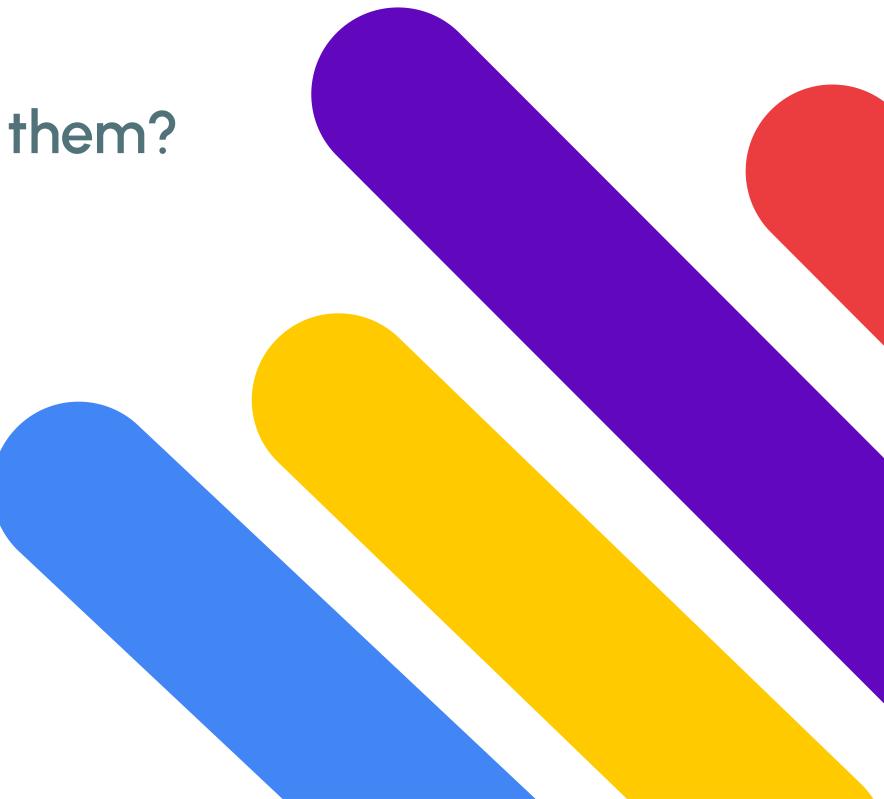


Observational Assessments

What are they, why, and when should you consider using them?



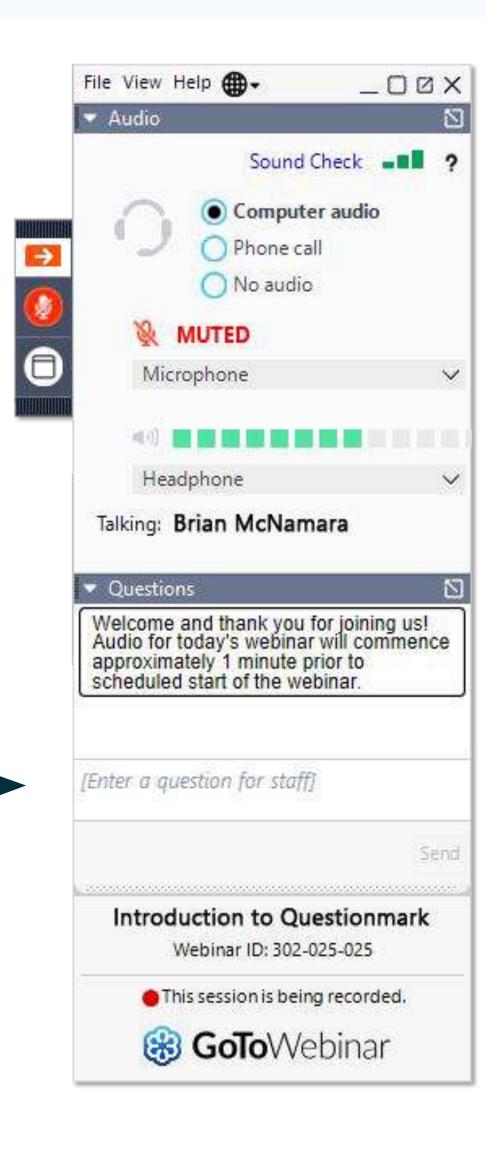
Before we get started

Watch for an email after the webinar to:

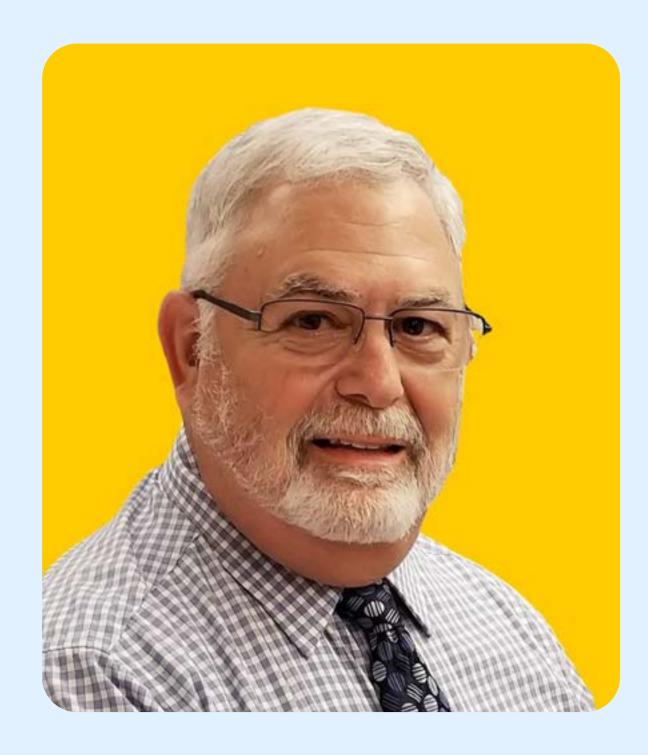
- Download slides (PDF)
- View a recording
- Explore valuable resources

To ask questions, use the "Questions" feature









Jim Parry

Owner & Chief Executive Manager
Compass Consultants, LLC

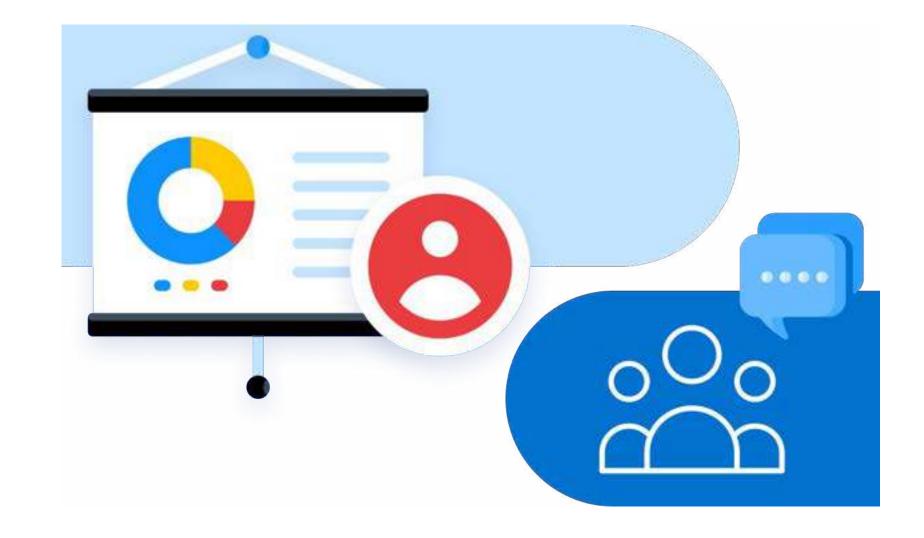


- Over 40 years experience in course design, development and presentation and assessment design, development, and analysis
- Holds a Master of Education degree from the University of West Florida
- A long time presenter of workshops and educational sessions at various professional conferences and customer locations
- Internationally recognized test development consultant
- Technology partner for Questionmark

Agenda

During this session, we will cover:

- Bloom's New Taxonomy
- Selected Response vs. Observational Assessments
- Analyzing Training Objectives
- Applying Observational Assessments
- When NOT to use Observational Assessments
- Creating Observational Assessments
- Benefits of Using Observational Assessments







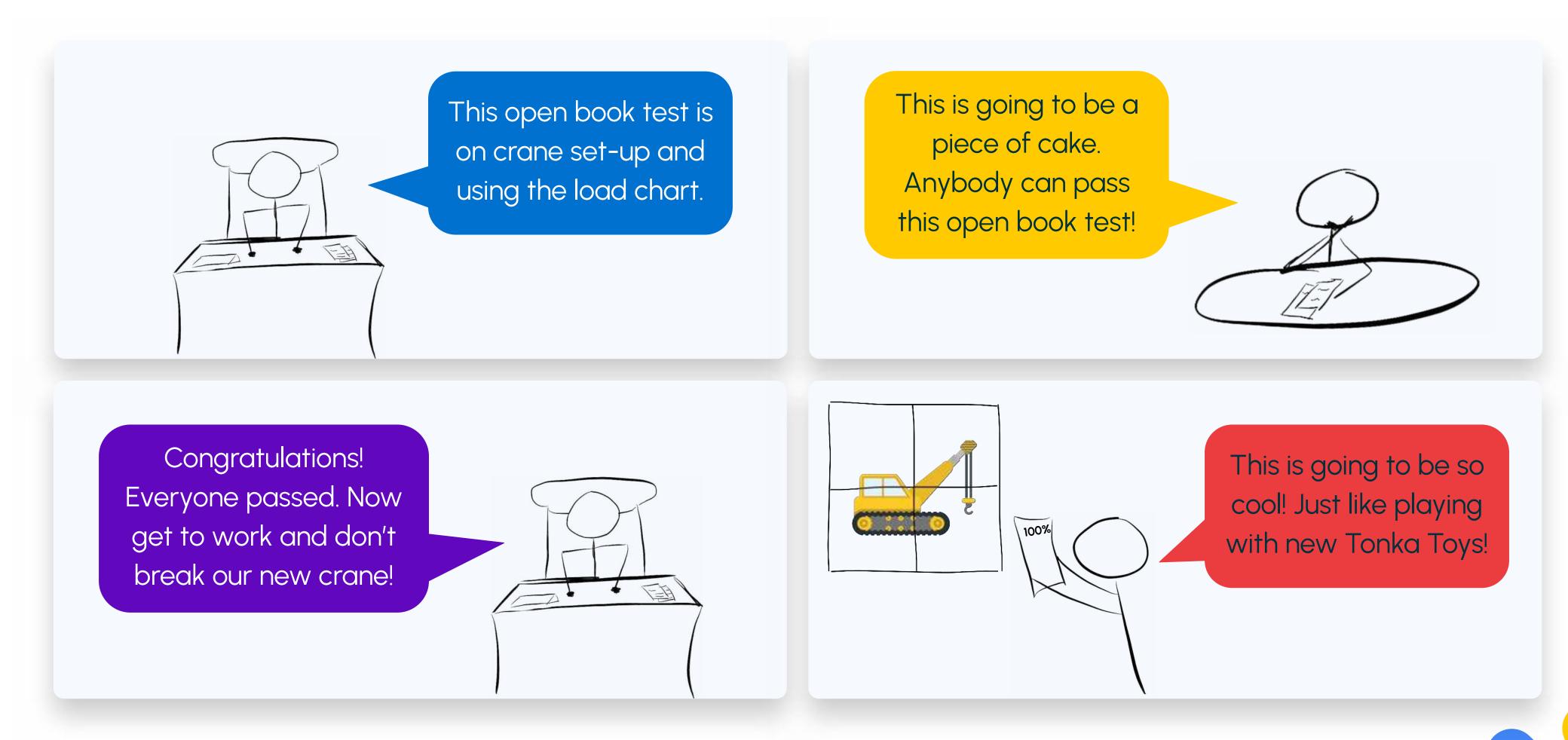
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Classroom at We Rent Cranes, INC.





So, how did this happen?

I don't get it... he
passed the written
knowledge test with
flying colors!





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Knowledge vs. Performance

What comes first – The chicken or the egg?

Knowledge

- Can we expect someone to perform a function or task without knowledge?
- How much knowledge is necessary before someone can perform?
- When do we stop checking knowledge and begin checking performance?
- Can knowledge predict performance?

Performance

- What are possible consequences of requiring performance without prior knowledge checks?
- Should performance be simulated or real?
- How do we know if someone is performing satisfactorily?
- Should the same standard be required for all participants?





We Decorate, LLC - Pre-hire Interview

Hello! I'm applying for the painter job. Here is my resume.



Welcome! Glad you are here. We are short handed.

Have you ever
worked as a
painter for a
decorator before?



No, but I have been painting houses for several years.

You will have to pass our written safety test. Any problem with that?



How hard can that be? I haven't had an accident in a while!

Congratulations! You passed the test.
Welcome to the team!

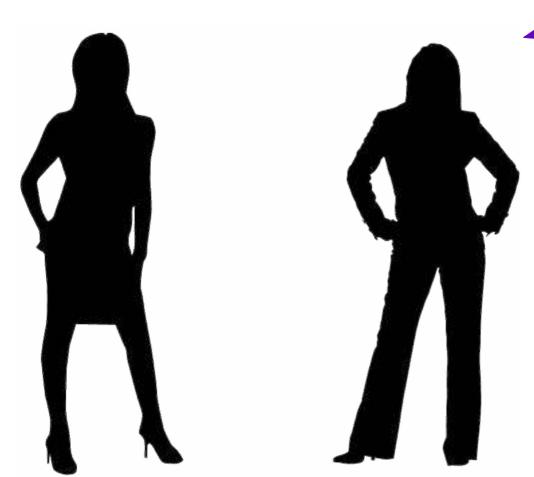


Did you ever have a doubt? When do I start?





I'm amazed the homeowner captured this photo.
When we hired him did we ever actually see him climb a ladder properly?

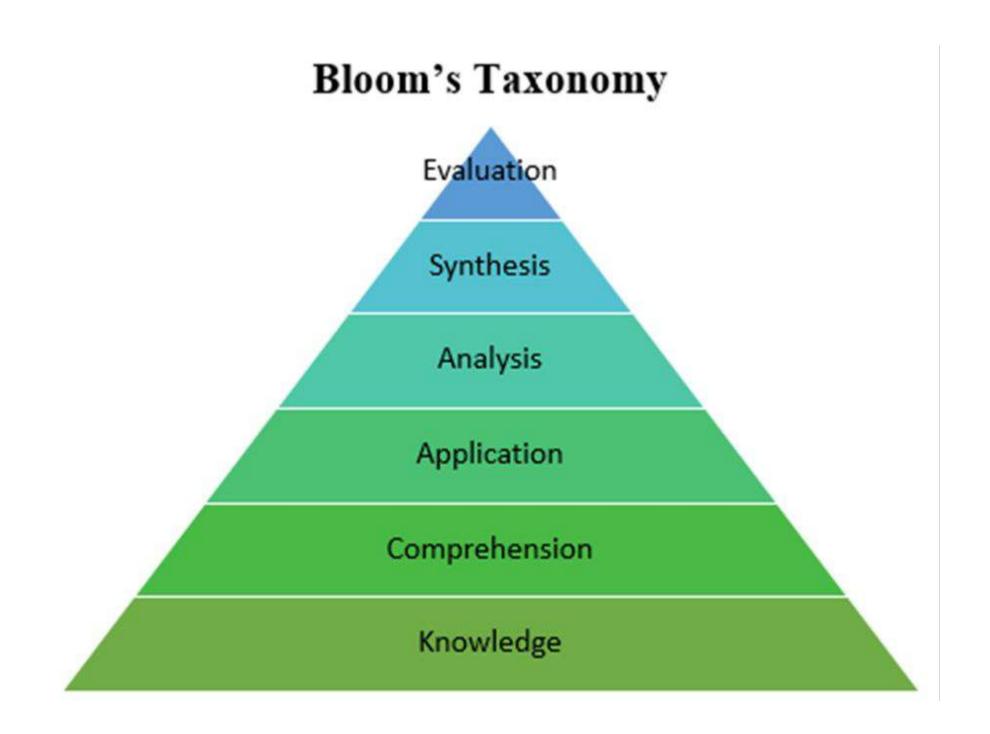


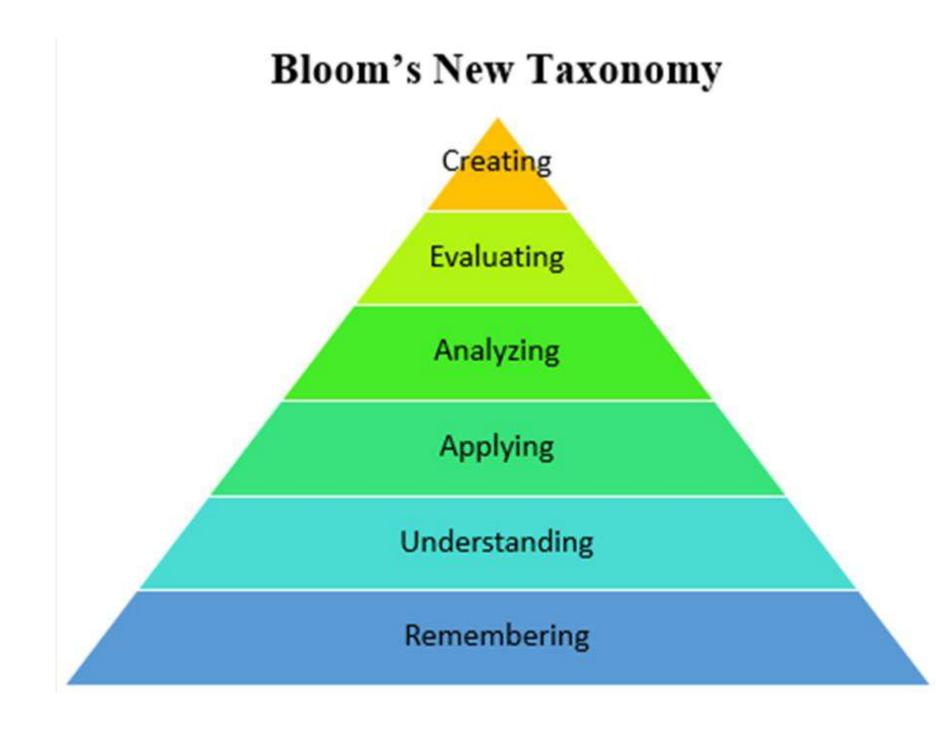
Well... no... but he said he knew how and he did pass our written safety test.





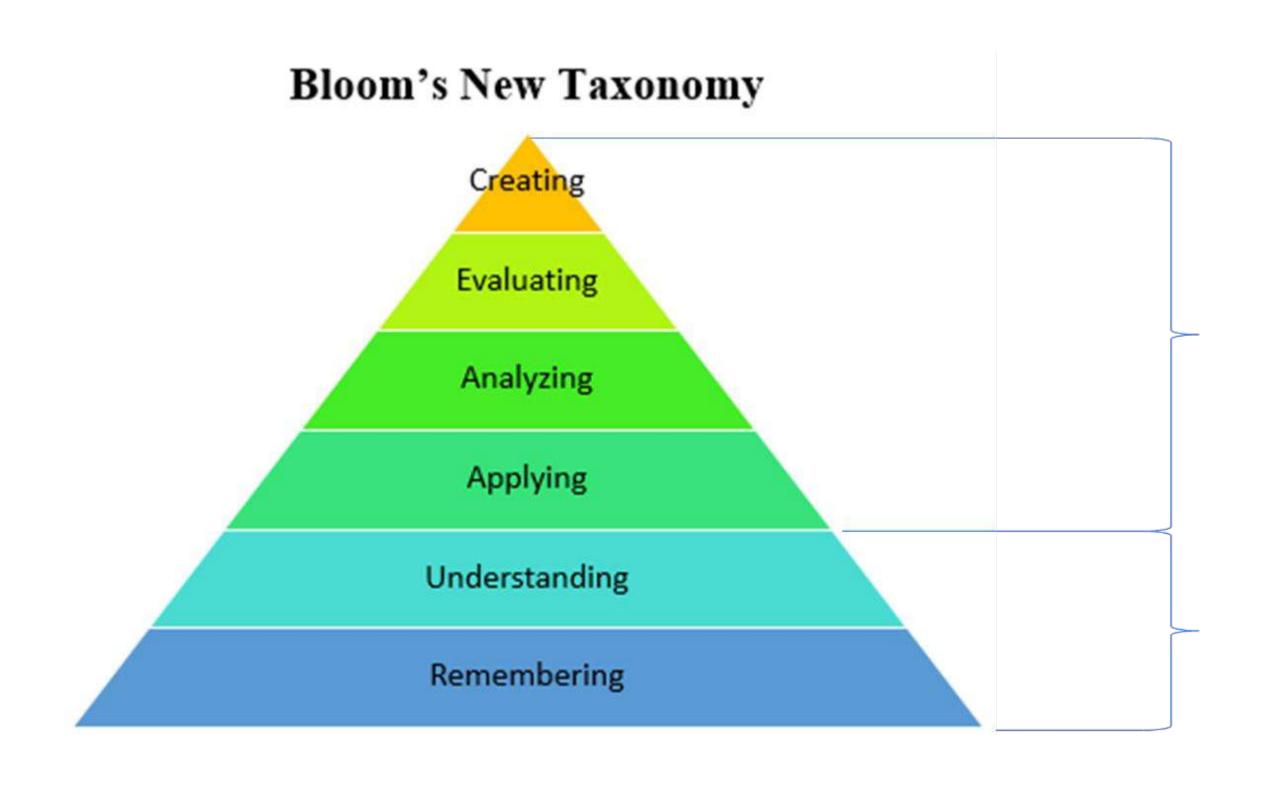
Bloom's Taxonomy







Testing/Assessment Levels



Written and/or Observational Tests/Assessments

Written Tests/Assessments

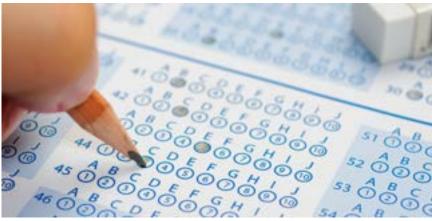




Types of Assessments

Selected Response

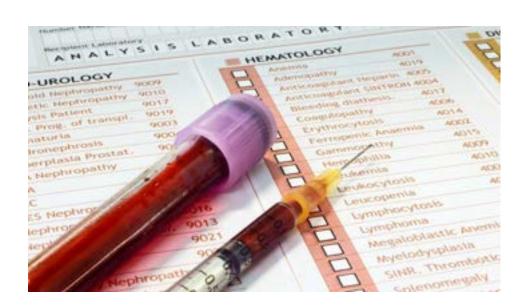
- Typically used to assess knowledge
 - Do you remember?
 - Do you understand?
- Formative can be used to predict readiness to perform
- Written Responses
 - True/false
 - Multiple choice
 - Multiple response
 - Select from a list
 - Matching
 - Etc.



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Observational/Performance Assessments

- Used to show/prove someone can DO something
 - Show me the steps in order
 - Build/fabricate something correctly
 - Perform a function/procedure
- Diagnostic/evaluative/summative
 - Designed to test actual on-the-job performance
 - Use actual/real equipment
 - Little or no written or verbal testing



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Analyzing Training Objectives

Should I use selected response or observational/performance assessments?

- What is the performer required to do by the objective?
 - Recite definitions, State procedures, Select formula, etc. = Remembering
 - Restate in own words, Translate information, Apply designated rules, Recognize examples of concepts = Understanding
 - Decide rule(s) to apply, Solve problems by selecting rule/method = Applying
 - Break down complex situations, Figure out how parts relate to each other or how one thing influences another = Analyzing
 - Judge appropriateness or worth of objects, plans, designs, etc. with some purpose in mind = Evaluating
 - Create totally original material, products, designs, equipment, etc. = Creating







Progression

Show me that you REMEMBER

Show me that you UNDERSTAND

Show me that you can DO IT





Process or Product Assessment

Process

- Detailed diagnostic information desired
- No product produced at end of process
- End product not necessarily result of process



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Questionmarkpowered by Learnosity

Product

- Objective specifies a product as final output
- Product is measured as presence or characteristic
- Procedure leading to product may vary without affecting final product



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Soft Skills vs. Hard Skills

Soft Skills (People Skills)

- Communication skills
- Adaptability
- Active listening
- Problem solving
- Teamwork
- Public speaking
- Creativity
- Dependability
- Organization
- Time management
- Leadership ability
- Flexibility
- Work ethic



Hard Skills (Teachable Abilities)

- Language skills
- Video editing
- Computer skills
- Driving
- Graphic design
- Data mining
- Copyrighting
- Carpentry
- Engineering
- CPR
- Blood draw
- Equipment operation
- Cooking



Fidelity is Important

Performance testing should equate to real on-the-job requirements

- Test on real equipment if possible
- Follow same steps as task requires
- Inter-rater reliability is paramount!



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Only knowledge and understanding required

REMEMBERING

- Which of the following formulas is used to determine electrical current?
 - $I = P \div E$
 - I = P x E
 - P = I x E
 - $E = P \div E$

UNDERSTANDING

- Determine the approximate current draw, in Amps, of a 120VAC household kitchen circuit if the load of all connected appliances is 320 Watts. (answer must be within \pm 0.1 Amps)
 - ____ Amps

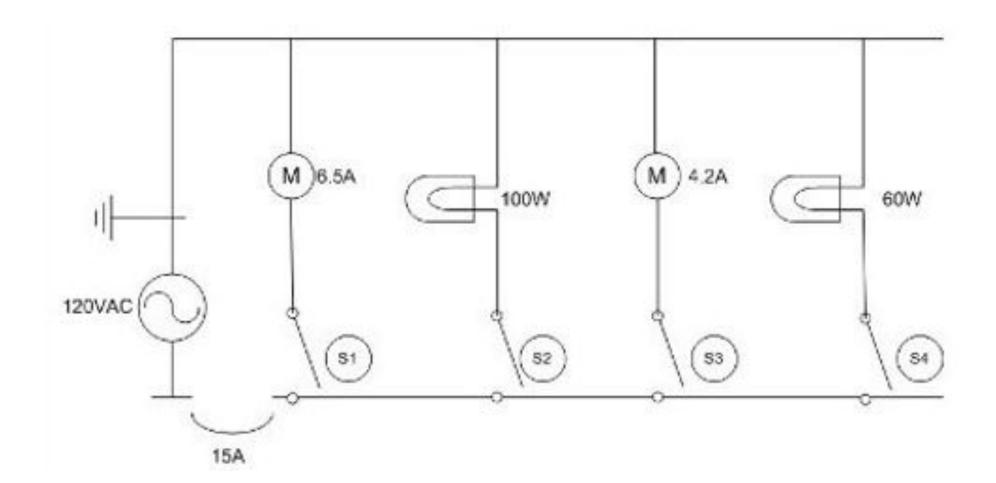






When performance does not require overt action

- APPLYING
 - Refer to the schematic below.
 - If S1, S2, and S3 are closed, what is the approximate current draw, in Amps, on the circuit? (Answer must be within ± 0.1 Amps)
 - _____





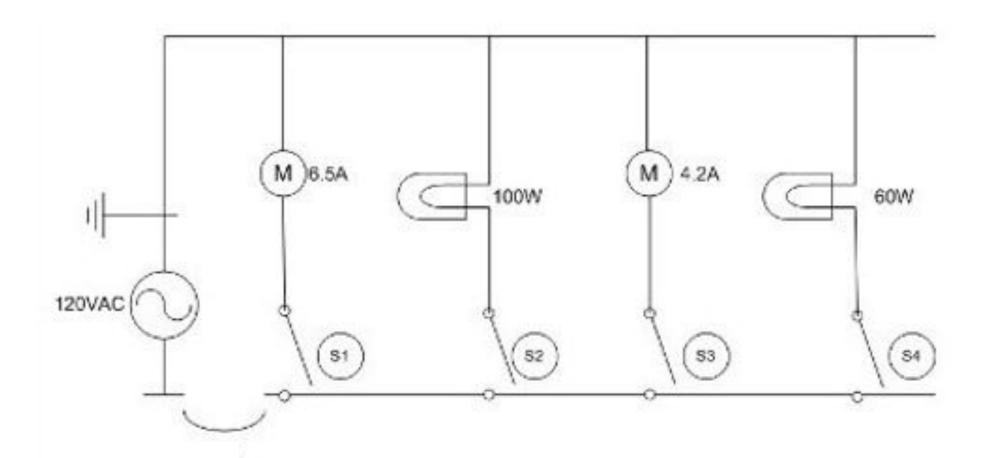




When performance only requires covert action

ANALYZING

- Refer to the schematic below.
- S1, S2, and S4 are normally closed producing a continuous load. Periodically, S3 is closed to provide ventilation when the ambient temperature exceeds 125°F. In order to be in compliance with the 1996 National Electrical Code (NEC) Sec. 384-16(c) concerning sizing of Over Current Protection Devices (OCPD), the minimum acceptable size of the circuit breaker shown is _____ Amps.





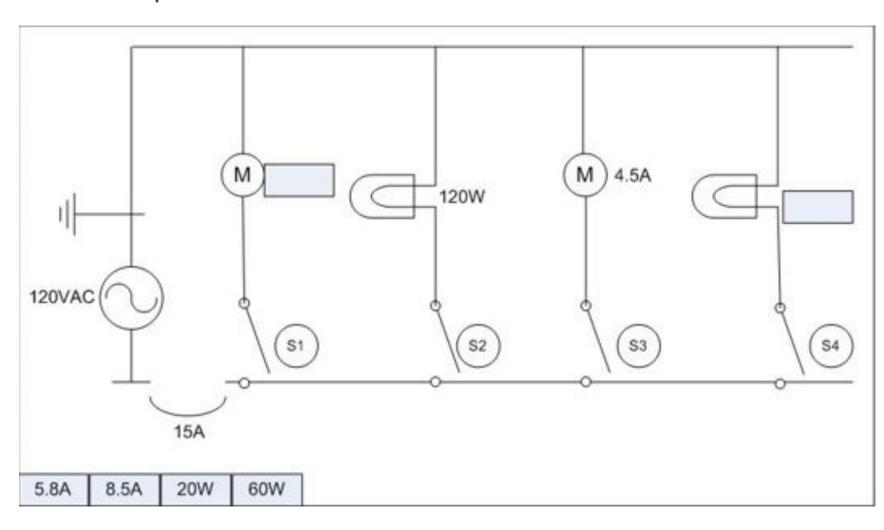




When performance can be accomplished using interactive testing

EVALUATING

- Refer to the schematic below.
- Drag and drop the correct amperage to the symbol for the motor and the correct wattage for the lamp to design a circuit with a 14 amp draw.









When performance requires extensive covert action(s)

CREATING

You are estimating materials needed to complete the rough-in electrical for a typical residential circuit for a living room. The room measures 24' x 12' with door openings as shown in the drawing below. There is one ceiling light fixture in the hallway which must have a switch at the entrance door and the opposite end of the hallway and the homeowner requires a switched receptacle on each end of the south wall and one on the north wall near the entrance door. There must be a switch for an outside porch light at the entrance. The homeowner also requires the room to be hard-wired for internet and cable TV with jacks centered on the south and east walls.

The circuit must be sized to handle a typical semi-continuous load of two 60W lamps, a computer & monitor (300W), a printer (600W), a router (7W), a 50" plasma TV (375W), A cable TV converter (35W), a DVD player (60W), a home theatre receiver (100W), and an X-Box 360 (187W). In addition there may be an intermittent load of 1440W from a vacuum cleaner.



Refer to the table below and the National Electrical Code to select the required quantities of various materials to meet minimum standards.

15A duplex receptacles	01	C 2	C3	C 4	05	C 6	C7	C 8	09	0.0
20A duplex receptacles	01	02	03	C4	C 5	C 6	C7	C 8	09	0
SPST light switch	01	02	C3	04	05	C6	C7	08	09	0.0
DPST light switch	01	C 2	03	C 4	05	C 6	C7	C 8	09	00
New construction single electrical box	01	02	C3	04	05	06	C7	C 8	09	00
New construction duplex electrical box	C1	C 2	C3	C 4	C 5	C 6	C7	C 8	09	00
RF/Network combo wall plate	01	02	C3	04	05	C6	C7	C 8	09	00
Single switch plate	01	C 2	C3	C4	C 5	C 6	C7	C 8	09	00
Duplex switch plate	C 1	C 2	C3	C4	C 5	C 6	C7	C8	C 9	00
Duplex receptacle plate	01	02	C 3	C 4	05	C 6	C.7	C 8	09	00







Creating an Observational Assessment

Decide action(s) to be tested

Create steps (checklist)

Develop Assessment





Platform Planning

- How will assessment be delivered?
- Will participant log in or only observer?
- Is connectivity available?



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Select Task/Skill to be Assessed

Task:

Inspect trailer in preparation for towing

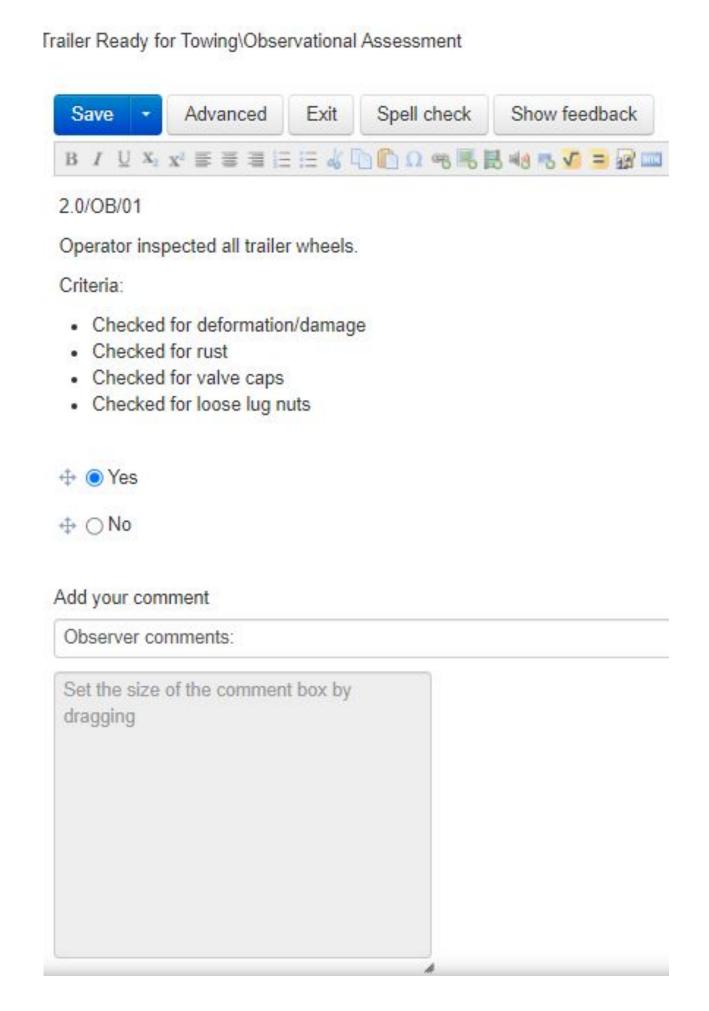


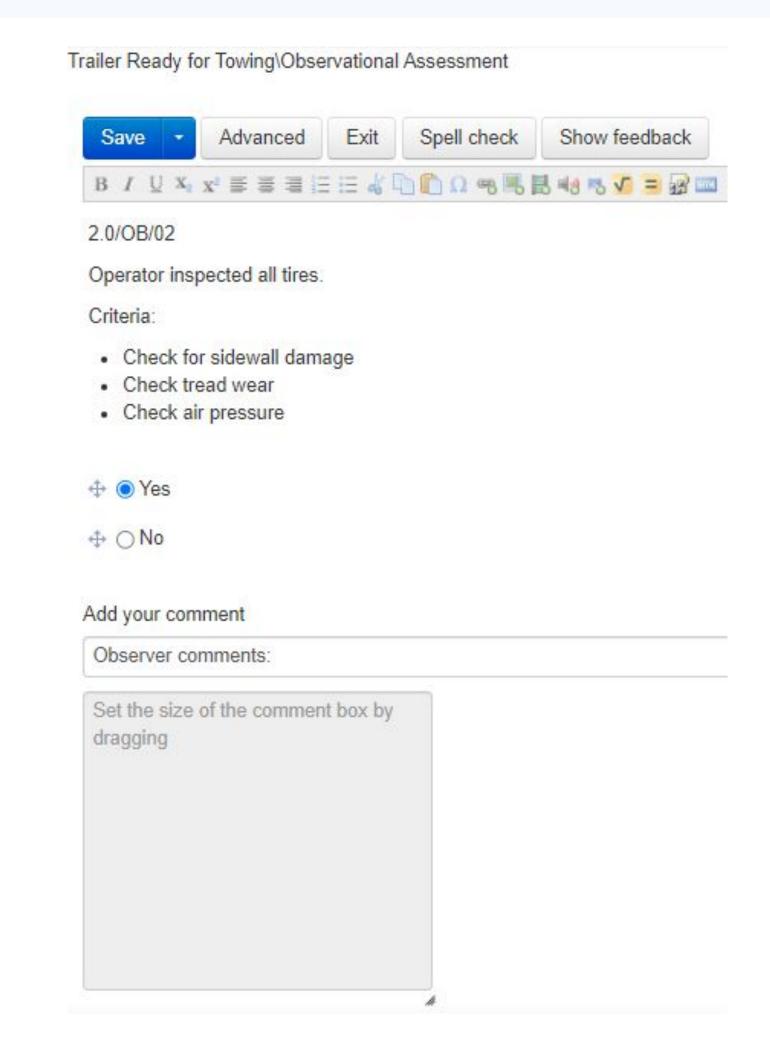
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Develop Observational Test Items



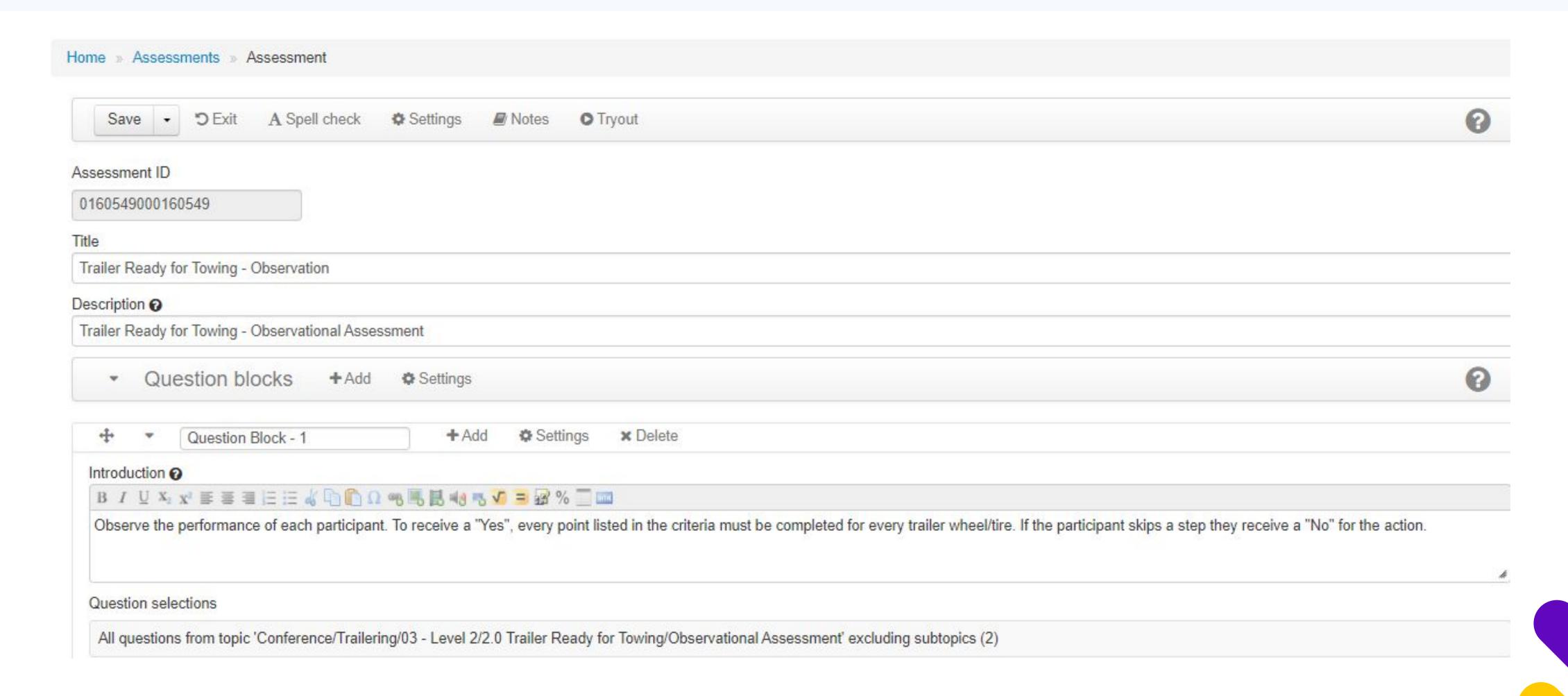


Follow performance checklist or required behaviors!





Create Assessment





Decide - Observer or Participant Initiated

Observer Initiated

- Assessment questions/items developed in topic editor normally
- Recommend adding comment space
- Design and schedule assessment normally
- Observer must initiate assessment and select person(s) to be observed from list of participants

Participant Initiated

- Assessment questions/items developed in topic editor normally
- Recommend adding comment space
- Full details available at:
 https://support.questionmark.com/content/observational-ngs-participant-initiated-preview-release





Observational Assessments - Participant Initiated

Getting Started

- The use of Observational Assessments allows participants to perform tasks while being observed and assessed by another person.
- Assessment can be defined in monitoring type as Observational Assessment when scheduling an assessment.
- Observational Assessment allows the observer to fill in the assessment while the participant is performing the task.
- To start an assessment the Observer will have to scan a QR code that is unique for every participant and every attempt of the assessment.
- In cases where a QR code cannot be scanned, the observer can always load the assessment by adding a manual code.



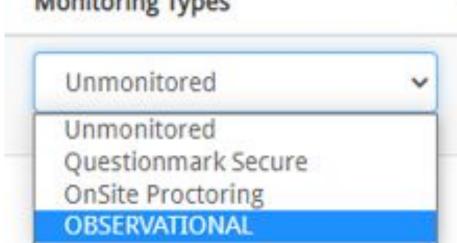
Schedule Delivery – Participant Initiated

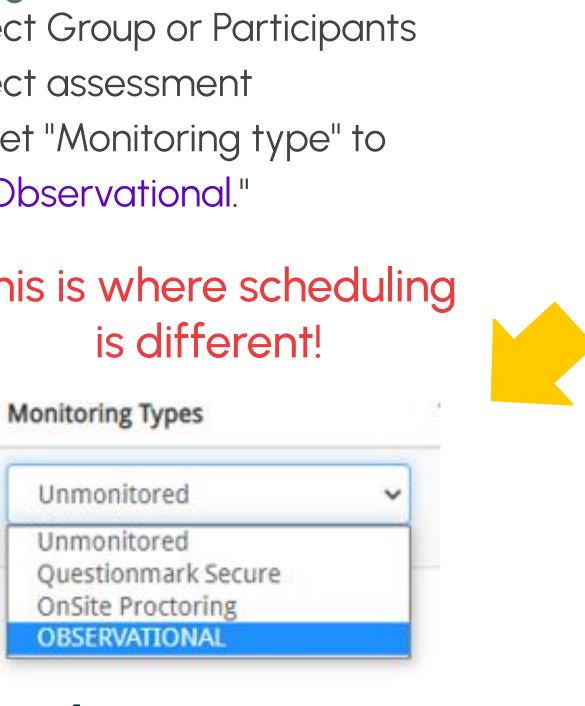
- Navigate to Administration > Schedules > Add Schedule.
- The scheduling process is identical as creating a normal schedule
 - Select Group or Participants
 - Select assessment
 - Set "Monitoring type" to "Observational."

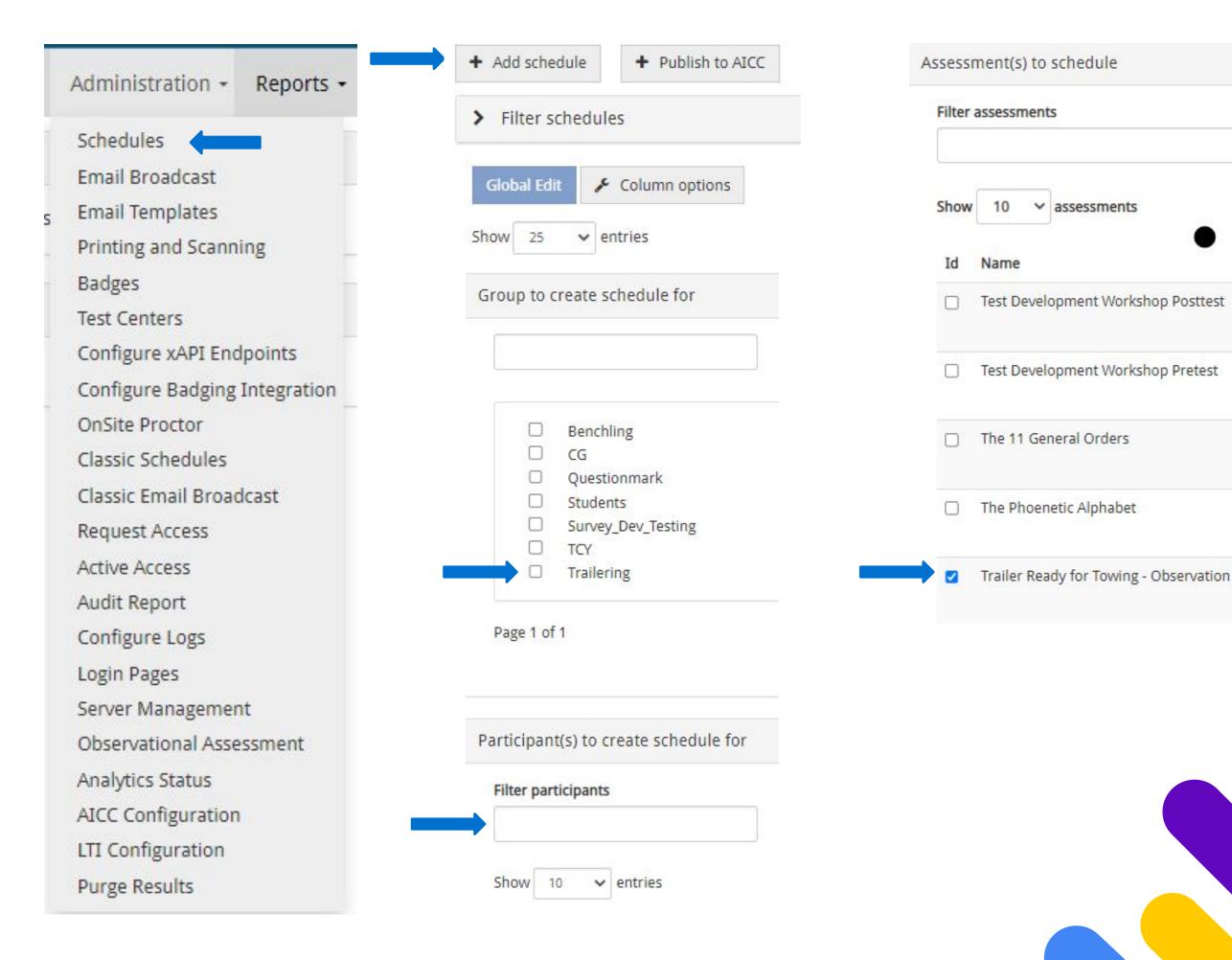


This is where scheduling





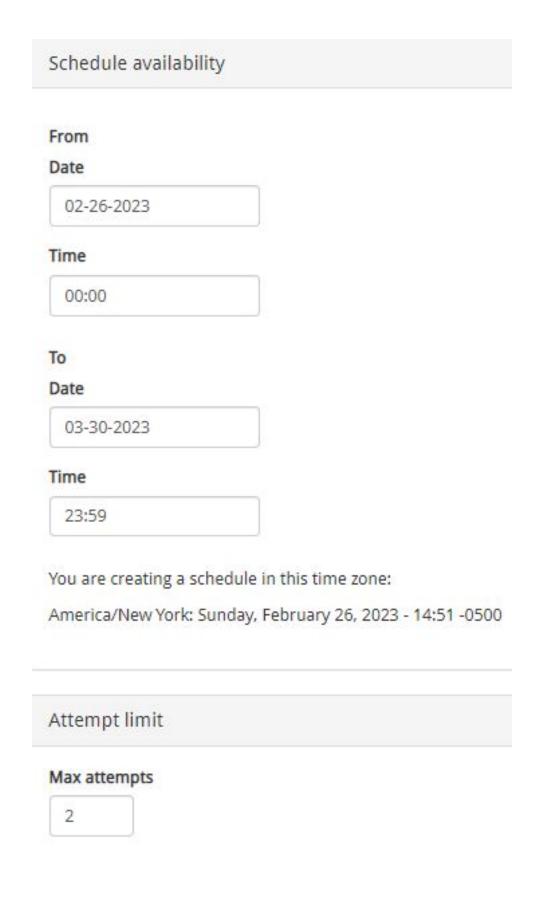






Schedule Delivery - Continued

- Set availability date(s)/time(s), and maximum attempts
- Send email to participants to let them know they have been scheduled and to contact their instructor/observer to schedule assessment





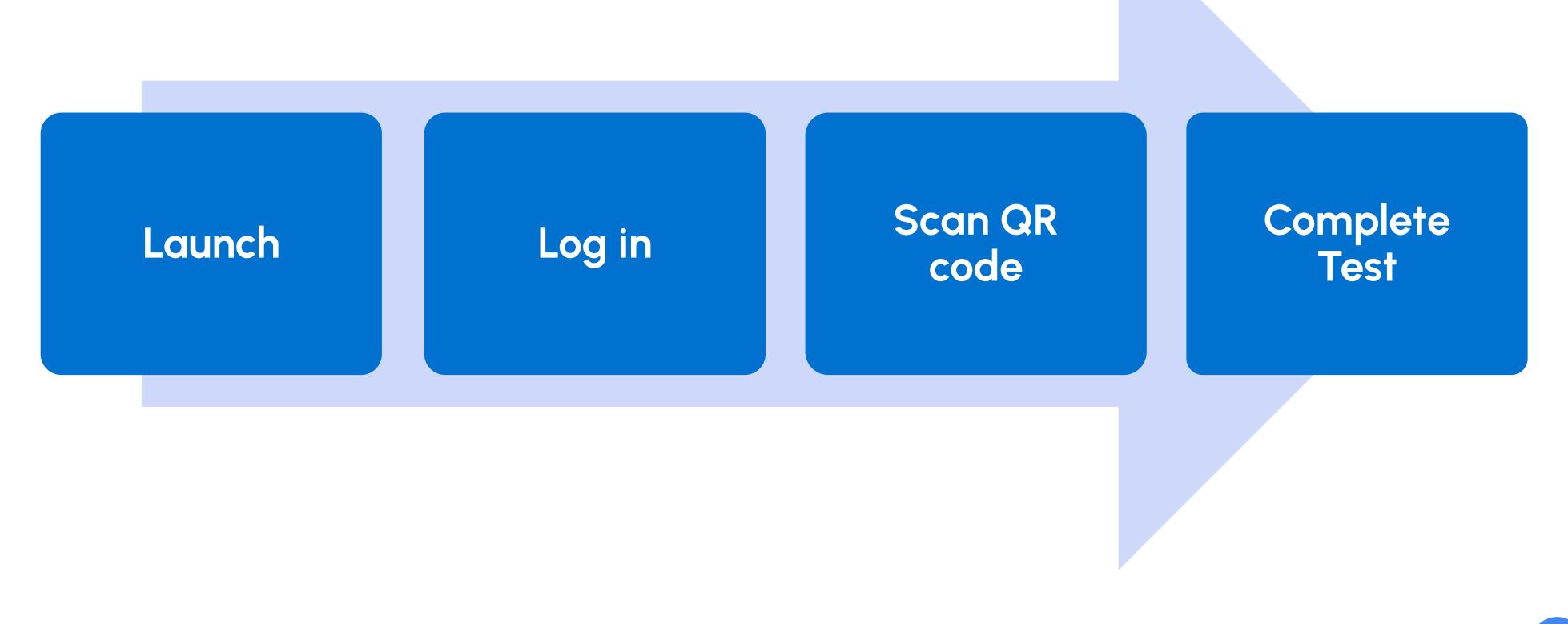
Send email to scheduled participant(s) or group

You can configure the email on the next screen.





How OnDemand Observational Assessments Work





Participant Launches Assessment

Log in on Smartphone

Show QR Code to observer



- Participant launches assessment from the "My Assessments" page in the Questionmark portal
 - Alternatively assessment may be launched from an LMS
- Participant's assessment screen displays a QR code and corresponding numeric code.
 - Notes about this code:
 - This code is personal and cannot be used by any other participant, it is unique to the assessment they will attempt.
 - The participant can save the code as a screenshot on their device
 - If for any reason the participant has no mobile device where the assessment is taking place, the participant can print the code and bring it with them on the day of the assessment.
 - The code is valid for the active attempt of the assessment. Once the code is used, it cannot be used again.
 - In case of resume of an attempt, the code will stay the same.

Log in on Desktop or Tablet

Show QR Code to observer

QR Code for Observation

Please let the observer scan your code

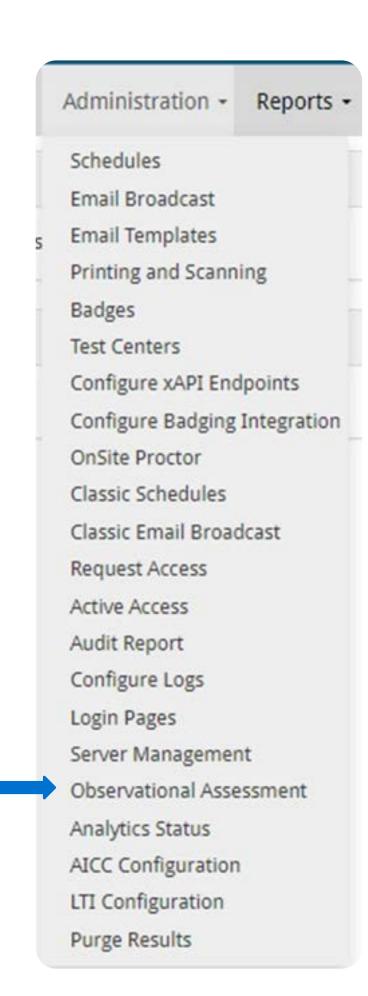


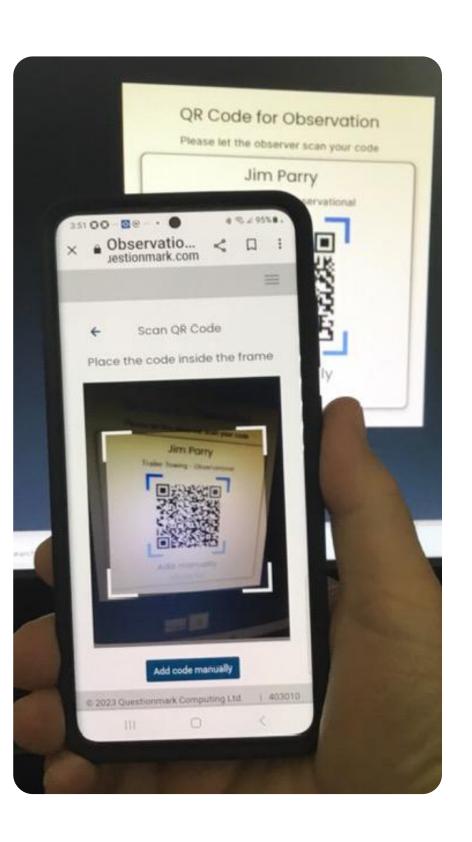




Observer Logs into Questionmark Portal

- Navigate to Administration > Observational Assessment
 - Have participant show QR code on their device
- Scan the QR code to launch the assessment
 - Observer confirms identity of participant and checks the box
 - Observer clicks "Start"
- Alternative method
 - The QR code provides a convenient method if observer is using a mobile device (e.g. phone, tablet)
 - If QR code does not scan, the numeric participant code below the QR code can be entered manually
 - If observer is using a device that can't scan a QR code (e.g. doesn't have a camera), QR code is obscured, etc.



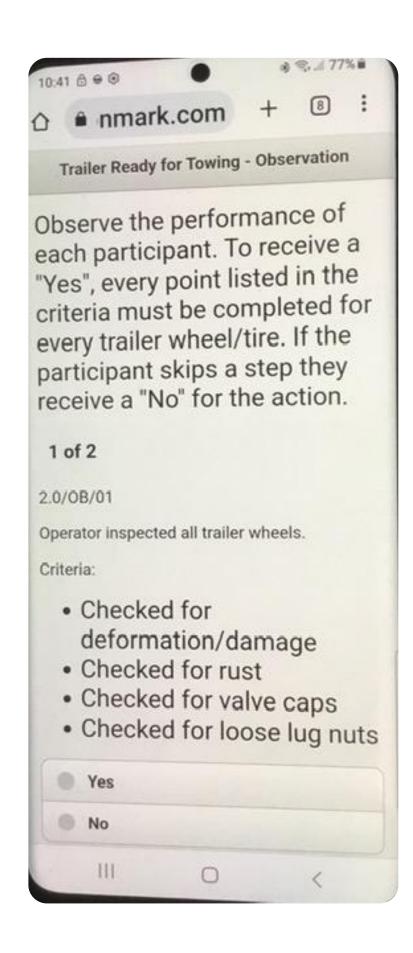


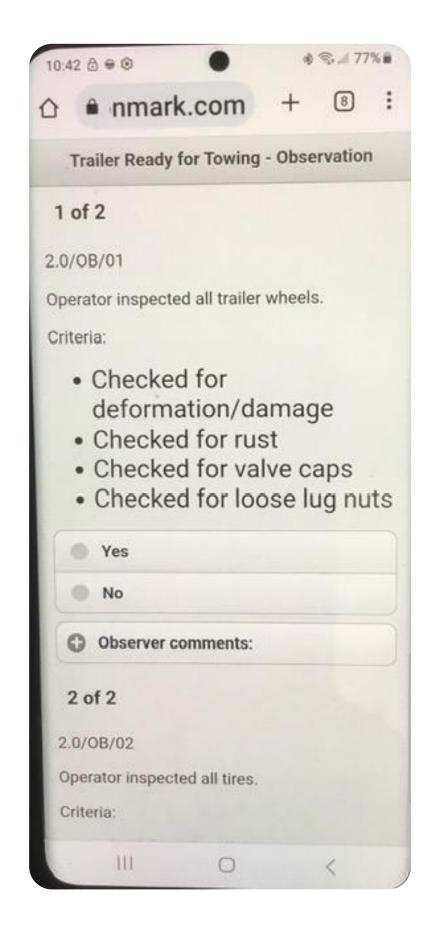






Complete the Observational Assessment Session





Click "Submit" when assessment is completed

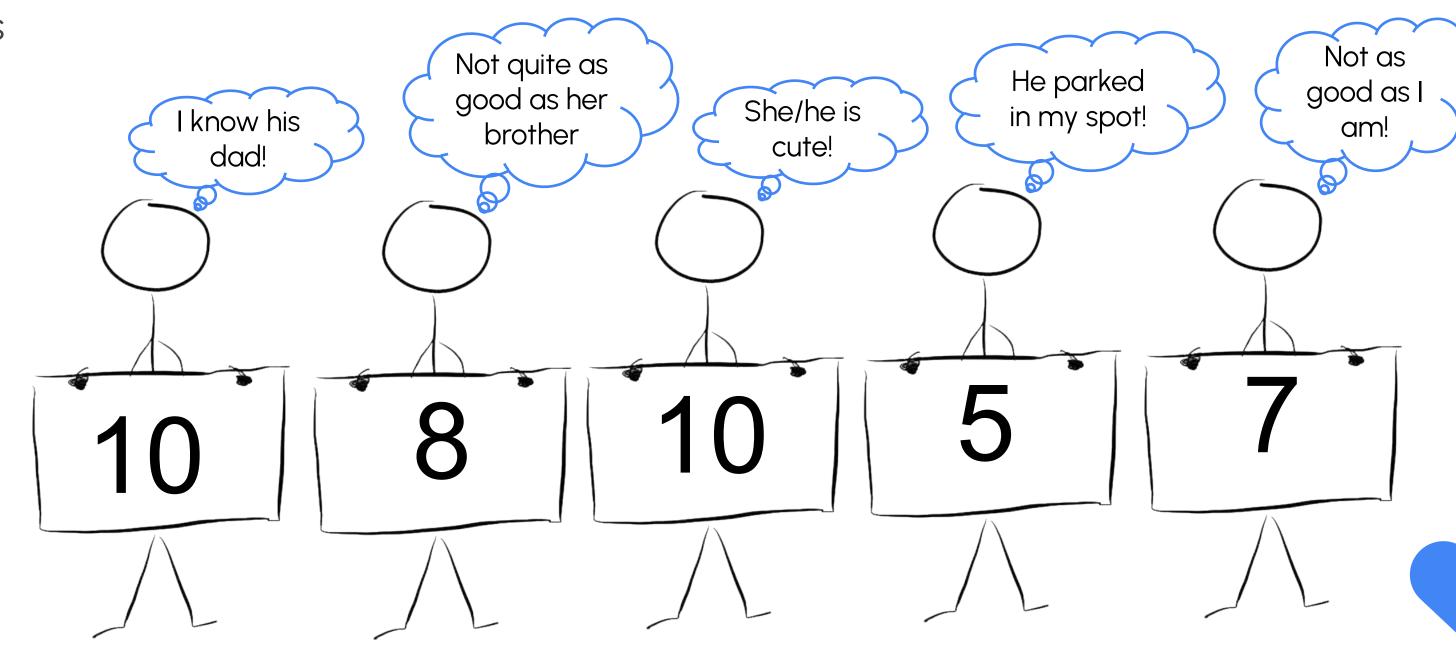




Avoid Bias

The primary type of bias in observational assessments is observer bias

- Train observers
- Use check sheets or rating scales
 - Go, No-Go; Yes-No
 - Behaviorally anchored ratings
- Use identical equipment
- Use identical situations





Behaviorally Anchored Rating Scales (BARS)

An alternative to standard Likert and survey matrix scales

Standard Likert "Out-of-the-box"

- Mostly subjective
- Typically "5-point"
- Source of possible bias



Survey Matrix

- Typical "checklist"
- Gives credit (or not) for performing specific steps
- Yes/No; Completed/Did not complete

Behaviorally Anchored Rating Scale

- A Behaviorally Anchored Rating Scale, also known as BARS, is a performance management scale using behavior "statements" as a reference point instead of generic descriptors found on traditional rating scales
- These patterns are used to rate each individual employee or trainee

Custom Scales

- Available in Likert and Survey Matrix questions
- Easy to create in Questionmark
- Now available to all authors not just creator
- Must have access to the topic!



BARS Example

1 2 3 4 5

Employee
does not
make eye
contact or
talk to
customers
when they
enter the
store

Employee
says hello
when
customers
enter the
store but does
not ask what
they are
looking for

Employee
asks what the
customer is
looking for but
doesn't offer
much
assistance
other than
aisle number

Employee asks what the customer is looking for, tells them aisle number and checks to see how they are doing

Employee cheerfully works with the customer until they find exactly what they want



So...Why Use Observational Assessments?

THEY PROVIDE RELIABLE DATA

• "By allowing a mentor to observe someone perform while applying a rubric to their performance, you allow for not only analytics of performance but the ability to compare to other individuals or to agreed benchmarks for performing a task. Also, feedback collected during the assessment can be displayed in a coaching report for later debriefing and learning." (Jim Farrell)

RESULTS ARE IMMEDIATE

• Compared to other forms of assessment, observational assessments produce almost instant results as the assessment takes place in real-time

ASSESSMENTS ARE MORE HANDS-ON

• Test subjects are more likely to perform better if an assessor can show them practical examples of a task. It can also help the assessor find possible room for improvement or skill gaps

DETERRENT TO CHEATING

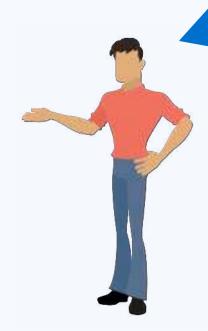
- Cheating is less likely because each person observed individually
- ChatGPT (AI) not readily available to assist because person must perform function unassisted





Observational Assessments Build Confidence





I feel a lot safer on this cruise now that I saw the crew practice and get checked off!

I know our operators can do the job safely!



I have full confidence in our staff since we began using observational assessments!







Any questions?

Contacts & Resources





For more information or assistance with your testing/assessment program contact Jim at:
james.parry@gocompassconsultants.com

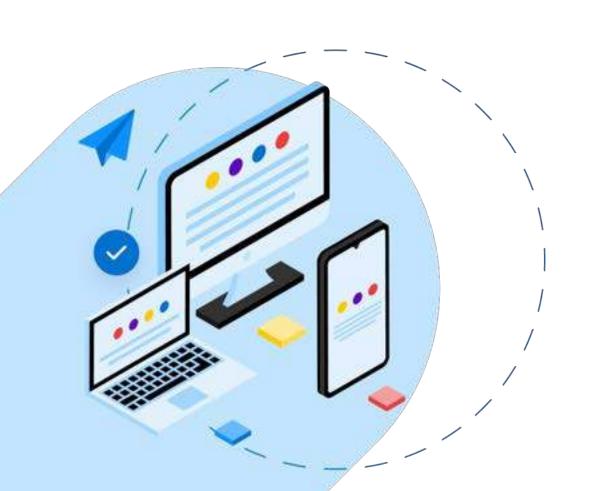
or visit the website at: www.gocompassconsultants.com

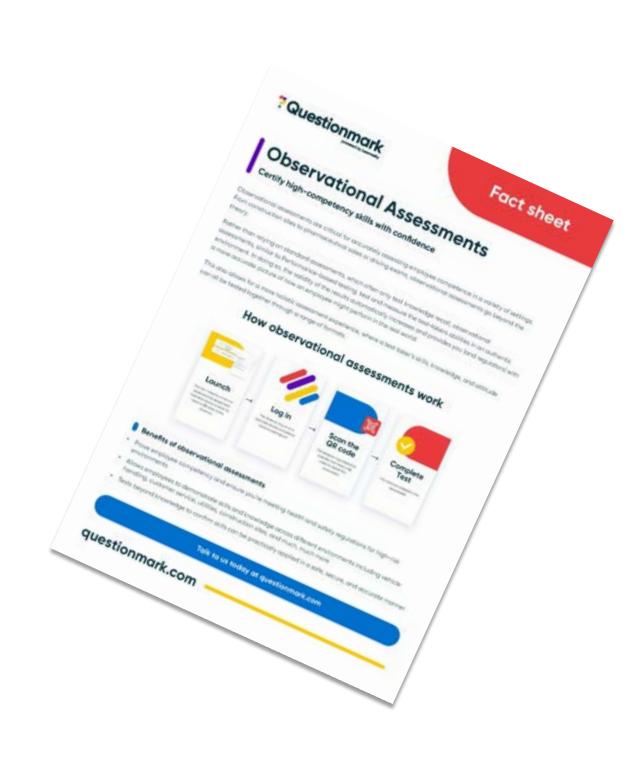
Questionmark's Resources

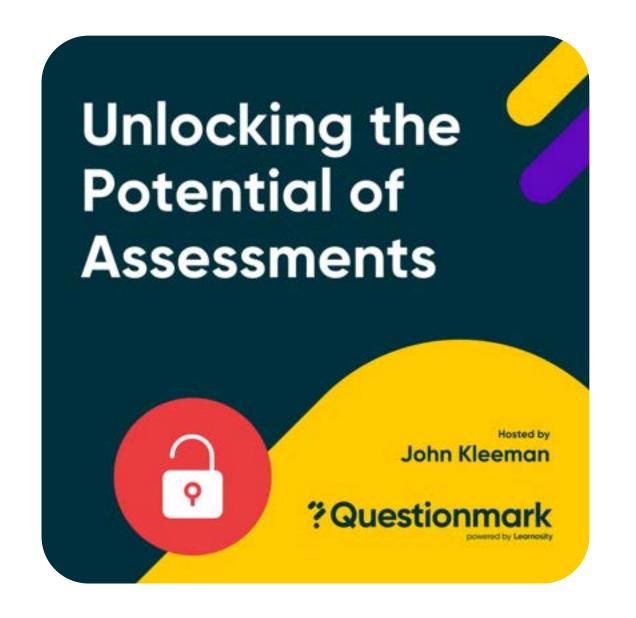
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