ACTIVE LEARNING TECHNIQUES IN THE
CHRISTIAN EDUCATION CLASSROOM AND IN MINISTRY CONTEXTS

Kenneth S. Coley
Southeastern Baptist Theological Seminary

Abstract: This article presents results of an ongoing mixed method study involving doctoral students’ perceptions of the use of Active Learning Techniques (ALTs) in both the on-campus classroom and in their particular ministry contexts. Respondents (N=58) include a wide range of ministry positions including senior pastors; ministers of youth, children, and music; and ministers of education. All received instruction in the use of ALTs in their doctoral studies and these approaches were modeled in teaching episodes. Participants in the study report using ALTs successfully in a local church setting.

Key Words: instructional techniques, active learning, metacognition, formative assessment, reflective practice

Introduction

Everyone involved in academia is painfully familiar with observing a classroom full of students who sit passively for hours on end while a presenter in front performs his or her best rendition of “sage on the stage.” Captivating for the students? Probably not. Is any learning taking place? Much less than anticipated. Is anything remembered and used with confidence in the future? Seldom.

After 35-plus years in education, this educator has chiseled out a philosophy of education that, when necessary, can be reduced to one word: engage. The teaching and learning experience cannot result in anything meaningful if the learner is not engaged in the process. The greater the engagement, the more significant the potential change in the learner, and the deeper the personal meaning will become for him or her.

It is the observation of this educator that as universities train new educational leaders for the classroom and for ministry, three current themes in the teaching profession intersect at the fulcrum of engagement—metacognitive analysis, reflective practice, and formative assessment. The examination of
these concepts receives major consideration in the doctor of education program at Southeastern Theological Seminary. The professors and guest lecturers frequently emphasize these dimensions of pedagogy, and the doctoral students are actively evaluating their usefulness in their respective ministries.

The goals of this article include the following:

1. Review briefly some of the current literature concerning the intersection of the concepts of metacognition, reflective practice, and formative assessment with active learning techniques (hereafter, ALTs).
2. Report on an ongoing research project involving doctoral students’ perceptions about the use of ALTs both in the campus classroom and in their ministry context.
3. Evaluate these findings in light of Jesus’ teaching style in selected passages of the Gospels.

**Review of the Literature and Research**

In his book *What the Best College Teachers Do*, Bain’s (2004) research involving 63 college/university professors lends significant credence to the value of engagement of students in the teacher-learning process in higher education. Reflecting on the large amount of data collected about these teachers, Bain writes, “The best educators thought of teaching as anything they might do to help and encourage students to learn. Teaching is engaging students, engineering an environment in which they learn” (p. 49). He continues,

> We found no great teachers who relied solely on lectures . . . but we did find people whose lectures helped students learn deeply and extensively because they raised questions and won students’ attention to those issues. The students became engaged [emphasis added] in thinking through the problems, in confronting them, in looking at evidence, and in reasoning rather than memorizing. (p. 107)

Popular author and experienced teacher Robyn Jackson (2009) expressed her philosophy this way in her book *Never Work Harder Than Your Students and Other Principles of Great Teaching*:

> One day, in the midst of a particularly boring worksheet I looked at their glazed over faces and realized that while they were now compliant, they were not learning a thing. At that point, I came face to face with my values. Was it more important that my students be quiet and cooperative, or was it more important that they actively engage [emphasis added] with
the material and learn to be critical thinkers and effective communicators? Was it more important that I feel in control of the classroom, or was it more important that my students learn? (p. 93)

Though Jackson was reflecting on a teaching episode that involved students in a K-12 setting, this graduate school professor found the insight particularly appropriate for teachers at all levels and in all settings, whether it is K-12 instruction, Bible study on a church campus, or a university classroom.

**Active Learning and Metacognition**

In *Teaching Strategies: A Guide to Effective Instruction*, Donald Orlich and his coauthors (2010) define active learning as “a wide range of teaching strategies that engage the learner in the actual instruction that takes place. Seat-work is passive. Students working on problems in small groups [are] active. . . . An active learning classroom is a learning community where all participate, including the teacher” (p. 40). Typically, this methodology yields some or all of the following:

- Active responses—as opposed to passive consideration
- Construction of understanding—as opposed to simple review of another’s definition
- Higher-order thinking, as opposed to mere recognition of a process or a concept
- Assessment—as opposed to tacit acceptance
- Use of prior experience—as opposed to collection of new concepts that can be pushed aside for sorting later
- Physiological change—moving and responding creates a new sense of energy in the room
- Competition—for those so inclined, the opportunity to compete creates heightened awareness and, in some cases, increased learning
- Assessment—formative assessment opportunities are available for the instructor and the students

First, this discussion will return to the concept of metacognition and a valuable book on reading in the content area by Ruth Schoenbach and coauthors (1999), *Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms*. The authors state,

The metacognitive conversation is carried on both internally, as teacher and students individually read and consider their own mental processes, and externally, as they talk about their reading processes, strategies,
knowledge resources, and motivations and their interactions with and affective responses to tests. In metacognitive conversation, then, participants become consciously aware of their mental activity and are able to describe it and discuss it with others. Such conversation enables teachers to make their invisible cognitive activity visible and enables teachers and students to reflectively analyze and assess the impact of their thinking processes. A great deal of research in the past two decades has identified metacognition as key to deep learning and flexible use of knowledge and skills. (pp. 22–23)

For effective instruction, it is not enough to plan and organize opportunities for these types of reflections; it is incumbent upon master teachers to be able to anticipate how students should best approach new information and plan how to assist them with overcoming potential hurdles. Returning to Ken Bain (2004), the text reveals that highly regarded professors have a strong grasp of their discipline and “the controversies that have swirled within them, and that understanding seems to help them reflect deeply on the nature of thinking within their fields.” (p. 25) Bain argues that this ability to think about their own thinking provides them with an understanding about how other people might learn:

They know what has to come first, and they can distinguish between foundational concepts and elaborations or illustrations of those ideas. They realize where people are likely to face difficulties developing their own comprehension, and they can use that understanding to simplify and clarify complex topics for others. (p. 25)

At this point in his argument, Bain (2004) makes a very powerful statement that is at the heart of the thesis of this paper:

The teachers that we encountered believe everybody constructs knowledge and that we all use existing constructions to understand any new sensory input. When these highly effective educators try to teach the basic facts in their disciplines, they want students to see a portion of reality the way the latest research and scholarship in the discipline has come to see it. Because they believe that students must use their existing mental models to interpret what they encounter, they think about what they do as stimulating construction, not “transmitting knowledge.” (p. 27)

as he learns, a biblical Christian would be more comfortable saying that the learner ‘discovers meaning’ or ‘builds understanding’ of truths that already exist” (p. 131). Marti MacCullough (2003) refers to this as interactive learning—“the process whereby the learner takes in new information from his or her surroundings and uses prior categories, vocabulary, and understandings to begin to process, make sense of, and store the information for retrieval and use” (p. 176).

Reflective Practice

In University Teaching: A Reference Guide for Graduate Students and Faculty, Merylann Schutloffel (2005) makes a connection between the professional educator themes of metacognitive analysis and reflective practice: “When we begin to question why we chose a particular methodological procedure, the reflection on our own thinking demonstrates metacognitive behavior. Metacognition assists novice instructors in their most difficult task: learning to think like teachers” (p. 261). Schutloffel identifies the following three levels of reflection that are interrelated in the metacognitive process:

1. The critical level asks the question why? In what ways does this course fit with the overall mission of the institution and the specific goals of the department?
2. The interpretive level of reflection responds to the question what? What messages are communicated symbolically and inferentially through the teacher’s behaviors and methods?
3. The technical level answers the question how? Which pedagogical tools are best suited for communicating the knowledge, skills, and dispositions presented in the curriculum? (pp. 262–263)

These are concepts of extreme importance, and one would predict that few students preparing for becoming educational leaders of ministries have ever considered these broad issues while reflecting on their own learning processes; most certainly they stopped short of interacting with other graduate students about their personal experiences. In light of the importance of this interaction, the model in Figure 1 has been developed to describe the relationship between metacognitive analysis and reflective practice with active learning for Christian education students.

Jesus magnificently demonstrates these concepts in Luke 9:18 (and following verses) when He inquires of His disciples, “Who do the crowds say I am?” (NIV, 1984 version). Being aware that His disciples were dealing with major-league cognitive dissonance, Jesus wanted them to express what they were hearing from others, as even His closest followers attempted to sort out
His identity. Their responses were all over the map: “Some say John the Baptist; others say Elijah; and still others, that one of the prophets of long ago has come back to life” (v. 19). He was acutely aware that their prior religious training had created schemata that made it extremely problematic to make sense of His ministry and miracles. Jesus continued the pop quiz: “Who do you say I am?” Only Peter’s response is recorded: “The Christ of God” (v. 20). This also illustrates another crucial point: the role of the Christian educator, as previously stated, is to assist students by stimulating the construction of understanding of absolute Truth within their mental framework and not the manufacture of a personal, relativistic truth.

Figure 1 depicts the process employed by an educator who is committed to engaging his/her students in ways that lead to the construction of understanding, deep learning, and the continued and confident use of new knowledge.

Formative Assessment

Active learning often has the potential to be formative, if the teacher and the students take note of the achievement level of the class or individual students. From the teacher’s perspective, what is the quantity or quality of the responses I am getting from the learners? From the student’s perspective, how do I need to adjust my personal study to perform at the level of expectation established by the teacher? W. James Popham (2008), a researcher and an author on this topic, defines formative assessment as “a planned process in which assessment-elicited evidence of students’ status is used by teachers to adjust their ongoing instructional procedures or by students to adjust their current learning tactics” (p. 17). Popham emphasizes that the formative assessment activities are planned and are not spontaneous as a result of capricious or spur-of-the-moment reactions to an unresponsive class (p. 18). Rick Stiggins
and Rick DuFour (2009) expand the definition and description of the use of these techniques:

Teachers and schools can use formative assessment to identify student understanding, clarify what comes next in their learning, trigger and become part of an effective system of intervention for struggling students, inform and improve the instructional practice of individual teachers or teams, help students track their own progress toward attainment of standards, motivate students by building confidence in themselves as learners, fuel continuous improvement processes across faculties, and, thus, drive a school’s transformation. (p. 640)

Robyn Jackson (2009) agrees with the importance of this approach:

Formative assessments are one of the most powerful ways to improve student achievement because they provide real-time feedback to you and your students on their progress toward the learning goals, and they help students see a direct relationship between how hard they work and what they learn. (p. 131)

Jackson suggests some activities called “dipsticking” that give quick feedback during instruction including one-question quizzes, thumbs-up/thumbs-down, or unison responses (p. 132).

In their book *Classroom Assessment Techniques: A Handbook for College Teachers*, Thomas Angelo and Patricia Cross (1993) connect the dots discussed in the themes of this paper as presented in Figure 1. They review several research projects that “are describing the development of metacognition, defined as the learner’s awareness, understanding, and control of his or her own learning process” (p. 373). These researchers have found that as teachers use formative assessment techniques, they promote metacognition by teaching students to use formative assessments that require self-assessment, by providing guided practice in using these techniques, and by giving feedback on student responses. “Once again, as with active involvement and faculty-student interaction, there is strong evidence from education research that explicit instruction in metacognitive skills and strategies leads to more and better learning—especially when students learn a variety of discipline-specific skills and strategies” (p. 373).

Richard Felder and Rebecca Brent (2009) have done extraordinary research in the field of active learning at the college and graduate school levels. These researchers define active learning as “anything course-related that all students in a class session are called upon to do other than simply watching, listening and taking notes” (p. 2). In concert with the approach taken in this
paper, they do not suggest that professors abandon giving lectures altogether. They passionately argue that

if a lecture or recitation session includes even a few minutes of relevant activity—a minute here, 30 seconds there—the students will be awake and with you for the remaining time in a way that never happens in a traditional lecture, and most will retain far more of what happens in those few minutes than of what you say and do in the rest of the session. (p. 2)

This educator and researcher would ask you, the reader, to respond to the question, “What does active learning look like in your ministry or your teaching context?”

What actually happens in a classroom when this interaction occurs? First, the learner actually hears what he or she has constructed, and this is another experience in organizing and evaluating one's thoughts and beliefs about a topic. Research shows that students learn much more by doing things and getting feedback than by watching someone and listening to someone tell them what they are supposed to know (Prince, 2004, p. 229). Second, the learner, as a participant, should perceive that the teacher or a classmate actually values what he or she has to offer. This builds confidence and reinforces for the learner that his or her contribution really matters (Marzano, Pickering, & Pollock, 2001, p. 50, 85).

These insights and convictions have led to a research project that examines doctoral students’ perceptions of the value of ALTs as a regular part of their classroom experience. In addition, this researcher wanted to find out whether or not these students were using ALTs in their ministry context and teaching others to include them in instructional episodes.

Methodology

The students in the doctor of education program at Southeastern Baptist Theological Seminary are currently taking part in a mixed-method study that examines their perceptions of the usefulness of ALTs in classes that they attend and in classes or ministries that they lead. All participants in the survey had taken one or more classes that included instruction in Active Learning Techniques (ALTs), and these methodologies were modeled in two or more seminars. These include think-pair-share, think-pair-square-share, cooperative learning groups, thinking-aloud pair problem solving (TAPPS) and various classroom assessment techniques that are included in formative assessment. In addition, students were introduced to popular approaches such as “a
one-sentence exit paper” about what the student believes to be the most important idea presented during the session.

Instrumentation, Participants, and Procedure

The students (N=58) were invited to participate in a survey that asked five Likert-style questions and three open-ended response questions. All 75 students in the doctor of education program were sent the survey and asked to return it by email attachment within a week. While the research was weakened by the use of this convenience sample, it was strengthened by involving students that had experienced very similar exposure to the same pre-survey instruction. In addition, other strengths include a high return rate and the fact that almost all participants have full-time ministry involvement and had some level of experience employing the teaching techniques that are the focus of the research. Table 1 contains the type and frequency of students’ ministry involvement.

Following the aggregation of the data yielded by the first survey, it was determined that a follow-up survey was needed in order to establish greater distinctions in the perceptions of the students. A second survey was distributed electronically to the same 75 doctoral students with a response rate of N=53. It is possible that the lower return could have been a result of more detailed questions asked about the doctoral students’ use of ALTs in their

| Table 1 |
|------------------|-----------|
| **Distribution of Ministry Settings of Survey Participants (All SEBTS EdD Students)** | |
| Ministry | Frequency |
| Senior Pastor | 11 |
| Christian School Leader | 8 |
| Minister of Education | 6 |
| Associate Pastor | 5 |
| College Administrator | 5 |
| College Professor | 3 |
| Sunday School Teacher | 3 |
| Denominational Leader | 2 |
| Church Planter | 2 |

These ministries have one representative: military chaplain, director of missions, Christian retreat center executive, worship pastor, public school administrator, and public school teacher.
ministry setting. Those using ALTs less or not at all may have chosen not to respond.

Results

Table 2 presents the perception of the respondents according to their rating on a five-point Likert-style survey. Reflecting on their own learning experiences during their doctoral studies, all the respondents reported that they would strongly agree or somewhat agree that they were familiar with active learning techniques (ALTs). Of the 58 participants in the survey, all but two (<4%) reported that the modeling of ALTs in their classes increased their understanding of this approach and increased their understanding of course content. When asked about lecture-

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>No Opinion</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am familiar with active learning techniques</td>
<td>39</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Instruction and modeling of ALTs in the doctoral program increased my understanding.</td>
<td>42</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Instructional episodes that employ active learning increase my understanding of content.</td>
<td>45</td>
<td>11</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lecture method without active learning is the best approach for teaching adults.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>I use active learning techniques in teaching episodes in my ministry.</td>
<td>26</td>
<td>29</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
method teaching that did not include ALTs, 55 (95%) responded that they somewhat disagree or strongly disagree that this was the best method for teaching adults.

Qualitative data from Survey 1

Students were asked to provide reactions to three open-ended questions:

- What does active learning look like in your setting?
- Do your students/members find these experiences valuable? Why or why not?
- Are you training others to use active learning when they teach? If so, how are you doing this?

The results of coding the responses given to the three questions were summarized as follows:

1. Of the 58 respondents, 55 (95%) described some use of ALTs.
2. Of the 58 respondents, 52 (90%) indicate that participants in their ministry find ALTs valuable.
3. Of the 58 respondents, 37 (64%) have trained teachers/leaders to use ALTs in their position.

Here are some of the snapshots provided by doctoral students who described using ALTs in their ministry settings:

✓ “I use think-pair-share many times after a teaching session. I also use case-study discussions in small groups for active application of materials. I think they are able to process the content better when they have engaged it in a variety of ways. Some have commented on the effectiveness of putting the information to work while using a case study.”
✓ “I sometimes will start my lesson with a brief survey asking for a raise of hands, writing down a few answers, pairing neighbors to converse about an answer, or soliciting verbal feedback from the whole class.”
✓ “I use discussion/reaction to videos, collaborative written responses in pairs, case-study discussion, and group development of graphic organizers.”
✓ “At the beginning of lessons, I use think-pair-share activities, one-sentence responses, and discussion questions to gauge prior learning on the subject of that day’s lesson.”
The Follow-Up Survey

Table 3 presents the aggregate data from the second survey. When asked to compare the level of participation in teaching episodes in the local church, 98% of the doctoral students found that ALTs produce more participation than does the more traditional question/answer technique, with 75% indicating strongly agree. Still strongly favored, but not to the same extent as the first

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>No Opinion</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active learning techniques (ALTs) when compared to question and answer sessions produce more participation.</td>
<td>40</td>
<td>12</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>75.5%</td>
<td>22.6%</td>
<td>1.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALTs when compared to general group discussion produce more participation.</td>
<td>29</td>
<td>23</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>54.7%</td>
<td>43.4%</td>
<td>1.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As the leader of a Bible study I have experienced resistance or reluctance to participate in ALTs.</td>
<td>7</td>
<td>19</td>
<td>6</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>13.2%</td>
<td>35.9%</td>
<td>11.3%</td>
<td>30.2%</td>
<td>9.4%</td>
</tr>
<tr>
<td>As the trainer of teachers I have received positive feedback from participants in training seminars that include ALTs.</td>
<td>18</td>
<td>23</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>33.9%</td>
<td>43.4%</td>
<td>20.8%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>The use of ALTs in my teaching results in higher job satisfaction as compared to using a straight lecture technique.</td>
<td>37</td>
<td>13</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>69.8%</td>
<td>24.5%</td>
<td>5.7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
question, ALTs produce more participation than does a general discussion of participants in a Bible study setting.

As was hoped, the second survey yielded a broader range of responses as the respondents were asked more detailed questions related to their current practice. The statement that produced the greatest distinctions asked about local church members’ reluctance or resistance to participate when they taught using ALTs. Almost 50% of the respondents indicated that they had experienced some resistance, while less than 10% indicated experiencing none.

On the other hand, doctoral students reported in large numbers (83%) that lay leaders/teachers in their ministries had given them positive feedback about training seminars that included ALTs. These positive experiences coupled with the experience of greater participation and engagement in teaching episodes appears to yield an increase in job satisfaction (95% agree or strongly agree).

When asked to respond to the open-ended question, “What activities/instruction related to ALTs could be presented in the seminary campus classroom to assist you in your use of ALTs in ministry,” a coding analysis produced four distinct clusters of reactions by the doctoral students:

- ✓ Students requested that ALTs be used more frequently and in more classes (11).
- ✓ Students believed that they would benefit from observing increased modeling of ALTs (14).
- ✓ Students desired more instructions on these techniques (12).
- ✓ Students requested more opportunities to practice ALTs while on campus (5).

Conclusions and Implications

The data collected in this research project (both quantitative and qualitative) indicates that for these doctoral students the use of ALTs in their seminary classroom is highly valued and leads to increased understanding of the academic content and the teaching/learning process. In addition, nearly all of the students, though not required as a part of their course work, report using ALTs in their ministry setting, and it is their perception that attendees of their teaching sessions like participating in these activities. Nearly all of these ministry leaders believe that ALTs lead to greater participation by attendees, even though about half report observing some resistance by attendees to participate with others during the use of ALTs. Many of the ministers/doctoral students (83%) have received positive feedback from lay leaders and teachers following training sessions that included ALTs.
As was indicated by the responses on the second survey, some of the students would like to see an expansion of the use of ALTs in their doctoral program, perhaps to include all professors and every course. A few recommended additional training in the specifics of how and when to employ these techniques, and some wanted more opportunities to lead learning episodes during which they could experiment with these methodologies.

Further research and examination of the use of ALTs in local church settings should include some measures or data collection from the lay leaders/teachers and church members themselves. While the doctoral students/ministry leaders involved in this project indicated positive reactions to ALTs and increased participation, it would be valuable to explore the perception of the church members in regards to the impact the methods have on their understanding of the biblical material being presented and their evaluation of the impact of the methods on their use of the concepts over time. Also of value would be a qualitative study involving local church teachers’ use of metacognitive analysis and reflective practice in regards to the influence of these on their use of ALTs in their teaching.

Techniques like those described in this article provide teachers with authentic active learning techniques that give them a more sophisticated understanding of their own learning processes (metacognitive analysis) and provide them with opportunities to reflect with their teachers and classmates about how learning takes place (reflective practice). As they receive feedback related to their understanding of the professional concepts as well as the teaching and learning concepts, these doctoral students can modify their focus and personal study in areas where they need additional practice (formative assessment). And their participation in active learning techniques will provide powerful models for them to follow as they prepare to encourage and engage their students in learning in their own ministry contexts.

A Final Illustration

In John 5, Jesus approached an invalid at the Pool of Bethesda and asked, “Do you wish to get well?” or as the original language seems to indicate, “Are you satisfied with the way you are?” At once Jesus engaged His potential student and follower in a confrontational analysis that required a bit of metacognitive review, reflective practice, and formative assessment (Why am I here? Is this working for me? Do I wish to change what I’m currently doing?). Then Jesus instructed him to take action: “Arise, take up your pallet, and walk” (John 5:8). In this brief teaching/healing episode, Jesus pressed His listener to think deeply and be engaged.
As educators consider the level of engagement of students in our university/seminary classrooms as well as those that they instruct in Bible study, may each ask himself/herself the same question: “Are you satisfied with the way you are?”

REFERENCES


AUTHOR

Kenneth S. Coley (Ed. D., University of Maryland) has been teaching at Southeastern Baptist Theological Seminary in Wake Forest, NC, since 1996. Dr. Coley is currently the Director of the Ed. D. program at SEBTS. E-mail: kcoley@sebts.edu.