Designing Performance Assessments

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## **Designing Performance Assessments**

Although it is important to assess student's knowledge of facts and basic concepts, other types of knowledge are equally important to assess. By assessing students using more than one type of measure, instructors are more suited to provide a complete analysis of student's progress towards mastering the course objectives. Also, some objectives are not well suited for a written assessment. Performance assessments allow students to show greater depths of knowledge.

#### **Objectives for Performance Assessments**

"Performance assessments do what written tests cannot; they measure acquisition of problem solving: a set of skills that goes beyond the knowledge of concepts and rules" (Oosterhof, Conrad, & Ely, 2008, p. 142). Some objectives also require a more length essay style answer which necessitates the need for developing rubrics to objectively measure the content. In the driving assessment, some of the objectives are not appropriate for a written test. These objectives include:

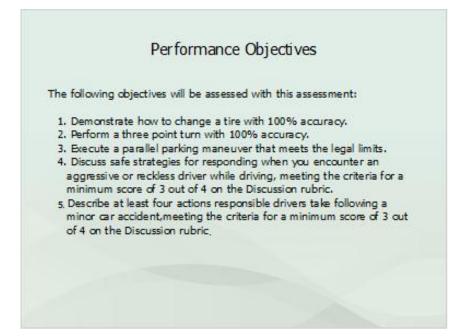
- 1. Demonstrate how to change a tire with 100% accuracy.
- 2. Perform a three point turn with 100% accuracy.
- 3. Execute a parallel parking maneuver that meets the legal limits.
- 4. Discuss safe strategies for responding when you encounter an aggressive or reckless driver while driving, meeting the criteria for a minimum score of 3 out of 4 on the Discussion rubric.
- 5. Describe at least four actions responsible drivers take following a minor car accident, meeting the criteria for a minimum score of 3 out of 4 on the Discussion rubric.

#### **Performance Assessment Items**

#### Slide 1:



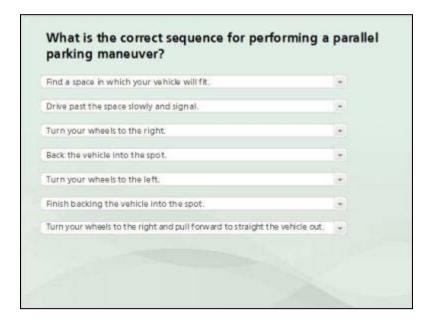
#### Slide 2



Slide 3

What is the correct sequence for performing a Parallel Parking maneuver?

(Sequence Drop-down, 7 points, 2 attempts permitted)



Correct Order
Find a space in which your vehicle will fit.
Drive past the space slowly and signal.
Turn your wheels to the right.
Back the vehicle into the spot.
Turn your wheels to the left.
Finish backing the vehicle into the spot.
Turn your wheels to the right and pull forward to straight the vehicle out.

### Feedback when correct:

That's right! You selected the correct sequence.

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# **Try Again Slide**

ring a space in	which your vehicle will fit.	(10)
Drive past the	(*)	
Turn your wit	Incorrect	-
Back the veh	You have incorrectly sequenced the steps needed to parallel park. Please try again.	
Turn your wit		
Finish backin	Try Again	
Turn your whee	Is to the right and pull forward to straight the vehicle out.	

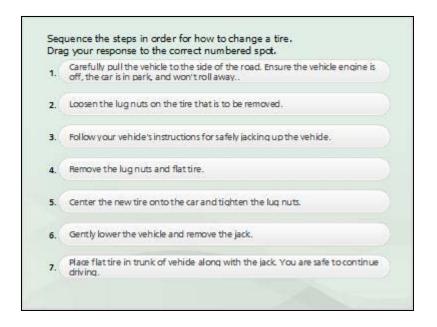
Feedback when incorrect:

You have incorrectly sequenced the steps needed to Parallel Park.

### Slide 4

Sequence the steps in order for how to change a tire.

(Sequence Drag and Drop, 7 points, 2 attempts permitted)



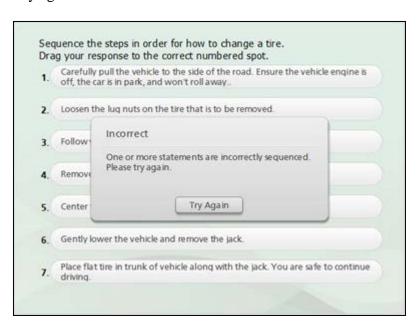
Feedback when correct:

That's right! You correctly sequenced the steps needed to change a flat tire.

Feedback when incorrect:

You have not correctly sequenced the steps needed to change a flat tire.

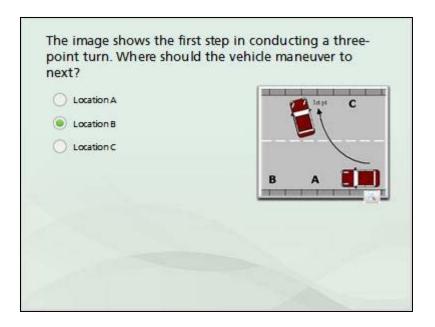
Try again slide



### Slide 5

The image shows the first step in conducting a three-point turn. Where should the vehicle maneuver to next?

(Multiple Choices, 1 point, 1 attempt permitted)



Correct answer: Location B

Feedback when correct:

That's right! You selected the correct response.

Feedback when incorrect:

You did not correctly identify the next place for the vehicle to maneuver to when conducting a three- point turn.

### Slide 6

What angle should the car tires be pointing when maneuvering the vehicle in the last step of a three-point turn?

(Multiple Choices, 1 point, 1 attempt permitted)

	be pointing when last step of a three-
○ 30	
<ul><li>45</li></ul>	
O 60	
90	

Correct answer: 45 degrees

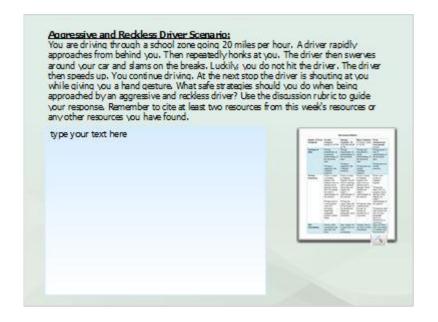
Feedback when correct:

That's right! You selected the correct response.

Feedback when incorrect:

You did not select the correct response.

### Slide 7



## **Scenario:**

You are driving through a school zone going 20 miles per hour. A driver rapidly approaches from behind you. Then repeatedly honks at you. The driver then swerves around your car and slams on the breaks. Luckily, you do not hit the driver. The driver then speeds up. You continue driving. At the next stop the driver is shouting at you while giving you a hand gesture. What safe strategies should you do when being approached by an aggressive and reckless driver? Use the discussion rubric to guide your response. Remember to cite at least two resources from this week's resources or any other resources you have found.

(Essay, 10 points, 1 attempt permitted)

#### **Discussion Rubric**

Quality of Work Submitted	Exceeds Standard A(4.0); A- (3.75)	Meeting Standard B+ (3.5); B (3.0); B- (2.75)	Below Standard C+(2.5); C (2.0); C- (1.75)	Work Submitted but Unacceptable F (1.0)
Synthesis of ideas	Writing demonstrates an exceptional understanding of the discussion topic.  Writing is supported with creditable resources.	Writing demonstrates an understanding of the discussion topic. Writing is supported with creditable resources.	Writing may demonstrate a partial understanding of the discussion topic.  Writing does not include creditable resources.	Writing shows a lack of understanding of the discussion topic. Writing does not include resources.
Written Expression	Work is written in Standard English with minimal errors in spelling and/or grammar which does not impede the reader's understanding of the material.  Writing conveys a clear purpose with well-developed supporting paragraphs around a central theme.	Work is written in Standard English with few errors in spelling and/or grammar which does not impede the reader's understanding of the material.  Writing has logical ideas that are developed in an introduction, supporting paragraphs, and a conclusion.	Work is written in Standard English with many errors in spelling and/or grammar which impedes the reader's understanding of the material.  Writing has ideas communicated, but may be missing an introduction or conclusion.	Work is not written in Standard English.  Writing has many errors in grammar and/or spelling which impedes the reader's understanding of the material.  Writing has some ideas present but does not have paragraphs and/or an introduction or conclusion.
APA Conventions	Follows APA conventions and may have one error.	May contain two to three errors in APA conventions.	Contains four to six errors in APA conventions.	Does not follow APA conventions or contains more than six errors.

Slide 8 Responsible Driver Essay



### **Scenario:**

You are driving down the parking lot heading to a grocery store. Suddenly, another car quickly backs out of their parking spot and hits your car. Describe at least four actions responsible drivers take following a minor car accident. Make sure your short essay includes resources from this week's reading to support your ideas. The discussion rubric used to score this essay is attached. (Essay, 10 points, 1 attempt)

Slide 9 The driving and performance test



(10 points per demonstration)

Slide 10



#### **Rationale for Selection of Assessment Items**

"Performance assessments do what written tests cannot; they measure acquisition of problem solving: a set of skills that goes beyond the knowledge of concepts and rules" (Oosterhof, Conrad, & Ely, 2008, p. 142). This portion of the driver's assessment included questions that varied from sequencing, multiple-choice, essay, and performance of an action. By having a combination of questioning strategies, the instructor is more able to objectively measure student performance towards meeting the course objectives (Washer & Cochran, 2012). Three learning objectives required assessing the affective domain. These objectives required students to change a flat tire, Parallel Park, and perform a three-point turn. The two essay questions emulated real life examples about safe driving and what to do in a minor accident. These performance assessments support learning as they emulated real life tasks (Palm, 2009). The scenarios included in the essay required students to demonstrate a greater depth of knowledge (Moallem, 2007). Students are required to apply knowledge in a more realistic scenario (Osborn & Neill, 2005).

Articulate® Storyline (2012) was used to develop these performance tasks. This software allows for students to receive immediate feedback on some of the question types. Flash based technology increases learner interest in the assessment (Articulate Global, 2012). Automatic scoring of many of the questions reduces the instructor's workload. Rubrics were included to help students judge their work prior to submission of their essays. The entire project was saved as an html file to allow for easy integration into learning management systems.

#### Conclusion

Learning objectives need to be aligned to the method of assessment. Some objectives require observing behavior. This portion of the driver's assessment was designed to measure

skills and competencies needed to safely operate a vehicle. Some of the questions required critical thinking about scenarios that occur while driving. Performance assessments afford students the opportunity to demonstrate a deeper understanding of the course material (Oberg, 2009). "Performance assessments in an authentic context adds relevance for learners by connecting learning to tasks that are meaningful both inside and outside the world of education" (Osborn & Neill, 2005, p. 5).

#### References

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