This course supports the assessments for JRT2. The course covers 4 competencies and represents 2 competency units.

**Introduction**

**Overview**
You will soon find out about evaluation questions and what they are used for. You will apply your knowledge and skills relative to quantitative/qualitative data collection and analysis, formative and summative evaluations, and obtaining the needed information relevant to what you want to study.

**Getting Started**
Welcome to Evaluation Methodology and Instrumentation! This course will help you gain the knowledge and skills needed to complete the Tasks associated with this course.

The following are some questions you may be asking yourself:

- How will completing the performance assessment help you conduct your formative and summative evaluations?
- How will you decide which data to collect?
- How will you obtain the data necessary for your formative and summative evaluations?
- How will you know which instruments will be best to use in your formative and summative evaluations?

*Note: To download this video, right-click the following link and choose "Save as...": [download video](#).*

This course provides guidance to help you demonstrate the following 4 competencies:

- **Competency 506.1.1: Assessment Validity**
  The graduate understands essential information related to assessment validity.
- **Competency 506.3.1: Qualitative Data Collection Tools and Techniques**
  The graduate employs appropriate qualitative data collection techniques and tools to collect data.
- **Competency 506.3.2: Quantitative Data Collection Tools and Techniques**
  The graduate employs appropriate quantitative data collection techniques and tools to collect data.
- **Competency 506.4.1: Designing an Evaluation Plan**
  The graduate develops a formative or summative evaluation plan.

**Teaching Dispositions Statement**
Please review the [Statement of Teaching Dispositions](#).

**Course Instructor Assistance**
As you prepare to demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try, course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources
The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

Automatically Enrolled Resources

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.

VitalSource E-Texts
The following textbooks are available to you as e-texts within this course of study. You will be directly linked to the specific readings required within the activities that follow.


Note: These e-texts are available to you as part of your program tuition and fees, but you may purchase hard copies at your own expense through a retailer of your choice. If you choose to do so, please use the ISBN listed to ensure that you receive the correct edition.

Other Learning Resources
You will use the following learning resources for this course.

**WGU Library E-Reserves**
This course of study utilizes resources located in the WGU Library E-Reserves, with articles available for you to download. For instructions on how to access WGU Library E-Reserves, see the "Accessing WGU Library E-Reserves" page.

The following e-reserve materials will be used in this course:


*Note: These resources are not optional. You are required to read them as you are required to read other materials outlined in the course. You may print or download the chapter to your computer.*

**Pacing Guide**
The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.

**Week 1**

- Introduction
- Preparing for Success
- Evaluation Questions

**Week 2**

- Evaluation Questions (cont.)

**Week 3**

- Instrument Design
  - Task 1

**Week 4**

- Assessment Design

**Week 5**
Evaluation Questions

For the first performance assessment, you will perform a formative evaluation on an instructional product or program you created. For the task in this subject, you will begin by formulating your evaluation plan. You will describe what you will be evaluating and the type of evaluation you will use (formative), and then you will write the questions that will guide your evaluation.

Introduction to Evaluation Questions

Your list of evaluation questions should begin with, "Was the instructional goal achieved?" The remaining questions should be open-ended questions looking for weaknesses in the product. Open-ended questions are those that CANNOT be answered with a yes or no answer. Closed-ended questions typically start with "did," "was," or "were," and elicit closed-ended questions. Four to six questions are usually adequate. These questions are not asked of participants but are used by you the evaluator to guide the entire evaluation process and materials. The following are examples of appropriate formative evaluation questions:

- Which directions were not clear?
- What sections of the instruction were the least interesting?
- Which vocabulary was not properly geared to the target audience?

On the other hand, you would not want to use questions that are closed-ended questions or are not looking for weaknesses. The following are examples of inappropriate questions:

- Was the pacing appropriate for the instructional product?
- Were the learners engaged throughout the instruction?

Readings

In *Program Evaluation: Alternative Approaches and Practical Guidelines*, read the following chapters:

- chapter 1 ("Evaluation's Basic Purpose, Uses, and Conceptual Distinctions")
- chapter 2 ("Origins and Current Trends in Modern Program Evaluation")
- chapter 4 ("Alternative Views of Evaluation")
- chapter 6 ("Program-Oriented Evaluation Approaches")
- chapter 8 ("Participant-Oriented Evaluation Approaches")
- chapter 10 ("A Comparative Analysis of Approaches")
- chapter 13 ("Identifying and Selecting the Evaluation Questions and Criteria")
- chapter 16 ("Collecting Evaluation Information: Data Sources and Methods, Analysis, and Interpretation")

Also, in *The Systematic Design of Instruction* read the following chapters:

- chapter 10 ("Designing and Conducting Formative Evaluations")
Read the following in *Handbook of Human Performance Technology*, located in the e-reserves:

- chapter 10 (“Evaluation”)

**Program Description**

You will be asked to describe the instructional product that you will evaluate in a way that allows the reader to visualize the product. Can you imagine reading an evaluation report of something without knowing what was evaluated? This will be good practice for writing the introduction section for your capstone. Be sure to include the instructional goal and performance objectives in your description. You will need to write Mager-style objectives for your evaluation. These objectives differ from normal three-part objectives. Please view the following presentation on how to write Mager-style objectives: [Mager Objectives](#).

**Start Notebook Assignment 1**

Describe the program or product that you are evaluating. Remember that this is a formative evaluation and the program or product should be something that you created. If the program or product is instructional, include the goal and performance objectives in your description.

**Audience Description**

Describe the audience for the instructional product. The audience is the target group of students, such as 10th grade science students. Be sure the description focuses on their characteristics relative to the instructional product you developed.

**Target Audience**

In your notebook, post three characteristics of your target audience AND explain how each feature relates to their role as learners of your instruction.

**Continue Notebook Assignment 1**

Continue your evaluation by describing the audience for the program or product. Write at least three characteristics of your target audience AND explain how each feature relates to their role as learners of your instruction.

**Evaluation Type Description**

Describe the type of evaluation that you are planning to perform (formative), and the three stages of your evaluation. Include who will perform the evaluation (internal or external evaluator) and at what point in the development of the instructional product it will be conducted.

**Continue Notebook Assignment 1**

Write all of the characteristics you can think of that are specific to formative evaluation. Then, continue your evaluation by describing the three stages of your formative evaluation (SME, one-to-one, and small group).

**Purpose of Evaluation**

Once you have the subject of the evaluation in mind, you must decide what you want to know. For the WGU formative evaluation of your instructional product, you want to know if the
instructional goal was accomplished and what portions of the product need revision. If the instructional goal is not achieved, no matter how interesting or how beautifully designed the product is, it is not serving its purpose. You need to decide what will be the purpose(s) of your evaluation. In other words, in this section of your evaluation, you would need to answer why you would conduct a formative evaluation on your program or product.

Continue Notebook Assignment 1

Continue your evaluation by describing the purpose of each stage of your evaluation. When thinking about your purpose, ask yourself, "What might be some consequences if you did not formatively evaluate your newly-developed instructional product?"

Rationale for Evaluation

If the instructional product is not serving its purpose, it needs major revision. In this section, you will seek to discover all areas of the product that can be improved through revision. This is not the time to look for pats on the back or compliments on the product; it is the time to look for mistakes, glitches, and weaknesses in the product or program. Curriculum is never perfect on the first attempt and will always benefit from thoughtful evaluation. Consider evaluation to be part of the development process and do not be defensive about what you have developed.

A successful formative evaluation may or may not show that the instructional goal was met, but it will point out areas that need to be revised. Discuss your rationale for selecting the type of evaluation you are planning to conduct.

Rationale

Write in your notebook your rationale for conducting a formative evaluation.

Continue Notebook Assignment 1

Continue your evaluation by discussing your rationale for conducting a formative evaluation.

Evaluation Questions

The first question of any formative evaluation should be, "Was the instructional goal achieved?" The other questions should be open-ended questions looking for weaknesses in the product. Examples of appropriate formative evaluation questions include:

- Which directions were not clear?
- What sections of the instruction were the least interesting?
- What vocabulary was not properly geared to the target audience?

The following are examples of questions that are not open-ended, which do not look for weaknesses. These closed-ended questions can be answered with simple "yes/no" answers. Avoid questions like these when writing questions for a formative evaluation:

- Was the pacing appropriate for the instructional product?
- Were the learners engaged throughout the instruction?

Start Notebook Assignment 2

Write three to five evaluation questions that will be used to guide your formative evaluation.
Instrument Design

One important differentiation between professionals with and without graduate degrees is how they understand, collect, and use data for decision making. Prior to graduate school, educators are typically fed information passively, and they often consume it uncritically. In graduate school, students learn how to effectively collect and analyze data. An important part of this transition is understanding that data from various sources have different characteristics in their use, analysis, and understanding.

Data are generally divided into two categories: quantitative and qualitative. Each type of data generally has its own method of collection and analysis, although as you will learn, it is possible to quantify qualitative data. The differences are discussed in more detail in the topics below.

Evaluation Context
You will describe the product or program which you plan to evaluate. Also include the type of evaluation you are planning, the purpose of the evaluation, and the evaluation questions.

Continue Notebook Assignment 2

In your formative evaluation you will be gathering data on your instructional product or program. Continue your evaluation by answering the following questions about the types of data you will be gathering in your formative evaluation:

- What type of data will you gather in your evaluation?
- How will you analyze the data in order to find weaknesses in your product or program?
- If you are gathering qualitative data, will you convert it to quantitative data? If so, how?
- If you are gathering quantitative data, what statistics or mathematics will you be using to analyze it?
- How will you display the results of your data?

Interview
As a professional conducting a formative evaluation, you will work intentionally and purposefully in completing your work. As such, you will want to think carefully about who you want to talk to, what you want to ask them, and why you are asking these people these questions. Without this, you risk wasting not only your own time and effort, but also the time and effort of your participants. You will write the purpose for and the participants of a potential interview related to the formative evaluation you are planning.

Continue Notebook Assignment 2

Discuss the purpose of and participants in a potential interview related to the product or program you are evaluating.

Interview Questions
Questionnaire and interview questions are either closed-ended or open-ended. Closed-ended questions ask for a very specific piece of information. They are not necessarily asking for a "yes" or "no" answer but may be something like, "How many siblings do you have?" There is only one right answer to this question. The respondent would not tell a story about siblings but would answer with a specific number. Open-ended questions are designed to elicit a richer
response.

An example of an open-ended question is, "How did you feel when you passed the test but missed almost half of the questions?" Another example is, "Tell me some of your happiest experiences in your first year teaching third grade." You will write eight to ten original interview questions that would be appropriate for your formative evaluation. The interview questions will be a type of qualitative data collection.

Write Interview Questions

In your notes section or in your personal study journal, write several examples of interview questions. Write your interview questions in your notebook.

Continue Notebook Assignment 2

Write 8–10 original interview questions that you could use during your evaluation that are appropriate for the purpose and participants.

Rationale for Interview Questions

You will write your rationale for choosing the type of interview (structured, semi-structured, or unstructured) and the type of interview questions (open-ended or closed-ended) that you selected. As outlined in the previous topic, it is important to work intentionally and purposefully in conducting your interview(s).

Continue Notebook Assignment 2

Discuss why you chose the type of interview and interview questions you did for your evaluation instrument. In your discussion, explain why you chose this method over at least two other commonly used interview methods.

Evaluation Questionnaire Context

You have completed a description of the product or program you are evaluating, the type of evaluation you are performing (formative), the purpose of the evaluation, your evaluation questions, an explanation of the purpose of and participants in a potential interview, and original interview questions. You have also discussed why you chose the type of interview and interview questions.

The completion of the "Evaluation Plan" task continues with a discussion of the purpose of and the participants in a potential questionnaire or survey, and the design of an original questionnaire or survey.

Notebook Assignment 2

How might you use a questionnaire in your formative evaluation?

Discuss the purpose of and participants in a potential questionnaire or survey related to the product or program you are evaluating. Address the purpose of the questionnaire and who the respondents would be.

Read the Evaluation Questionnaire Document

Read the following document:
• Evaluation Questionnaire

Continue Notebook Assignment 2

Design an original questionnaire or survey that is appropriate for the purpose and participants in your evaluation. Use design elements that contribute to the purpose of the product.

Complete Task 1

Complete Task 1 in Taskstream. It is recommended that you use the JRT2 Task 1 template to complete this task. You can access it by clicking here.

For details about this performance assessment, see the "Assessment" tab in the course.

Assessment Design

For your second performance task, you will assess learner understanding and determine if the content is adequately being covered in a fully-developed instructional product or program. You will be performing a summative evaluation in this task since you are using a fully-developed instructional product or program and using the results to measure learner achievement. Since you are using a fully-developed instructional product or program, you will not be using the same program or product that you used in your first task.

Evaluation Context
Copy and paste your evaluation questions from the instructional design you create.

Start Notebook Assignment 3

Write a description of the product or program you are evaluating and how it is appropriate for your setting

Assessment
You will write the purpose for and the participants in a potential assessment related to the summative evaluation you are planning. The assessment will most likely be a multiple-choice test.

Continue Notebook Assignment 3

Discuss the purpose of and participants in a potential assessment related to the product or program you are evaluating.

Performance Objectives
You will write the performance objectives related to the summative evaluation you are planning. It is important that you understand the relationship between objectives and assessment. The third part of each objective is the criterion, or measurable portion. That part of the objective should align with the assessment(s) you include in the instructional product. Please be sure to go back and review the Mager-style objective presentation again if needed on how to write performance objectives: Mager Objectives.

Read and Write

Read the following section within The Systematic Design of Instruction:
Continue Notebook Assignment 3

Provide the performance objectives that the assessment will measure.

**Assessment Validity**
You will address the type of assessment validity you chose to use for your test and why you feel that type is most appropriate for the assessment you developed.

**Read Chapter 6**

As you prepare to complete the assessment validity task, read the following in *Educational Research: Competencies for Analysis and Applications*:

- **chapter 6 ("Selecting Measuring Instruments")**

**Continue Notebook Assignment 3**

Write an assessment that has face validity to measure your performance objectives.

1. Determine the type of question that is appropriate for each objective.
2. Write at least **three** different assessment items per performance objective. (*Do not write item clones; each item should be significantly different, with substantial distractor and response differences between items.*)
3. Provide the evaluation method for the assessment (e.g., answer key, rubric, etc.).
4. Use design elements that contribute to the purpose of the product.

**Complete Task 2**

Complete Task 2 in Taskstream. It is recommended that you use the JRT2 Task 2 template to complete this task. You can access it by clicking [here](#).

For details about this performance assessment, see the "Assessment" tab in this course.

**Final Steps**

Congratulations on completing the activities in this course! This course has prepared you to complete the assessments associated with this course. If you have not already been directed to complete the assessments, schedule and complete your assessments now.