

Customized Learning Theory:
Laying A Foundation for Self-Directed Learning

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Abstract

The process of learning includes at least three factors: the setting (or environment), the experience (which includes stimuli, curriculum, skill development, etc.), and the learner. The broader context of the formal education throws in a fourth factor, and that is the teacher. Individuals are constantly learning and learning settings can include the home, the school, the workplace, the church, or anyplace else where the learner exists. When formal learning is required, the setting, the experience, the learner, and the teacher must be aligned in such ways that clear objectives are met, and outcomes are achieved. The most important thing to remember is that *learning is about the learner*. A self-regulated learning theory posits that learners must become increasingly responsible for the management of the learning process. Self-directed learning builds upon self-regulated learning and must be the by-product of earlier strategies of direct instruction and group instruction that build foundational learning and foundational learning skills. This was the real meaning of *discipleship* where the transfer of knowledge and skills resulted in the ability becoming a part of the learner.

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Slavin (2009) ask the question, “Can good teaching be taught?” (p. 5). Slavin contends that the answer is *yes*. However, the intentional and effective teacher must go beyond mere teaching knowledge but must develop the ability to be an effective *learner*. Slavin notes that many studies looked at the differences between expert and novice teachers and write, “One theme comes through these studies: Expert teachers are critical thinkers” (p.7). Critical thinking is a learning skill that teachers must first acquire then teach. The most important part of a teacher’s education is that they must learn how to be learners in order to teach learners how to learn. This must then translate into a practice in education that focuses on learning skills that allow students to become self-regulated and then self-directed learners.

Attributed to an old saying, “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime” (Chinese proverb). At what point should children become *self-regulated* learners? Should the goal of education be that the student becomes increasingly responsible for *self-directed* learning? Should teachers be committed to working themselves out of a job for each individual learner? Could there be a Pareto rule for the educational process where the student has 80% of the responsibility for learning? These questions should be at the heart of how educators see their roles in the process of learning.

A very salient reason for focusing on self-regulated and self-directed learning is the need for student preparation for college. Students must be able to do independent study and have the motivation to achieve. Students must demonstrate the capacity for accepting responsibility for their learning. Students should not wait until they get to college to acquire study skills. Because the stakes are high in an economy which demands higher education, the skills needed for achieving in higher education must be taught early. Sometimes this means that study skills and independent learning skills must begin before the high school level. However, the caution is that there must still be a strong basic foundation, and independence cannot be given too early.

Definitions

There are two definitions to be considered in the customized learning theory under consideration. The first is self-regulated learning. Loyens, Magda, and Rikers (2008) write, “Self-regulated learning (SRL) is ubiquitous in research on education nowadays and it is an umbrella term for various processes such as goal setting, metacognition, and self-assessment, all of which influence learning in various ways” (p. 411). In self-regulated learning, the learner is engaged in planning, goal setting, monitoring, and evaluating their own instructional process.

The self-regulated learner can be assigned a task by the teacher but can choose personal learning strategies. SRL as a *within school* process means significant student engagement but not complete control of the environment in which the learning takes place.

Self-directed learning is defined as “a process in which individuals take the initiative, with or without the help from others, in diagnosing their learning needs, formulating goals, identifying human and material resources, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Loyens, Magda, & Rikers, 2008, p. 414). While both self-directed learning (SDL) and self-regulated learning (SRL) are very similar, Loyens et al. note that SDL is usually independent of a school environment (p.419). SDL includes personal autonomy, personal management of the process, independent learning, and learner control of the instruction (Loyens et al., p. 414).

Research by Loyens, Magda, and Rikers (2008) conclude the following about self-directed and self-regulated learning.

It is argued that SDL and SRL have similarities with respect to active engagement, goal-directed behavior, metacognitive skills, and intrinsic motivation. Yet, a close examination of both concepts led to the conclusion that they cannot be used synonymously. While SRL is usually considered as a learner characteristic, SDL is both a learner characteristic and a design feature of the learning environment. Further, SDL entails more student control over the learning environment and provides a crucial role for the learner in initiating a learning task (p. 423).

Because SRL and SDL are different each should be considered in a customized learning theory that is designed on a continuum. Directed and cooperative learning are followed by gradually increasing the use of self-regulated learning, and as student near the end of high school moving

to a framework of self-directed learning that emphasizes independent skills needed for the college level.

The Accelerated Christian Education Model

The Accelerated Christian Education Model developed in 1970 in response to “dissatisfaction with public schools over such matters as lack of discipline, the abandonment of God-centered education, and the espousal of a humanistic rationale” (Kelley, 2005, p. 13). Over the past 40 years the curriculum and educational model of Accelerated Christian Education (ACE) has grown to a representation of over 7,000 schools in 125 countries (p. 13) and is being used by over 15,000 homeschoolers (Kelley, 2005, p. 14). The ACE model is one example of self-regulated learning. First and foremost, it is based on a Christian worldview of education.

Rowe (2010) writes that the philosophy of education for Christians should be consistent with God’s Word (p. 15). One of the precepts of God’s Word is that we are individuals that are responsible for talents given to us by God (Matthew 15: 14-30, KJV). The *Parable of the Talents* emphasizes personal responsibility, but also individual uniqueness as seen through the eyes of God. God expects responsibility to be in proportion to the talents that are given. Rowe writes,

You [parents] must insist that the method of your child’s education be designed to meet his or her needs as a unique individual. The student who is required to be in “lock-step” with an entire class of 25 to 40 other students and age-graded textbooks may encounter severe problems. The higher achiever and rapid learner may become bored – and the slower learner may become overwhelmed, confused, and depressed (Rowe, 2010, p. 15).

One of the five basic principles of ACE is that the characteristic of uniqueness acknowledges that learners are at different levels and that learning must take such differences into account.

The individualization principle is not unlike other learning theories and models. In Carroll's QAIT model, it is called *appropriate levels of instruction* (Slavin, 2009, p. 263). Slavin observes that in high schools, "Probably the most common means of dealing with instructionally important differences is to assign students to classes according to their abilities" (p. 267). This is called *between-class ability grouping*. Another strategy, *within-class ability grouping*, is used in elementary school reading programs (p. 269). Slavin writes, "In reading, teachers typically have each group working at a different point in a series of reading texts and allow each group to proceed at its own pace" (p. 271). The ACE program simply extends this *pace* model to the individual learner instead of the group.

There are five laws of learning that are the basis of the Accelerated Christian Education model of learning (ACE, n.d., Individualization). These are demonstrated in the allegory of the farmer driving a cart load of hay being pulled by a donkey. Stretched in front of the donkey is a stick with a carrot dangling just out of reach of the donkey. The farmer uses a small stick to prod the donkey forward if the donkey hesitates in pulling the load. The donkey in this allegory is the learner. The five laws of learning are as follows:

- How heavy is the load? This is represented by the loaded cart and refers to the first law that students be at a subject level where they can perform. The load should not be too heavy or too light.
- How long is the stick? Law two is that students must set reasonable goals. The stick out in front of the donkey suggests that the goal is not too far away at any time.

- Students must be controlled and motivated. The analogy of the stick and carrot refer to motivation and reinforcement techniques.
- Learning must be measurable.
- Learning must be rewarded. (ACE, n.d. Individualization).

In practice students are diagnosed and their *paces* (units of coursework) are prescribed according to abilities. The classroom environment and ACE model follows the one room school house and nongraded program model. Slavin (2009) notes that “there has been little research on today’s application of the nongraded primary program but one study did find achievement benefits for a nongraded school” (p. 270). Built into the process are goal checks, rewards, self-testing, and other features that make up a self-regulated learning environment.

Weaknesses in the ACE program

While the Accelerated Christian Education model has many benefits and is a popular Christian education program it comes under criticism for several weaknesses. These weaknesses suggest that using self-regulation too early in the learner’s education creates a weak foundation for the later use of self-directed learning. Research by Kelley compared ACT scores from ACE Christian schools with public schools and traditional Christian schools. The study criticized many aspects of the ACE program and demonstrated bias in several respects. Kelley (2005) characterizes fundamentalist Christians by writing, “For this reason, fundamentalist Christians may be considered a religious minority, as they are predominantly viewed negatively by society and are typically not associated with mainstream Christianity” (p. 14). Interspersed with *research* that includes the negative comments about a pastor being jailed and negative reviews by other researchers, Kelley refers to a study by Elkins of the University of Indiana that report

such weaknesses as “The lack of social integration is a problem” (p. 32) and “ACE’s political orientation borders on propaganda” (p.32). While much of Kelley’s research is laced with anti-Christian bias, the research considers legitimate weaknesses that must be considered in a self-regulated learning model like the ACE model.

Kelley (2005) observes that “college students must be able to listen effectively, or listen to learn” (p. 5). Both self-regulated and self-directed learning are inadequate for developing listening skills and communication skills. Too much emphasis on the individual learner without the use of cooperative learning or directed learning can leave a student without significant practice and listening and communication skills that are needed at the college level. Listening, asking relevant questions, and being engaged in meaningful discussion are important skills that can be developed before high school. They are essential for the traditional college environment. These same skills are needed later for the life of work. Unless a self-regulated or self-directed learning environment includes opportunities for some form of group learning or direct learning, the important skills of listening and speaking may suffer.

A second criticism by Kelley (2005) is that the ACE program did not provide adequate study skills (p. 6). Kelley references an audit by the Alberta Department of Education who analyzed the ACE pace curriculum. Kelley (2005) quotes the findings which state,

For the most part PACEs are well written, present information clearly and are organized around explicit objectives. The use of examples, practice exercises, systematic reviews, and cumulative exercises illustrates the incorporation of commonly accepted, sound principles of pedagogy. (p. 26)

However, the weaknesses described include rarely meeting goals and objectives by the Alberta Department of Education (p. 26), writing coverage was insufficient (p.27), did not allow for

enough creativity and critical thinking skills (p.27), and the PACEs encouraged too much rote learning (p. 27). It should also be noted that the Alberta Department of Education demonstrated its own bias by stating that the curriculum was unacceptable because of “repeated condemnation of those who reject the author’s interpretation of the Bible as it pertains to science” (p. 27).

While praising the curriculum on one hand and denouncing it on the other in references to other research into the ACE model, highlighting study skill weaknesses are worth considering. When self-regulated or self-directed learning is used, students without guidance may select curriculum that does not require a full range of study skills resulting in deficits. This is one reason why building a study foundation at the earlier age levels is so important. Only a good sense of motivation and purpose will cause the self-regulated or self-directed learner to make better choices in how they approach learning.

There are some learning skills that cannot be taught if the educational process is completely individualized. Direct learning, cooperative learning, and even group strategies each have skills that can make the individualized learner a better learner. Slavin (2009) states “Effective teaching of critical thinking depends on setting a classroom tone that encourages the acceptance of divergent perspectives and free discussion” (p. 255). This means that an effective learning theory incorporates the best of several strategies to develop what will hopefully be a *lifelong learner*.

While the Accelerated Christian Education program demonstrates weaknesses in fostering certain study skills, the five laws of learning guide the process and are important concepts for any self-regulated learning model. Self-regulated learning however should follow a good foundation that includes the development of listening and cooperative learning skills, and strong basic skills such as reading and writing. In addition to the philosophy of uniqueness and

individualization, Rowe (2010) observes the following condition must be met for a child to have a *True Education*. Rowe writes, “You must determine that your student will take responsibility for his learning and be inspired to learn” (p. 19). The principles of individualization, responsibility, and motivation are essential elements of a customized learning theory that moves a self-regulated learner to a self-directed learner.

The continuum of learning

In order to become a life-long learner one must become a self-directed learner. Adults involved in college classes in later years are becoming more common. Loyens, Magda, and Rikers (2008) write,

According to Knowles (1975, 1990), learning does not take place in isolation but in association with others such as teachers, tutors, and peers. Therefore, learning can be placed on a continuum, ranging from teacher or other oriented at one end to self-directed at the other end. When shifting from one end the other, the amount of control over learning changes as well as the amount of freedom to evaluate learning needs, to decide on the content of one’s learning issues, and to implement learning strategies to unravel one’s learning issues. (p. 414).

The middle of the continuum is the place where self-regulated learning should be placed to serve as a bridge between the foundation of teacher oriented learning and the goal of self-directed learning.

Self-regulated learning does not have the prominence in education that it deserves. There may be several reasons for slow progress in developing a self-regulated environment. Teachers need to teach and some may find it difficult to give up control of the learning process. Mandates of the No Child Left Behind Act create an educational regulatory environment that

leaves little flexibility for the educational process. Students that would be self-regulated are pushed into compliance with test requirements, and teachers are under pressure to *teach to the test*.

One example of the power of a self-regulated learning is examined in research by Camahalan on the *Effects of Self-Regulated Learning on Mathematics Achievement of Selected Southeast Asian Children*.

Conclusion

Learning must be on a continuum that begins with the teacher and ends with the learner. The purpose of the continuum is to systematically move the learner from dependency to independency. The goal of the continuum should be that the learner, as a disciple, now has the responsibility of becoming like the teacher, if that is his or her choice, or of having the skills of being someone else. The discipleship program of Jesus Christ prepared a person to be like Jesus, but it was still a choice. As Paul stated, “Wherefore, my beloved, as ye have always obeyed, not as in my presence only, but now much more in my absence, work out your own salvation with fear and trembling” (Philippians 2:12, KJV).

A self-regulated learning theory posits that learners must become increasingly responsible for the management of the learning process. Self-regulated learning however must be the by-product of earlier strategies of direct instruction and group instruction that build foundational learning and foundational learning skills. This was the real meaning of *discipleship* where the transfer of knowledge and skills resulted in the ability becoming a part of the learner. The abilities once acquired result in a learner that can be self-directed as a lifelong learner.

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