

A Discrepancy Assessment Model for Evaluation (Descriptive Data)

Robert E. Stake

Modified and Applied to Christian Education by Edward D. Seely

When asked to teach a course; or prepare a lesson plan for a single class; or write a curriculum; or speak at an event such as a seminar, retreat, or a special assembly, a teacher is faced with several significant challenges. One of those challenges involves identifying the key variables in the context in which one is teaching, the variables that significantly affect the message and its application over time in the learners' behavior.

Contextual Questions

Quite a few questions confront me as a teacher. The first deal with the context in which I'll be teaching. What are the key variables in the context where I'll be conducting the session(s)? For example, what age range am I teaching? I'll have to have different objectives if I'm teaching early elementary age children or if I'm teaching teen-agers.

What are the needs of the students I'll have? Two types of needs must be taken into account: felt needs and unfelt needs.

Felt needs are the needs the students know they have and want to resolve (though they aren't always able or willing to articulate those needs). *Unfelt needs* are needs the students have of which they are unaware. I need to know not only the unfelt needs they have, of which the soundest literature informs me, but I also need to know some of the felt needs they are bringing with them. I can find a lot of that out when I begin meeting with them, but my lesson plan will require fewer changes, and I can be better prepared, the more I know ahead of time as to what needs the students have of which they are already keenly aware and which they long to address. Their motivation will be a lot higher to engage with me in learning the subject matter we must study, and I can make it a lot more practical and helpful, if I know as much as possible ahead of time the most intense of their felt needs.

How many students will I have? I'll teach much differently if I have five or if I have 50 in my group.

In what type of setting will I be teaching? I'll have to have a different lesson plan with different methods if I'm teaching in a classroom with the latest high tech equipment or if I'm teaching out under a tree.

I need to develop a Plan B, and it has to have flexibility. What teacher hasn't planned a lesson with specific expectations as to the context and then arrived to find that the expected conditions were not congruent with what was observed upon arrival. For example, the high tech classroom I was planning to use has been given to another class, and I now have to teach in a conventional classroom without that advanced instructional equipment. Or, and I've had this experience: when I was teaching children and youth and when the weather was beautiful outside, I did have the classroom I planned to use, but my students implored me to teach the class outside, and I'd arrived with a great lesson plan that was designed to use with a projector and other technology.

Instructional Methods

In the light of the expected context in which I'll be teaching, what lesson plan can I construct to most effectively accomplish the objectives that will meet my students' felt and unfelt needs? And, as always, as with the matter of expected conditions, how can I maximize the likelihood my intended lesson plan will be congruent with the actual lesson I'll be teaching? If when I arrive and engage the actual teaching situation I have to make only minimal, if any, changes in what I planned to do, I'll be more adequately prepared and the lesson will be more effective than if I have to make immediate changes on the fly.

Accomplishing the Needed Outcomes

As I construct my lesson plan according to the expected conditions, I anticipate specific outcomes will occur as a result of following my plan. However, what is the likelihood that my planned outcomes will be congruent with the actual outcomes, especially if a lack of congruence has occurred in the preceding matters, i.e., the actual context I observe upon arrival to teach being significantly different from what I envisioned, and the number of changes I've had to make in my lesson plan to accommodate to the contextual realities we must encounter?

More specifically, the key question becomes: How can I evaluate what we did, so I can be sure my students have benefitted from our time together, specifically that their felt and unfelt needs, upon which the lesson, special program, or course was based and focused, have been met? In other words, what evidence can be obtained that the actual objectives, if not the intended objectives, have indeed been accomplished?

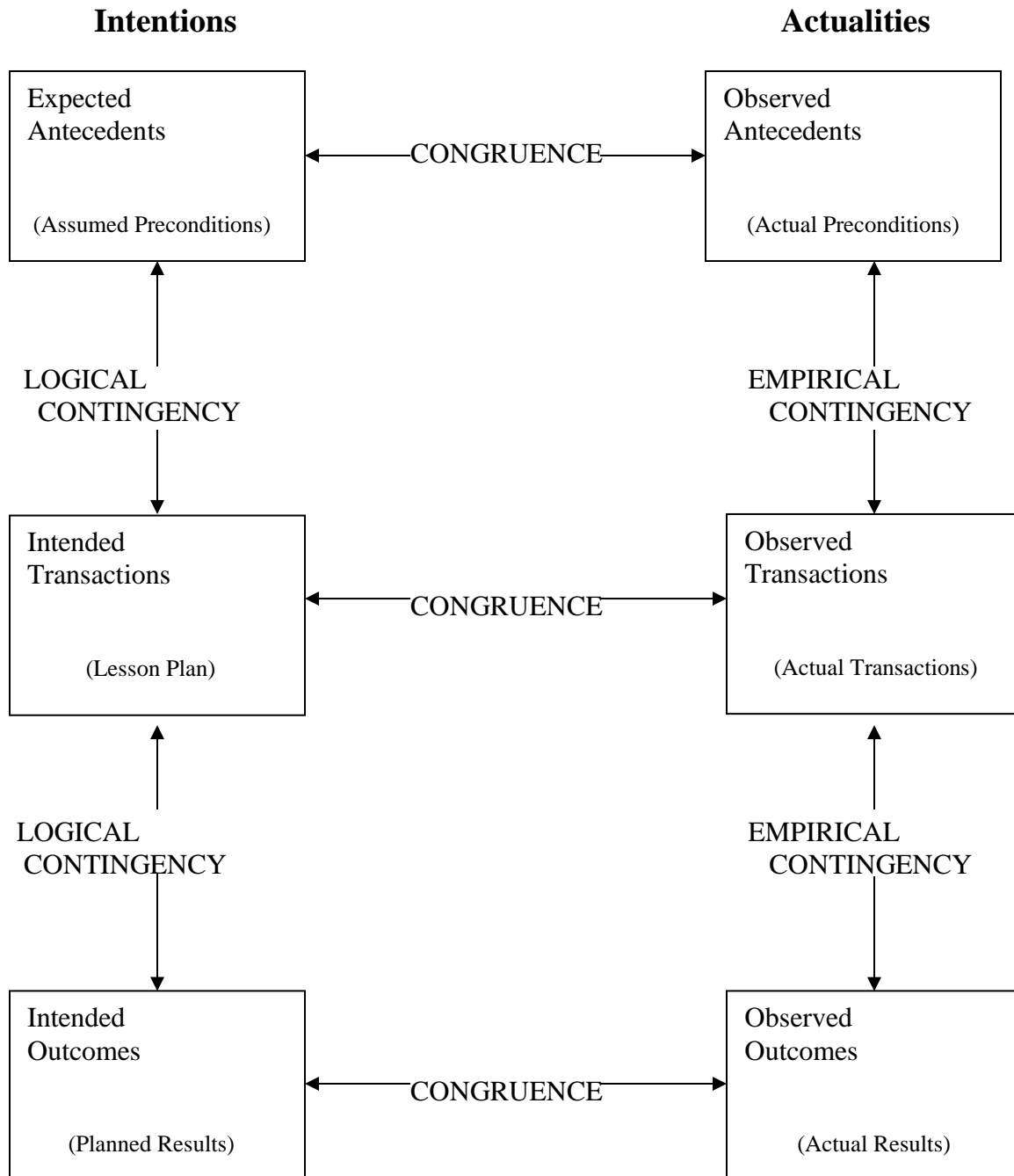
Other questions exist as well. For example, considering the actual setting, what changes in the classroom, retreat, or conference have occurred during the presentation, and are these changes acceptable and satisfactory? Also, on the basis of what actually occurred, what changes in the plan should be made for the next session, for next year, or for whenever this class or event is offered again?

To help plan and evaluate the presentations we make in educational contexts, a very useful tool has been designed by educator Robert E. Stake. This tool is a helpful model for equipping us with what we need to do to answer the questions we have that will prepare us to function most effectively and facilitate the most desired outcome in the teaching we have the opportunity to do.

Stake has written for the field of general education, however the model he has constructed offers insightful and helpful guidance for teachers in the church and Christian schools as well. Since everything good and perfect is from God (James 1:17), we should be aware of the good tools he has provided for all people, some of which have come from secular sources to whom God has given some of his common grace (e.g., Matthew 5:45). If they are good, we should use them for his people, the church, to help his believers grow and serve him most effectively.

I have summarized Stake's model with application for Christian education. It appears in the form of the chart on the next page.

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Source: "Language, Rationality, and Assessment," Robert E. Stake in David A. Payne, Ed., *Curriculum Evaluation* (Lexington, MA: D.C. Heath and Company, 1974), p. 130.

Let's now look at each component of the model specifically. We can then more readily explore its uses in helping us teach more effectively and enjoyably.

Intentions vs. Actualities

Intentions

As we saw above, what we plan to do in our presentations in teaching settings does not always occur in the actual context in which we conduct our class, seminar, or retreat. Since preaching is a type of teaching, pastors also will find this model useful in preparing to lead in worship services, especially in other locations. Stake alerts us to the importance of trying to identify as completely as possible all the elements that comprise what he calls the "Intended Antecedents," that is the conditions that the educator expects to comprise the context in which he or she will teach, which is why I with other colleagues prefer the term "Expected Antecedents." The term, "antecedents," of course, refers to the preconditions awaiting us when we arrive to "do our thing."

Expected Antecedents (i.e., as many of the assumed preconditions as we can identify)

Thus, the first step in helping people learn is to understand as much as possible what they already know and need to know as well as the conditions of the setting in which we'll be teaching. Some of these antecedents were mentioned above, e.g., the age range and number of students, their felt and unmet needs, and the physical setting of the instructional venue. Is singing an expectation? If so, will at least a guitar be needed? Other instruments? Who can play it/them? Will printed words be required? If so, what songs will be used; who selects them; are they Biblically and theologically accurate; do they fit with the subject matter of the lesson(s); who leads them; and how will they be made available? Through songbooks, printed sheets, projection on a screen? How will any other resources be made available?

What other expected antecedents can you add? For a lesson, seminar, or course on witnessing for Christ, indeed for the triune God of which the Lord is a part, a felt need likely includes the desire of the attendees to be as effective as possible in communicating the Gospel of Jesus Christ, the calling of each of us who are his believers and followers. (Matthew 28:18-20; 1 Peter 3:15)

Intended Transactions (i.e., our plan as to how we will meet the needs we expect in this session)

Logically, the second step is the plan we develop to meet those needs. What is most reasonable for the teacher or speaker to do, that will effectively help those who attend to resolve their needs? Pertaining to the example of witnessing for Christ, indeed for the whole Trinity, we remember the distinction between knowing and doing; i.e., while it is important to present information as to how to do something, we also have to help the students and/or other attendees to develop the skills to use the information most effectively.

Therefore, using Hilda Taba's "Model of Curriculum and Unit Development," which I explain and how to use in my essay, "Curriculum Development and Lesson Planning: For Teachers & for

Teachers of Teachers,”¹ we start by writing behavioral objectives. These behavioral objectives are very specific and include precisely what, by the end of the course, the students will be able to do, in what context, and how well they will do these behaviors. These statements of intent are expressed in terms of what the learners will be doing in order to demonstrate that they not only understand the subject matter but are also able to state how to apply it to life circumstances, are motivated to act accordingly, and are in fact doing so. The objectives are referred to in the literature as Level III objectives, and I’ve explained them, including how to write and use them, in the above-mentioned essay, “Curriculum Development and Lesson Planning,” and elsewhere.

As indicated in the preceding paragraph, these Level III objectives should be written for all three domains of human learning. The three domains are the cognitive, affective, and behavioral aspects of human development. The *cognitive domain* refers to such mental functioning as knowledge and understanding; the *affective domain* refers, e.g., to feelings, emotions, and attitudes about the subject of the lesson; and the *behavioral domain* refers to action on the subject in life settings. These three domains, sometimes referred to as Head, Heart, and Hands, are not three separate categories; rather they are distinct but linked, interrelated, and function on a continuum, which, together with their importance, I’ve explained in the essay on “Curriculum Development and Lesson Planning.” Pertaining to their importance, see what Jesus has to say in John 14:21, “The one having my commands and obeying them, that one is the one who is loving me; indeed, the one loving me shall be loved by my Father; and I will love him and make myself known to him.” (EDS translation of the original Greek) In fact, all three domains here appear together in just one verse, as well as in larger passages, throughout God’s Word.

Once the objectives have been written, the teacher needs to select and organize the subject matter content that will accomplish the objectives which will meet both the felt and unfelt needs of the students. Then the teacher selects and organizes the learning experiences/teaching methods, which will help his or her students learn the content that will accomplish the objectives that will meet their needs.

Thus, in addition to a presentation of information and explanation via a certain amount of lecture, depending upon the age and other backgrounds of those who attend, the lesson plan will involve discussion and such learning opportunities as role play, which is why this step in the model is called intended *transactions*. The teacher or speaker is not the only one who is active, while everyone else is just sitting and listening. Careful human learning research has shown that adults prefer, and learn best from, a combination of lecture and discussion; the latter can be facilitated by several different methods.

Educators speak of the importance of what is called transfer of learning, which means helping students develop the ability to take what they have learned in the classroom and use it well wherever they are in the world. Another way to refer to learning transfer is what I call going “from the text to the turf.” This skill is especially important in obeying the Lord’s commands, specifically to be his witnesses, and to do so well.

¹ Edward D. Seely, “[Curriculum Development and Lesson Planning: For Teachers and for Teachers of Teachers.](#)” p. 2 ff.

Since witnessing for Christ involves both knowledge and explanation of that knowledge, it is necessary to help our students to not only understand but to develop the skill to explain that understanding to others. That skill of explaining the Gospel of Jesus Christ is most effectively learned by doing that explaining in the classroom setting, or in another instructional context, whereby the student actually explains to someone else who Jesus Christ is, what he is like, what he came to do, what he is doing now, and what he will do when he comes again. One good way to help people develop that skill is in any of several types of role-play methods.

The role-play method I like best is called reality practice role-play, and is done in groups of three, or four if necessary. I explain the method in a lesson plan entitled, “Teaching the Course, *Basic Christianity* by Dr. Arthur H. DeKruyter, Lesson/Volume No. 1 – Introduction to Christian Thought.”

Intended Outcomes

The third step that logically follows next in planning an educational event, such as a class, seminar, or retreat, is stating the intended outcomes. What are the results the teacher expects will occur from proceeding according to the lesson plan?

This statement comes from a review of the Level III objectives that have been written (the second step in Taba’s model) and used to plan the lesson. Level III objectives will be necessary for evaluating whether the desired learning has occurred, including its transference to daily life applications. Well-written Level III objectives in all three human learning domains (cognitive, affective, and behavioral) will give the answer to the question of whether the intended outcomes have resulted. For further information on the three domains, see my essay, “Curriculum Development and Lesson Planning: For Teachers and for Teachers of Teachers.”²

As Christian educators, we need to continually keep in mind how crucial all this planning is to helping God’s children, young people, and adults to know and obey his commands. This message from God appears on every page throughout the Bible and is what Biblical scholars refer to as a major motif. There are a considerable number of major motifs in the Bible (e.g., covenant, love, redemption, blood, unity of word and deed) that I’ve identified and explained in a course called *Bible Digest*,³ in both a PowerPoint and an accompanying notebook that is available on the Christian Education page of my Website at www.fromacorntoak12.com and www.edwardseely.com. The other essays mentioned herein are also located on the Website, and all these resources are free; there is no charge for them.

Now, as Robert Stake has insightfully insisted, these three steps stating the intentions of the teacher are the logical progression of the educational experience that has been planned. Each step is contingent upon the preceding step in a rational sequence. Thus, he designates the

² Edward D. Seely, “[Curriculum Development and Lesson Planning: For Teachers and for Teachers of Teachers](#),” p. 7 ff.

³ Edward D. Seely, “Bible Digest PowerPoint Presentation” and “Bible Digest Notebook,” <https://www.fromacorntoak12.com/church-education-3/>.

Intentional connection between the three steps as consisting of a *logical contingency*; i.e., what can be done in a particular stage is predicated upon, and what is present in, the preceding stage.

However, it doesn't take much experience as an educator to know that what has been planned does not always occur. Thus, Stake's model is helpful in facilitating the most effective implementation of the plan. Hence, we turn to the second column, the **Actualities**, where we ascertain the degree of congruence between what we have planned in each of the three steps and what we actually observe, thus called the *empirical contingency*, taking place in each step.

Actualities

Intending to do something is one matter; actually doing it, is a related but significantly distinct and more important matter. (E.g., Matthew 7:20 ff.) As long as a desire remains only an intention, it is unfulfilled and not helpful. We must accomplish what we intend to do, especially when it pertains to the calling the Lord has given us to serve him, the family he has given us, his church, and the world, all of whom and of which he so loved that he gave his only begotten Son, that everyone believing on him may not perish but have life eternal. (John 3:16)

Thus, Stake states the necessity of taking important notice of the three steps, specifically their components and their relationship with each other. Pertaining to the latter, whereas the three steps in the **Intentional** sequence progress according to a *logical contingency*, in the **Actual** situation, each step is necessarily connected by what Stake calls an *empirical contingency*. That is, in the intentional, or planning, phase, the steps proceed in a logical manner, as we've seen above, but in the actual situation the teacher encounters, the three steps progress empirically according to what the teacher actually experiences upon arrival in the physical location where he or she plans to conduct the instruction planned. Since what has been planned is frequently different from what is discovered in actual experience, changes need to be made, and these modifications depend upon how much difference exists between what was planned and what is empirically observed. Thus, the modifications must be made according to the empirical constraints or contingencies observed to be present.

Observed Antecedents

At the beginning, we started with the first step, identifying the expected or assumed antecedents, the conditions in which our lesson, course, Bible study group, retreat, or other learning experience we are planning is expected to take place. Now we arrive on the scene, well before the attendees arrive, just in case we find out that the actual setting is different from what we assumed would be in place, thus requiring us to make needed changes. **Please note:** even if we have been to this place before, it is unwise to assume it will remain as it was when we were last there; someone else could have used that location and made significant changes to it, making it not congruent with our expectations.

Since it is not uncommon to find that the context in which we will be functioning is different from what we were planning, it's important to allow time to make changes that must be made to enable us to accomplish our objectives. The degree of similarity or conformity with what we planned, what Stake calls *congruence*, determines the amount of modification required in either

the setting itself, our lesson plan, or both: the less amount of congruence, the greater the modification needed; the greater the amount of congruence, the less modification is needed.

Further, the more we can modify any discrepancies in the observed antecedents, to bring the actual setting more into congruence with our expectations, the more likely we will be able to proceed with and accomplish our plan, our intended transactions. For an example pertaining to our objective to teach attendees how to be more effective witnesses for Christ, if the teacher has planned a lesson in the **Intentional** phase that assumes the students know the essential truths in the Bible about Jesus Christ, including the triune God, and upon arriving finds the **Actuality** is that the students know very little about Christ and the Trinity, a very necessary period of time will have to be taken in remedial instruction to teach the basics of the Bible's revelation of who Jesus Christ is and how he functions together with the Father and the Holy Spirit as the triune God. This additional instruction will have to be accomplished before proceeding with the intended lesson plan in the second step.

Observed Transactions

The second step in the **Actualities** phase of our instructional event is the version of our lesson plan, or program, that we can indeed present. It is shaped by the degree of congruence between our Intended Transactions and our Observed Transactions and the Empirical Contingency between our Observed Antecedents and what we see we need to do in our class presentation, retreat, seminar, or other learning experience we are providing in order to accomplish our objectives.

As indicated in the previous section, if a significant lack of congruence between our Expected Antecedents and our Observed Antecedents exists, we then have to make changes to our Intended Transactions, such as the example of remedial education in the previous paragraph. Such changes range from minor modifications on our original lesson plan, which we'll call Plan A, to major overhauls such as a Plan B that contains some of what we had in Plan A but a lot of new content as well. We may even have to implement a whole new Plan C before being able to return to our original Plan A, if at all, depending on the observed needs of the attendees in our Observed Antecedents and the amount of time we have with the students, for example if this program is just a weekend retreat and we have to conclude according to a preset schedule.

Observed Outcomes

The third step in the **Actualities** phase of our instructional event depends upon the degree of congruence between our Intended Outcomes and the Observed Outcomes and the Empirical Contingency between the Observed Transactions and the Observed Outcomes. In other words, do our Intended Outcomes (e.g., the Level III objectives) match the Observed Outcomes as a result of using the actual lesson plan in the Observed Transactions? That is, were our students able to accomplish the Level III objectives?

We have noted above that insightful and helpful lines can be drawn vertically on the chart that alert us to the contingencies, logical and empirical, between the steps within both the **Intentions** and the **Actualities** columns on Stake's chart. We have also reflected on the horizontal lines that

offer important awareness as to the degree of congruence between the corresponding steps across each column.

As the outstanding and internationally regarded educator, Dr. Ted Ward, has observed, we should also draw other lines, making other connections, and take into account the important and helpful questions these connections make. First, in the **Intentions** column, what valuable insights do we find when we draw a line from the Expected Antecedents down to the Intended Outcomes? Such a comparison raises the crucial questions, “Given these constraints, can we reasonably (Logical Contingency) expect these outcomes?” Or, looking at the Intended Outcomes, “Are the objectives appropriate for these people on this occasion?”

Second, what do we learn when we draw a line between the Intended Transactions and the Observed Antecedents? When we carefully examine our lesson plan and what we discover when we arrive on the scene of our educational event, on the basis of what we discovered is actually the case, what changes in the lesson plan should I make, thus resulting in the Observed Transactions?”

Third, in the **Actualities** column, when we draw a line between, or examine both, the Observed Antecedents and the Observed Outcomes, what do we learn? We see what changes in the setting (e.g., the classroom, retreat, conference) have occurred during the presentation, and then we need to ask, “Are these changes acceptable and satisfying; did they meet the felt and unfelt needs?”

Fourth, when we draw a line between, and examine, the Intended Transactions and the Observed Outcomes, what do we learn? On the basis of what actually occurred, what changes in the plan should be made for the next session and/or for the next time this course or presentation is offered?

Educators distinguish two types of evaluation: formative evaluation and summative evaluation. As I explained in another essay,

Evaluation must be done to determine if the students’ have accomplished the objectives that will meet their needs. Careful evaluation encourages both the teacher and the students. In the literature, two types of evaluation are required for the most effective teaching.

Formative Evaluation is the continual comparing and contrasting of what is occurring during the process of instruction with a preset standard, specifically the objectives and any enabling objectives (statements, or at least presuppositions, of what needs to occur in order to accomplish the objectives). For example, as a teacher is presenting information by explanation (such as a lecture), if he or she sees 75% of the students nodding off, or even asleep, a decision has to be made. The teacher has to discontinue, at least for a few minutes, the presentation and say, “O. K., let’s stand up for a minute and take a stretch break. Move around. Have a drink of water or grab a cup of coffee.” Or, move to the next step in the lesson plan or to a Plan B (an alternative plan to accomplish the objectives).

Summative Evaluation is what most people think of as evaluation. This type of appraisal is done at the end of a learning experience such as a lesson, course, seminar, or retreat and constitutes an examination of all that occurred, i.e., the sum total of what took place. The summation includes a look at the Level One objectives but focuses on a review of the Level Three objectives and the record of how well students did in accomplishing the objectives.⁴

In the above discrepancy assessment model, most of the lines drawn and questions asked are formative evaluations that are done in progress within a given lesson, course, retreat, seminar, or conference to facilitate the accomplishment of the intended purposes. Those lines and questions involving the Observed Outcomes are summative evaluations and will help both the teacher and the students to evaluate the learning experience and obtain empirical evidence that the desired learning in all three domains (cognitive, affective, and behavioral) has developed and is continuing over time, thus facilitating the students' maturing in Christ and serving him more effectively. (Isaiah 61:3; Ephesians 4:11-16)

⁴ Edward D. Seely, "[Curriculum Development and Lesson Planning: For Teachers and for Teachers of Teachers](#)," p. 18.