

# Selecting and Adapting Performance Assessment Tasks

DESIGNING FOR DEEPER LEARNING



Stanford  
University

# Selecting an existing task



# Guiding Questions for Selecting a Task

*What curricular topics are right for my class?*

*What key performance outcomes am I interested in for my students?*

*What is the quality of the task?*



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# EXAMPLE IN PROBABILITY



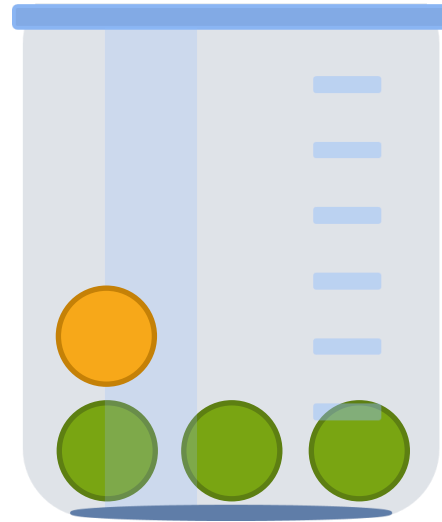
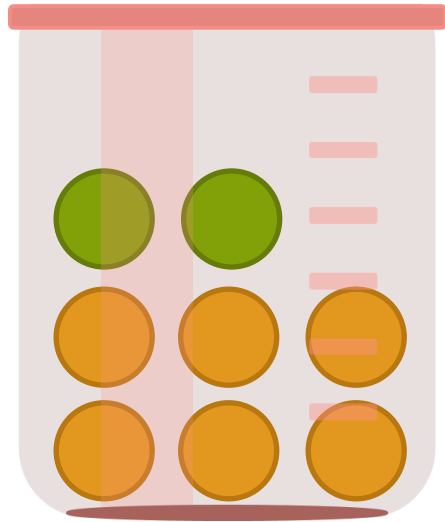
$$P(A | B) = \frac{P(A \cap B)}{P(B)}$$

$$P(B|A) = P(A \cap B) / P(A)$$

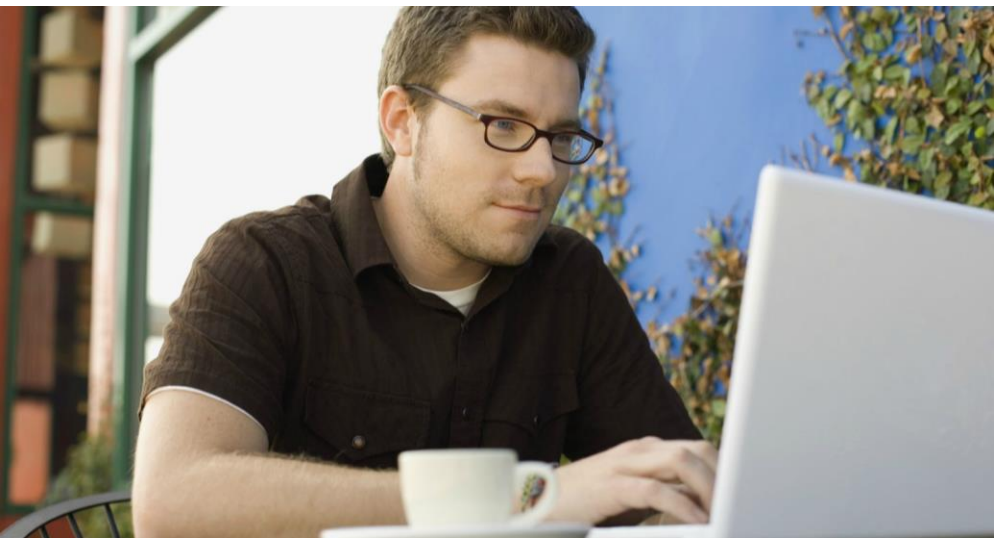
$$P(A|B) = P(A \cap B) / P(B)$$

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# MATH CONTENT STANDARDS

## STUDENT PERFORMANCE OUTCOMES

S-CP

Understanding independence and conditional probability and use them to interpret data

S-CP.4

Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.

S-CP.5

Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.

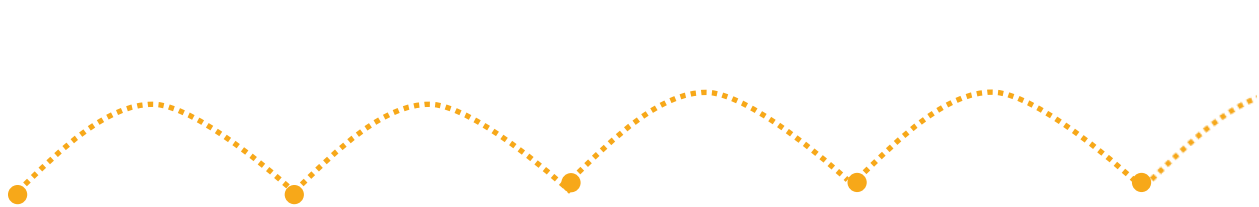
S-MD

Students will evaluate real-world decisions based on conditional probabilities.

# ADDITIONAL PERFORMANCE OUTCOME

ELA

Technical Subjects: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.







- >> [Assessment](#)
- >> [CMT](#)
- >> [CAPT](#)

>> [No Child Left Behind](#)

#### Access the New



#### **CEDaR Portal**

Connecticut  
Education  
Data and  
Research

## Connecticut Academic Performance Test Released Items

- ▶ [CAPT 2013 Statewide Results for Released Items](#)
- ▶ [CAPT 2012 Statewide Results for Released Items](#)
- ▶ [CAPT 2011 Statewide Results for Released Items](#)
- ▶ [CAPT 2010 Statewide Results for Released Items](#)
- ▶ [CAPT 2009 Statewide Results for Released Items](#)
- ▶ [CAPT 2008 Statewide Results for Released Items](#)
- ▶ [CAPT 2007 Statewide Results for Released Items](#)

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## ***“At Risk” Drivers***

### Working with Data: Probability and Statistics

2. An insurance company is conducting a study in Connecticut of “at risk” drivers-those drivers most likely to be in an accident. The insurance Company decides to define each of the following groups as “at risk” drivers:

- Drivers under twenty-one years of age
- Drivers over seventy-five years of age
- Drivers of any age with a traffic ticket in the last year

The insurance company took a random sample of driving records of 1,000 Connecticut drivers. The driver’s age and whether or not the driver received a traffic ticket in the last year are shown in the table below:

**Driving Record Sample**

	<b>Under Twenty-One</b>	<b>Over Seventy-Five</b>	<b>Other Ages (21-75)</b>
Traffic Ticket	24	11	218
No Traffic Tickets	29	84	634

The driving record of a Connecticut driver is selected at random from the sample. What is the Probability that the driving record belongs to an “at risk” driver? Show your work or explain How you found your answer.

Based on the data, which age group has the highest probability of getting a traffic ticket? Show Your work or explain how you found your answer.





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# SIX QUALITY CRITERIA

1

Clear and Worthwhile  
Performance Outcomes

5

Accessible

3

Relevance &  
Authenticity

2

Focused, Clear &  
Coherent

6

Curriculum  
Connected

4

Student Choice  
& Decision-Making



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## PAUSE & DISCUSS:

*How do your steps compare to  
the ones I've discussed?*



As I complete the task myself, what are students asked to do?

Do my students have the prior knowledge and background to access this task?

## Questions to Consider When Adapting Tasks

Do the texts, resources, and materials work for my class?

Are the language demands manageable for my students?

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# Impediments to Students' Engagement

*No big goal or problem to investigate*

*No construction of representations since frequency was given*

*The “so what” was not a part of this task*

*Insufficient challenge for my students*

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## Teen Driver Facts

- Teen fatal crash rates are roughly **three times** those of other drivers
- Motor vehicle crashes are the leading cause of death for teenagers in the United States
- Teens are thought to be at elevated risk for distracted driving-related crashes due to:
  - ✓ Inexperience behind the wheel
  - ✓ Ongoing development in areas of the brain responsible for decision-making and risk management
  - ✓ Avid use of technologies



## Key Findings: Question 1

*Which distracted driver behaviors are most common among teenage drivers?*

- **Use of electronic devices** was the leading distracted driver behavior, and was seen in 7% of clips
- Excluding electronic device use, teens were observed engaging in distracted behaviors in 15.1% of clips, including:
  - ✓ Adjusting controls (6.2%)
  - ✓ Personal grooming (3.8%)
  - ✓ Eating or drinking (2.8%)

## Question 2

*Do males and females differ in how often they engage in distracted behaviors, or the kinds of distractions they experience?*

- **Yes!**
  - ✓ Females nearly twice as likely as males to use electronic device
  - ✓ Males roughly twice as likely to turn bodies around while driving
  - ✓ Excluding use of electronic devices, females slightly more likely to be observed engaging in a distracted behavior (15.6% of clips, vs. 13.9% for males)

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# LAUNCH LESSON

1. Develops a shared understanding of the context of the task
2. Engages students

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## From the Executive Summary:

Despite widespread attention and interest, there is presently no generally accepted definition of distracted driving. In its broadest sense, distractions are objects, events or activities that divert drivers' attention from driving (NCHRP, 2005). They can include physical tasks (e.g., eating or inserting a CD), auditory or visual diversions (e.g., a crying baby), or cognitive activities (e.g., talking on a cell phone). Some behaviors can be distracting in multiple ways. Texting, for example, can result in a driver being physically, visually and cognitively distracted simultaneously. Sometimes the terms “distraction” and “inattention” are used interchangeably. However, distraction is just one aspect of driver inattention. The latter can also result from fatigue or the driver's physical or emotional status (NHTSA, 2010a).



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# Language Demands

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**Texts**

**Group discussions**

**Written Reports**

**Oral Presentations**

# Selecting a Task Checklist

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# DISTRACTED TEEN DRIVERS