

Developing Assessments

Hello again, I'm Kerry Kinslow. Welcome to our next lesson on assessments for instruction seminar. You know, over the years some of the most common questions I get asked by my students over and over again are: "Why do we have to assess our students?" "Is it really necessary?" "Why do we have to do so much assessment?" I always answer, of course we should assess. In fact, we should assess again and again and again throughout a unit of instruction. Why is important to assess you ask? Well, if you don't determine if your students can perform the task that you're training them on before they leave the training environment, how are you going to know if they can perform the task on the job when it really counts? Keep in mind though assessment doesn't necessarily mean testing. When we talk about assessment we're talking about measuring student progress towards your stated objectives. This can and should be done frequently to let you and the student know where they stand in the training environment. To support my statement, let's take a look at a quote from Robert Mager.

According to Robert Mager, author of Preparing Instructional Objectives, "An objective is a description of a performance you want the learners to be able to exhibit before you consider them confident." The key word in Mr. Mager's quote...*exhibit*. We want to see if the student can perform the task stated in the objective before they leave the training environment. Having said that, let's take a look at our Terminal objective for this training presentation.

Our objective for this training presentation is for you to be able to; given a performance based objective we want you to develop and administer a written or performance based assessment that measures the stated learning outcome and meets the minimum criteria specified in the NTC lesson plan evaluation checklist. That's correct. In your 30-minute presentations we want you to develop and administer an assessment. But don't worry, this won't be overly complicated or time consuming. We just want to make sure that your students do the stated performance in your Terminal objective. Now that you know what our objective is for this lesson, let's take a look at what we will be covering.

In this lesson we will be covering the following topics: assessment versus evaluation, types of assessments, how to develop an assessment, and how to administer an assessment. Now that you know what we will be covering, let's dissect the difference between assessment and evaluation.

In order to make sure you grasp the difference between the two, let's keep things real simple. When we talk about assessment, we're talking about all the things you can do as an instructor to determine if your students are on the right track in meeting your established training objectives. Of course, assessment is also a valuable tool for your students as well. It provides them with immediate feedback on where they stand in

relationship to expected outcomes and training objectives. When we talk about evaluation, we're talking about that final piece of the puzzle to find out if our students did in fact reach our intended learning objectives. This could be through a post test, written or performance. For our purposes, we're not going to cover how to evaluate your students. Meaning, we're not going to show you how to develop test questions, or how to develop checklists or scoring rubrics' for performance-based assessments. These skills are not within the scope of the course. However, in the future these skills may be offered as additional professional development courses that you can take when you wish. So, simply stated, we will assess you the whole time you're here to determine if you're making progress. However, we will only evaluate you once on the last day of training when you deliver your thirty minute training presentation. Keep in mind our evaluations are not graded, meaning; you won't receive a score, only feedback from your instructor, coordinator and peers. Let's now look at the different type of assessments.

When we talk about the types of assessments, we're talking about the different things that you can do during class or during your presentation that will allow both you and the students to determine if they can do the state of performance in your terminal and the enabling objectives. Our first type of assessment is known as an objective assessment. Here you can administer pen and paper exercises. For example, you can do quizzes, case studies, or scenarios base type exercises were you use matching, multiple choice, true false, or fill in the blank, or even essay type questions. Our second type of assessment is known as a performance based assessment. Here you can administer live demonstrations, or practice sessions in the classroom. For example, things like role play, discussions, or demonstrations, where by you demonstrate a specific skill like counseling, driving, instructing, taking a water sample, or using a computer application, and then you have the students practice and demonstrate the skill.

If you're struggling with objective assessments versus performance based assessments, just remember, a physical skill sometimes referred to as a psychomotor skill, is a physical activity required to accomplish a job. Some examples of psychomotor skills are: inspecting an oil well, operating a vehicle, taking a water sample, or delivering a training presentation. Now that you know what the different types of assessments are, let's learn how to develop an assessment.

Obviously when we're thinking about developing an assessment, we should always to refer to either our terminal or enabling objectives to make sure we develop an assessment that matches what we want the student to be able to do. Using our example again from the developing performance base objective lesson, what is the performance component of this terminal objective? If you said, adjust the fair market value estimate of the mineral material, you would be correct. However, how are we going to assess the performance stated in this terminal objective?

Are we going to use an objective or performance based assessment? Remember, objective assessments are your pen and paper assessments. Performance based assessments are for your physical or psychomotor skills; for example, delivering a 30-minute training presentation, operating an ATV, or taking a water sample. For our objective, we will be using an objective pen and paper type of assessment that will be scenario based because it is not a physical motor skill. You can make a case that the calculation is performance based, however, the assessment still needs to be carried out via pen and paper with scenarios.

Now that you know what you're going to assess and how you're going to assess it, what would you need in order to administer the assessment? You might need scenarios and questions, or pictures, or materials or handouts like charts and graphs. You might need a segment of video, or people, or to recreate certain aspects of the environment. Here's a little tip, refer back to your terminal objective, and look at the condition component to determine what the students will need in order to complete the performance stated. Of course, the condition component will more than likely not indicate everything you will need, for example. You might need a rocky slope and a piece of equipment to do a calculation, you might need water and equipment to take a water sample, you might need people to deliver a training presentation or to practice triage or CPR procedures. You can use your students if you have people needs. And don't forget, you will need to have enough of whatever it is you need to carry out the assessments for everyone, meaning all your students, or else your assessment could become cumbersome and time consuming. Finally, you may want to have some type of checklist for your students if you're administering a performance based assessment in the classroom, so they have the steps in front of them to refer to as they work through the task. We have checklists for you to use for your thirty minute training presentations, they are located on the Instruction Seminar materials KRC, or Knowledge Resource Center, that we provided for you. Look for the student 30-minute presentation evaluation checklist, and lesson plan evaluation checklist. They both have all the components we will be looking for during your presentations. Also there are the 30-minute presentation and lesson plan guidelines that provide an in depth explanation of each item on the checklist. Please review those if you would like to know exactly what we will be evaluating you on.

Now that you have considered your assessment needs, you need to develop the assessment. Keep in mind this will probably be the most time consuming part of the process for you. Developing scenarios and quiz questions will take some creative thought and time to develop them properly. Gathering pictures, developing handouts, or finding the right section of video, or enough equipment will also take time. Something else to consider is developing good instructions for the assessment. You will deliver these instructions when you deliver the assessment with your students, make sure they are specific in detail. Also, plan accordingly, the last thing you want to do is wait until

the last minute to develop the assessment piece for your training presentation. In fact, it's highly recommended that you develop it several weeks in advanced so you could let other instructors, instructional system specialists, and coordinators review it for technical accuracy and educational soundness. Now that you know how to develop your assessment, let's learn how to administer it properly.

When it comes to administering assessments, one of the biggest weaknesses that both experienced and novice instructors make over and over again is, not giving specific instructions for the assessment. Trust me, I don't know how many times I have given instructions for an exercise and my students give me the "deer in the headlights look". Don't let this happen to you, be specific. Give good instructions before starting the assessment. Let your students know what it is they're supposed to be doing, how they are supposed to do it, how much time do they have to do it, and what they will be doing once they have completed the assessment. Remember, we're talking about some type of exercise that matches your objectives. Normally, at the completion of an objective assessment exercise, there is some type of out brief whereby you allow the students to share their findings or results. This is an excellent opportunity for you as an instructor to determine if they got it, and if they missed the mark a little bit, either you can fill in the missing pieces or let other students try. Of course, this will require you to ask effective questions to facilitate a good review discussion. To help you with that skill, we will have a lesson on asking effective questions, later on in the course. Now that you know how to deliver an objective assessment, let's take a look on how to assess a performance based assessment.

When we administer a performance based assessment, we want to first demonstrate the task at least once or twice depending on the complexity of the task. We then want to have the students practice the task several times with either peer or instructor assistance. Just think about driving a car, you've watched your parents do it for years, but when it came time for you to take the wheel, you either had them in the passenger seat guiding you, or if you had drivers Ed an instructor. This is the same principle, finally we want the students to demonstrate the task on their own with no assistance from anyone. This reassures them and you that they can do the task before the end of your lesson presentation. It also helps to build their confidence. When they're finished, you could have an out brief to discuss how things went for them, to get a feel for needed improvement areas. Imagine for a second if you did not have assessments in your lesson presentations, and all you did was tell the students how to do something or to lecture. How would anybody know if they could do the task properly when they return to their offices? With that in mind, do you currently have assessments integrated into your lesson presentations? Now that we've covered how to administer an assessment, let me give you one last thing to consider before you start working on your assessment for your thirty minute instruction seminar training presentation.

If you're going to administer pen and paper type assessments, if possible make sure some of the questions measure the actual terminal objective, if you can't write questions that measure the terminal objective, chances are you need a performance based assessment. What do I mean by that? Well, let's look at our example again. We want the student to do what? Adjust the fair market estimate of the Mineral material.

Therefore, we want to develop a question that requires our students to do the performance stated in our terminal objective. Notice right away that this is not just a question, but a scenario that includes all the mineral material data, that we said we would give to the student. As stated in the condition portion of the terminal objective. Meaning, the mineral material data they need to do the calculation. All though the correct answer is amongst the available responses, the student will still have to perform all the enabling objectives to complete the task stated in our example terminal objective. Meaning, these tasks are inherent to the tasks stated in the terminal objective. The student cannot obtain the correct answer without going through each of the steps stated in the enabling objectives. Now that you have seen a quiz question that measures our example terminal objective, let's take a look at a quiz question that does not.

The following multiple choice question is an example that measures just a piece of knowledge needed to complete the task. Notice it is asking where something is located. These types of questions are okay in your assessments, and even in the post test. As long as you have either questions that measure the actual performance stated in your terminal objective or a performance based assessment. However, if your assessment has nothing but knowledge based questions that do not require the students to perform the task stated in the terminal objective, then you are missing the mark. More importantly, you are not preparing the students for the skill set they will need when they are in their field offices. Relying solely on knowledge based questions during your assessments either through discussions or paper quizzes, will only hamper them and the BLM in accomplishing daily mission requirements. Remember; assess the task stated in your terminal objective, and not just the knowledge.

When you deliver your thirty minute training presentation, we will be looking to see if you met the following criteria: Did you get your students to your intended terminal objective? Did you use different learning strategies (we will cover these later in the course)? Did you have your students do something? Was there physical inner activity? Having an assessment in your presentation will help you meet all of these requirements.

In conclusion, we covered several very important topics in order to get you to our intended terminal objective.

First, we covered the difference between assessment and evaluation. Remember, assessment is something you should do continuously with your students during your

lesson presentations in relationship to your stated terminal enabling objectives. Specifically, are you checking to see if the students are progressing towards the stated objectives? Evaluation on the other hand tells us if the students did in fact reach our intended objectives. Evaluation helps us to validate our course. It is usually done with post tests and surveys. There are several different ways we can assess our students. We can either assess them objectively meaning on paper or we can assess them physically, meaning a live performance based assessment. For example, when you took your test to obtain a driver's license, you were tested objectively on paper whereby you were given scenario based questions that you had to answer. For example, you are approaching an intersection at forty miles an hour, you are a hundred feet from the intersection, you see the light turn yellow. You should? You get the point. However, you were also given a performance based test that requires you to actually drive the car with an instructor evaluating you. With that example in mind you can and should have these types of assessments in your actual training presentations in order to provide the students the opportunity to practice. In order to develop a good assessment, make sure you review your terminal objectives to make sure your assessments target the skill and not just the knowledge. Also, take the time to determine what you will need for your assessments and develop them. Remember, developing assessments takes time. Also, don't forget to develop good instructions for your assessments. When it comes time to administer your assessments, you don't want your students to get that, "deer in the headlights" look when you're giving the instructions. Also, if you're administering a performance based assessment, be sure to give yourself enough time to do so these types of assessments can be time consuming. Furthermore, be sure to demonstrate the task a couple of times for the students before allowing them to practice a couple of times with either your help or guidance or with their peers helping. Now that we have reviewed our topics, let's take a look at our lesson objective.

If you'll remember, the objective of our lesson was for you to be able to, given a performance based objective, develop and administer a written or performance based assessment that is an exercise that measures the stated learning outcome and meets the minimum criteria specified in the NTC lesson plan evaluation checklist. Now you might be thinking, well we didn't get to do this during the lesson, and you'd be absolutely right. However, when you attend the live portion of the course, you will. When you attend the webinar portion of the course we have an exercise to help you prepare your assessment for your thirty minute training presentation. Here are your directions; answer the following questions on a sheet of paper, then bring the sheet with you to the webinar, we'll talk about your assessment. The following questions are; What will your assessment have the students doing? It should match your objective. What will you need to successfully carry out the assessment with your students? What are the directions for the assessment? How much time will you give the students for the assessment? Remember you will need this assessment integrated into your thirty

minute training presentation. Why? Because we want to make sure your students have the opportunity to practice the stated performance in your terminal objective. More importantly, the assessment will provide you and the students with the feedback needed to determine if they're 'getting it' or 'not'. Good luck in developing your assessments.