assessing Adult Learning in Graduate Theological Education

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INTRODUCTION

This series of learning inventories is a companion volume to, *Orienting Adults to Learning in Graduate Theological Education*. We have selected the inventories because of their utility of application and usefulness for conducting learning self-assessments. The inventories and assessments will combine to provide a comprehensive picture of your learning skills. The information gleaned from the taking of the inventories and assessments will provide you with essential information about the type of learner you are or need to become. All of the inventories and assessments are self-administering and self-grading. None of the inventories, with the possible exception of Kolb's *Learning Style Inventory*, have any predictive value. The purpose of the inventories is to provide you with additional information concerning your learning skills not to make judgments on your academic abilities. None of these inventories correlate with GPA or IQ. Do not let the test taking quality of these inventories scare you away from completing them. There are no "right answers" required for any of them; they are simply appraisals based most often upon your own self-assessment.

Left Brain/Right Brain Orientation

This learning inventory provides an informal indication as to your preferred brain hemisphere orientation. This information will enable you to understand and appreciate your preference for processing information you are learning. A few people will display a preference for one or the other, but the majority seems to prefer a balance between the two.

In the early 1960's, Dr. Roger Sperry and his colleagues studied the behavior of "splitbrain patients" who were undergoing traumatic epileptic seizures. To relieve their symptoms, specialists performed brain surgery during which the *corpus callosum*, the bundle of nerve fibers connecting the right and left hemispheres, was surgically divided. Performing these procedures provided brain researchers with useful empirical data concerning brain function. Consequently, we now know that each hemisphere of our brain conducts discrete functions. Contemporary researchers on brain function use something similar called "visual half-field presentation" as well as measuring brain electrical activity.

Brain dominance research has demonstrated compelling evidence for the fact that there are two equally valid and compelling ways of viewing and understanding stimuli. Although we have two brain hemispheres, most of us have a dominant hemisphere, just as most of us have a dominant eye, ear, hand, and foot. This does not mean the less dominant side of our brain is dormant but simply not a preferred way of perceiving and processing the world. One misconception is that each eye is connected to a different side of the brain. Actually, half of the information in each eye goes to each of the hemispheres.

The left hemisphere (in our culture, the more "dominant" and overdeveloped) specializes in numerical information processed sequentially in a linear fashion. It is the active verbal, logical, rational and analytical part of our brain.

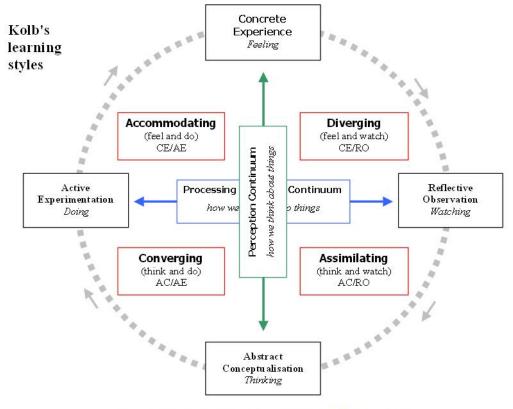
The right hemisphere is associated primarily with those activities we consider to be creative. It is the intuitive, experimental, nonverbal part of the brain and it deals in images and holistic, relational grasping of complex configurations and structures. It creates metaphors, analogies, and new combinations of ideas.

A double-dominant result showing a balance between right and left brain function indicates that you have learned how to utilize both hemispheres of your brain. Whether we realize it or not, most of our mental activities involved in learning involve both sides of our brain

(as well as the tops and bottoms) simultaneously. It takes both hemispheres of the brain to be logical and to be creative. Individuals may show a preference for one hemisphere over another but this does not mean that the other hemisphere is not functioning or not having any influence. Although there is some sharing of information between the hemispheres through the *corpus callosum*, they actually act interdependently taking different approaches to the same problem. Brain researchers have observed that the ability to think in a bilateral fashion across both hemispheres improves with age and may have something to do with accumulated wisdom.

Kolb Learning Style Inventory

Kolb's Learning Style Inventory (LSI) is a reliable and valid instrument for measuring learning differences among adults. The LSI is a self-description questionnaire that measures a person's relative emphasis on each of the four learning modes (concrete experience, reflective observation, abstract conceptualization, and active experimentation). These four learning modes manifest themselves in learners as four learning styles that are various combinations of these four modes of processing new learning. Just like the learning modality inventory suggested, we tend to have a combination of learning styles with one that predominates. A few learners will manifest a more nuanced or balanced learning style profile – which according to David Kolb is the ideal learning profile. Here is a visual representation of the combination of learning modes and learning styles.



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If you have a high score in concrete experience (feeling) and reflective observation (watching) then you have a *Diverging learning style*. Students with this learning style prefer to learn from real life examples that they can then think about and consider. Students who have this

learning style prefer to process information through detailed and systematic types of delivery whether in verbal or written form.

If you have a high reflective observation (watching) score and a high abstract conceptualization (thinking) score, then you have an *Assimilating learning style*. Students with this learning style prefer to learn from experts who present material in an orderly manner with clear directions and instructions for them to follow. Students with this learning style do not like to figure out what they are supposed to learn but prefer to have the professor tell them exactly what is expected.

If you have a high abstract conceptualization (thinking) score and a high active experimentation (doing) score, then you have a *Converging learning style*. Students with this learning style want to know that knowledge is useful and directly applicable to their life, vocation, and ministry. These learners prefer an interactive learning environment that requires them to take an active role and to contribute to the learning experience.

If you have a high active experimentation (doing) score and a high concrete experience (feeling) score, then you have an *Accommodating learning style*. Learners with this learning style want to know the significance of what they are learning and what others have learned. These learners enjoy complexity and can handle ambiguity. They are able to see relationships and connections and are able to integrate and synthesize discreet items into a complete picture.

Kolb prefers to describe learning styles as "possibility-processing" structures rather than "fixed personality traits." That is, a learning style is adaptive and dynamic rather than static. Remember this when you are assessing the results of your LSI, it is giving you a picture of yourself as a learner NOW, not what you used to be or will become. Adult learners, if they are going to be effective and successful learners, need to acquire four different learning abilities: concrete learner abilities, reflective observation abilities, abstract conceptualization abilities, and active experimentation abilities. Although this is the ideal, in practice it is difficult to achieve. Nevertheless, it still is something toward which all adult learners need to strive in order to be able to handle competently any learning environment. The *Learning Style Inventory* will demonstrate your ability levels in each of these four learning modes. The results of the inventory will indicate which are your strongest and weakest learning abilities and provide you with a descriptive learning style indicative of your learning strengths.

Click on the hyperlink on the title above and this will take you to a version of the Kolb LSI. Print out a copy of all of the pages and fill out the inventory by hand with a pen or pencil. Follow the directions provided for filling out and scoring your inventory. Be sure to pay special attention to how you rank order the ten words that run across the page (see below).

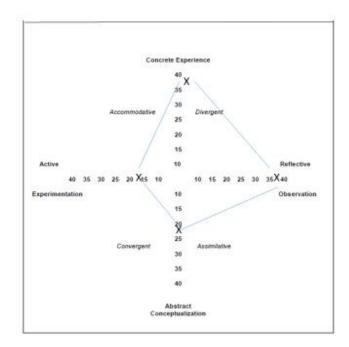
	The Learning	Style Inventory	
nstructions: It will take 30-49 earning Style Profiles. As your or wrong answers. The Invent ability.	a complete the Learnir	ng Style Inventory remembe	r that there are no right
	our learning style, a 3) in the 10 items listed below to the next best, a 2 to the ro each of the four words. Do	next, and a 1 to the least
1 involved	tentative	discriminating	practical
2 receptive	impartial	analytical	relevant
3 feeling	watching	thinking	doing
4 accepting	aware	evaluating	risk-taker
5 intuitive	questioning	logical	productive
6 concrete	observing	abstract	active
7 present-oriented	reflecting	future-oriented	practical
8 open to new experiences	perceptive	intelligent	competent
experience	observation	conceptualization	experimentation
o experience	reserve	rational	responsible
10 intense	ieseive		

You will rank order from 1 (least characterizes your learning style) to 4 (most characterizes your learning style) ACROSS column # 1 that includes the words "involved," "tentative," "discriminating," and "practical." You are to think of how you typically process what you are learning. Think of which of these words "best" describes you and put a number 4 in the space provided by that word. Then identify the word that "least" describes you and put a number 1 in the space provided by that word. Decide between the two remaining words and assign a 2 to one and a 3 to the other.

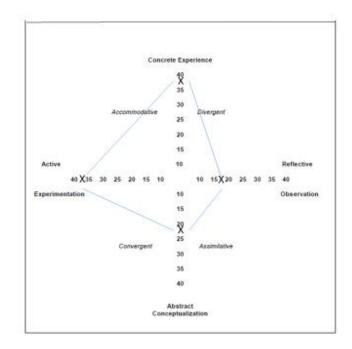
Once you have rank ordered all ten columns *horizontally*, then add up each of the four columns *vertically*. This means you will add all the numbers beginning with the word "involved" down to the word "intense" and put that total socre in the space provided by the letters CE standing for Concrete Experience. Do this for each of the columns. Once your are finished, you will have four scores beside the letters CE, RO, AC, and AE.

Now it is time to transfer these four scores to the learning style grid. Find the Concrete Experience axis on the grid and find approximately where your score fits and place an X. Then find the Relfective Observation axis and repeat for each of the four axes on the grid. Once you

have placed four Xs on the grid, it is time to connect each X with a line. The result should be a learning style profile that looks like this:

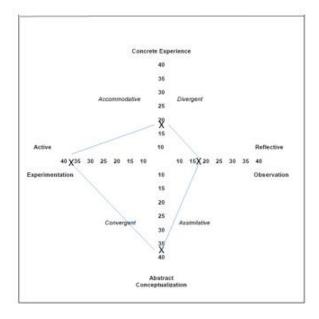


If your four scores plotted out on the grid like this one, you would be classified as a Diverging learning style because your two highest scores were concrete experience (feeling) and reflective observation (watching).

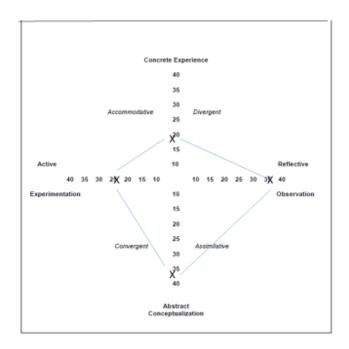


If yours plotted out as a mirror opposite of this one, you would be classified as an Accommodating learning style because your two highest scores were concrete experience (feeling) and active experimentation (doing).

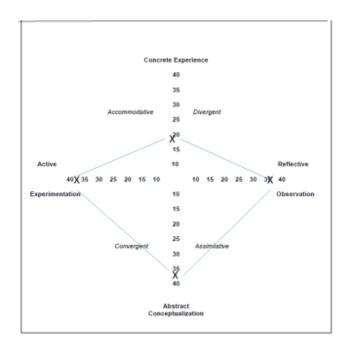
A converging learning style would look similar to this profile:



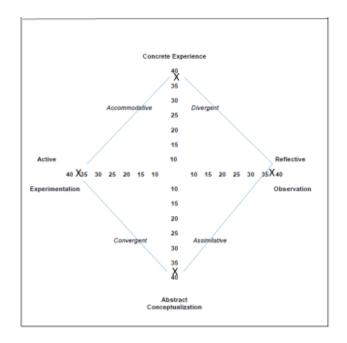
And an assimilating learning style would look similar to this:



Your profile may have had two dominant learning styles that looks similar to this:



Kolb's ideal learning style profile would look something like this:



Here a student indicates that they are strong in all four of the ways we prefer to process what we are learning and thus produces a balanced learning style profile for which Kolb has no identifying name as he does the other four. The more balanced your learning style, the easier it is for you as a learner to adjust yourself to any learning situation. This gives you more flexibility and agility as a learner and probably means that you will do well regardless if you take a course on campus or online. As learners, we have either learned from our own experience or we have been conditioned by our learning environments to prefer one or two of the four parts of the learning process. This means that we can learn to incorporate all of them into a more balanced profile as pictured above. We do this by choosing to learn from a different vantage point and step outside our learning comfort zone. We often hesitate to do this because we may have been successful using our current learning style profile. It is risky to go through the learning curve to acquire a new learning skill but this course provides you a unique opportunity to do that without any grade consequenes to worry about. What happens in RTCH 500, stays in RTCH 500!

Many adult learners limit their ability to adjust and modify their approach to learning out of fear. This may be a fear of failure, a fear of learning something new, or a fear of an unknown outcome. As Christians, we are not to live in fear because our relationship to Christ does not "give us a spirit of fear, but of power and love and a disciplined mind" (2Tim 1:7). A "diciplined

mind" is a mind that through the Spirit controls the emotion of fear and chooses a path more consistent with our new status in Christ.

YOUR BEST & WORST OF TIMES

This inventory gives you an objective view of your own internal biological clock. We all have certain times of the day, and even times of the week, that are our optimal periods of creativity and learning. Part of the self-assessment process includes being able to identify these times for yourself so you can attempt to structure your study schedule accordingly. Due to occupational or ministry constraints, we all may not have the luxury of selecting our "best" times for study. As always, we have trade-offs we must make and this may mean that you must choose a time of study that is less than ideal but better than your worst time. In any case, this inventory intends to sensitize you to the importance of being aware of all the factors that impinge upon your ability to learn.

By now, most adult learners have a good idea as to when they function optimally during the 24-hour period of a given day. A self-directed learner will take this information and use it to his/her advantage. Capitalize on those periods during the day when your mind is most alert and schedule your study time accordingly. Avoid those times when you are mentally fatigued because you may be wasting your time trying to force yourself to study when the benefit is minimal.

The following questions will help you sharpen your sense of what time of day you learn best. You may already be generally aware of your preferences, but these simple questions will help spur you on to act on them. The questions were adapted from Professor Rita Dunn of St. John's University, Jamaica, New York. Answer *true* or *false* to each question.

I dislike getting up in the morning
I dislike going to sleep at night
I wish I could sleep all morning
I stay awake a long time after I get into bed
I feel wide awake only after 10:00 in the morning
If I stay up late at night, I get too sleepy to remember anything
I usually feel a low after lunch
When I have a task requiring concentration, I like to get up early in the morning to do it
I'd rather do those tasks requiring concentration in the afternoon
I usually start the tasks that require the most concentration after dinner
I could stay up all night

I wish I didn't have to go to work before noon
I wish I could stay home during the day and go to work at night
I like going to work in the morning
I can remember things best when I concentrate on them (select one):
in the morning
at lunchtime
in the afternoon
before dinner
after dinner
late at night

To interpret your answers, check whether you answered true or false for most of the questions that point to a single time of day: morning, noon, afternoon, early evening or night. That time will be the period during which you feel that you learn either your best or worst.

VARK Learning Modality Inventory

Knowing your learning modality is different from knowing your learning style. A learning modality indicates your preference for receiving new learning and your learning style indicates your preference for processing new learning. This can be confusing because many educators use the term "learning style" to refer to a learning modality but they are different and so we treat them separately.

The acronym VARK stands for: Visual – Auditory – Read/Write – Kinesthetic. These four modalities for learning refer to the preferences we have as learners for receiving new learning or information. Some prefer to receive information primarily through the eye-gate (visual), others through the ear-gate (auditory), others through touch (tactile or read/write), and still others through bodily movement (kinesthetic).

Although many learners show a preference for one of these four, many of us are multimodal. That means many learners tend to blend preferences into a composite modality of different blends.

Knowing your learning modality will enable you to maximize your acquisition and retention of new material. Acquisition has to do with your initial exposure to a topic or subject and retention has to do with your ability to retain or remember what you have studied.

Click on the hyperlink to the VARK website where you can take the VARK inventory and view the results.