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Assessing Knowledge in the Classroom Setting: It's More Than Just a Test

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Background

- Tests and examinations have long been utilized to assess learner knowledge and understanding as well as measure learning outcomes.
- Data has shown that at times, tests may be a deterrent to learners, as they escalate anxiety, instill feelings of inadequacy, and produce overwhelming emotional states.
- Using different learning modalities (auditory, kinesthetic, tactile, visual) and incorporating them into the classroom, may help assess a learner's knowledge because it allows for complete engagement through their senses.

Purpose

- Identify alternative methods to assess learner knowledge and understanding.
- Compare benefits of using different assessment modalities rather than use of testing alone.
- Explore learner satisfaction in relation to specific assessment methodologies.

Learner Feedback About Tests

Tests give me such anxiety. I learn better and can focus more when doing hands-on activities.

Tests are good in that they help to make sure we know the specific information, but they still make me stressed out!

I get so focused on worrying about the test, I can't concentrate on any other information or perform well on anything else until it's over.

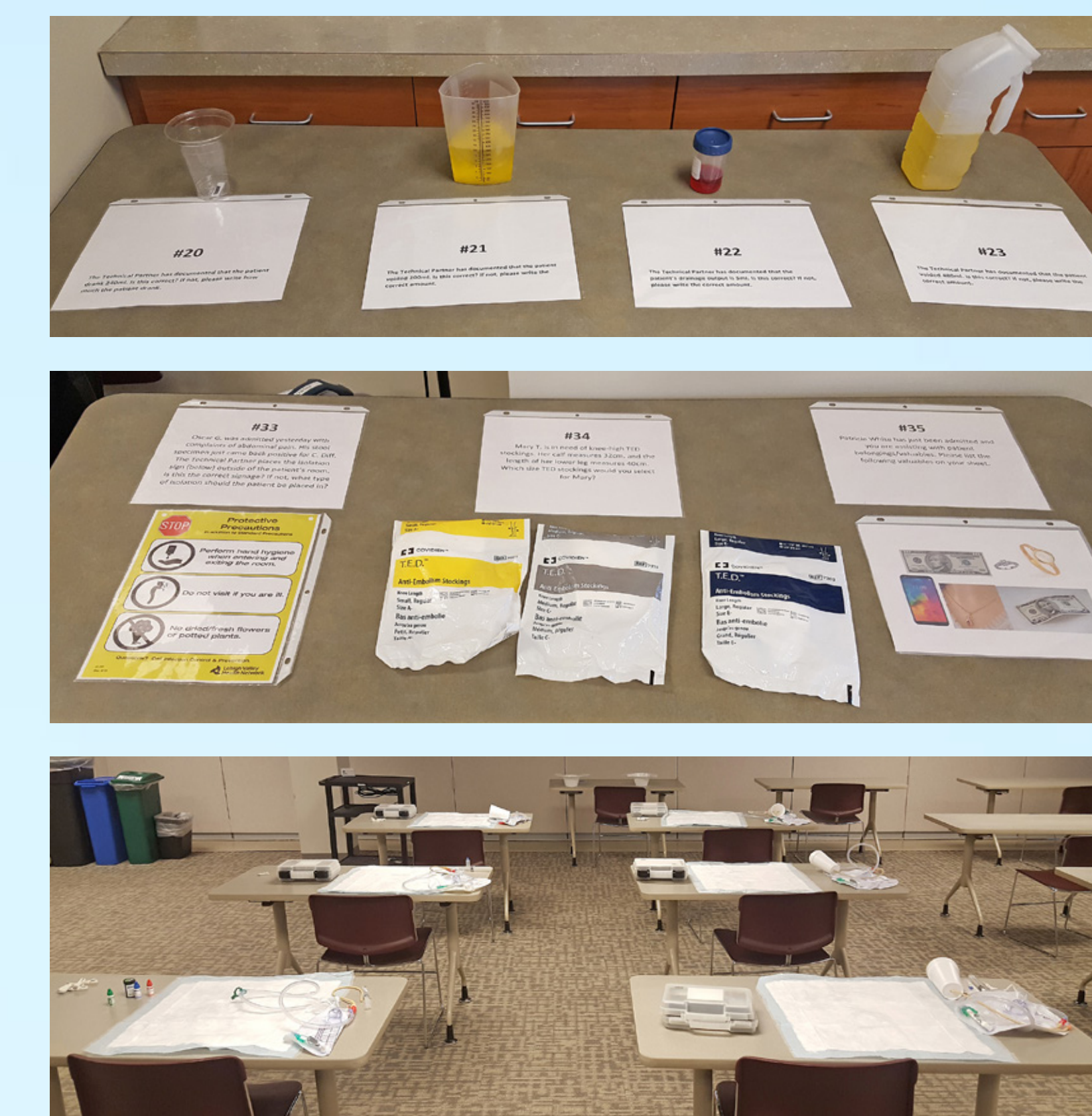
Hands-on activities are highly preferred and are more beneficial to learning. Some people are naturally poor test takers, so hands-on activities are incredibly helpful.

Methods

- Alternative, innovative approaches were added to onboarding programs in order to increase assessment of knowledge and to decrease learner anxiety regarding "stress for the test."
- Learners were asked to rate these modalities using a Likert-type scoring scale.
- Some of the methods that were included:

SPOT AND SOLVE THE PROBLEM STATIONS

Learners are given specific items to identify the problem or solve the question that is asked. Participants go station to station to complete the task. Examples: spot the problem with specimen labeling, calculate ounces to milliliters, identify what's wrong with the code station, meal completion calculation, identify correct sizing for TEDS stockings.



AUDIENCE RESPONSE SYSTEMS

Clickers and online polling systems are used and incorporated throughout classroom lectures in "real time" to ensure learners are identifying key concepts.

HANDS-ON SKILLS PRACTICE

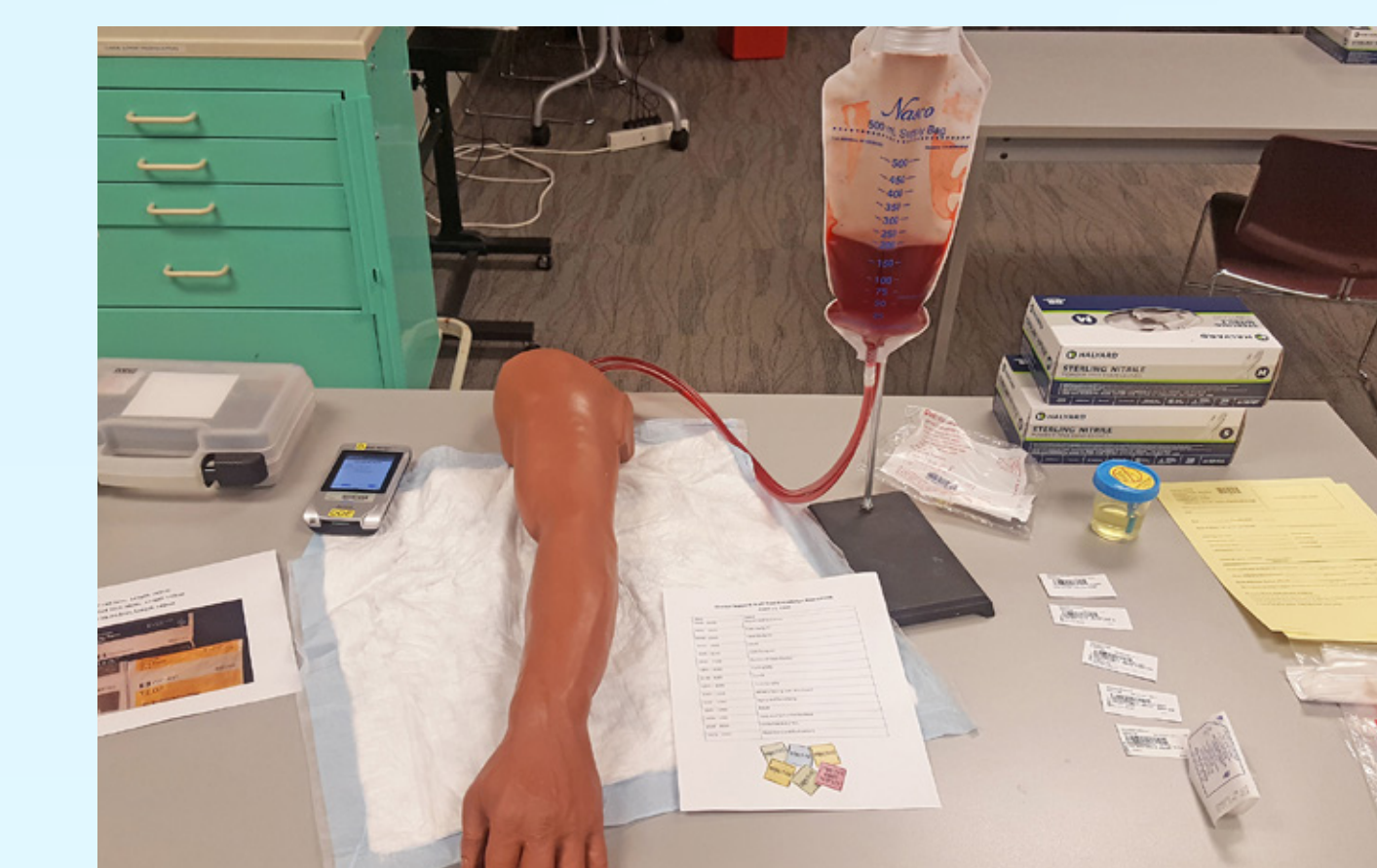
Learners would receive a lecture on a specific skill and then practice the skill using the information they learned. The skills were practiced more than once on different days in the classroom to reinforce comprehension.

ONLINE GAMING AND GROUP COMPETITIONS

Online games and group competitions that review specific topics that were discussed provide feedback to educators on learner understanding.

INTERACTIVE, UNFOLDING CASE STUDIES IN THE CLASSROOM

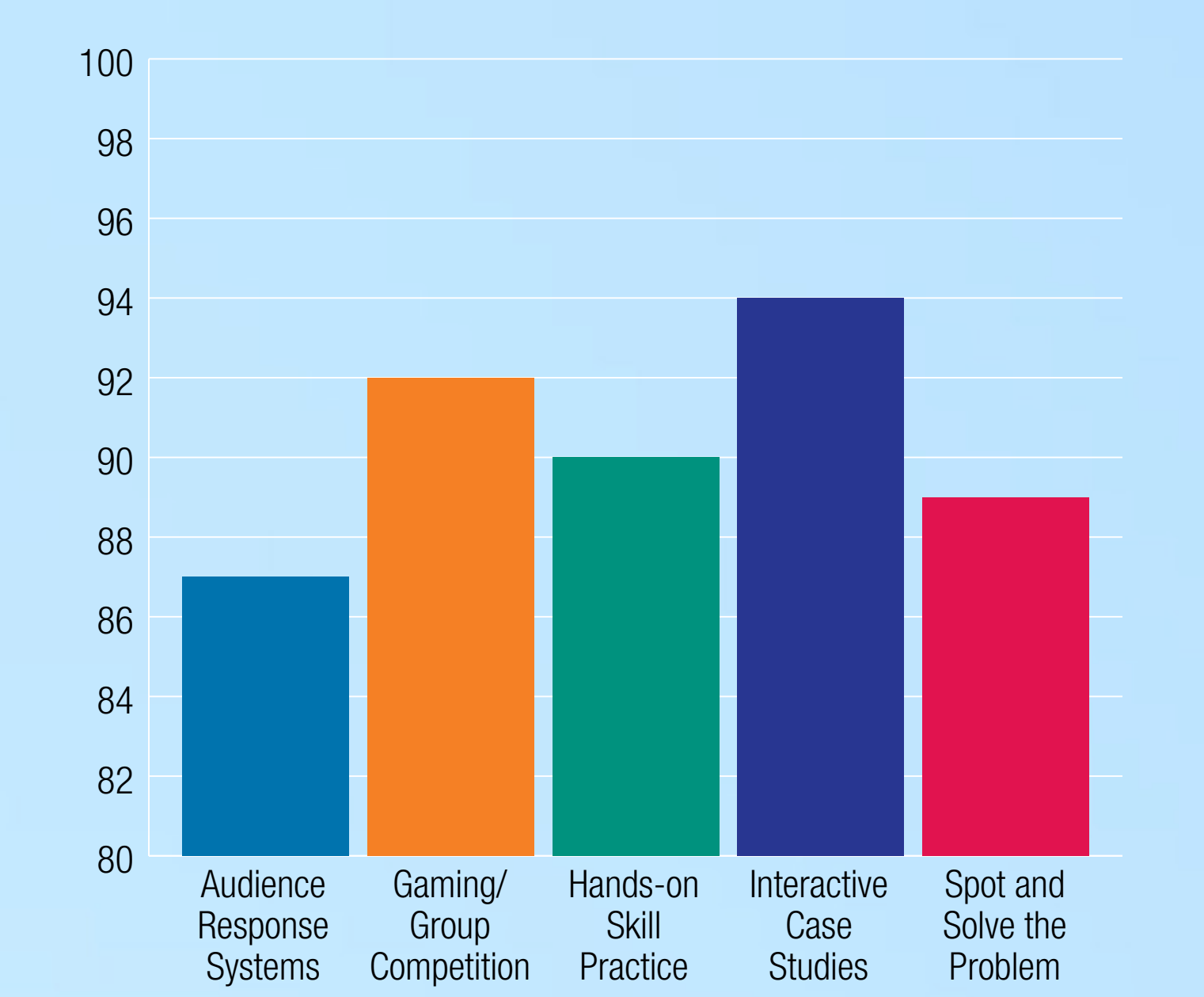
Taking a spin on case studies, additional activities were added that unfolded as the learner worked through scenarios and that prompted them to utilize skills learned in the classroom such as glucometer use, phlebotomy, specimen collection, and reporting of critical values.



Outcomes

- Adding additional assessment tools throughout an educational program enhances learner knowledge.
- A recurring theme from learner feedback is that tests not only cause anxiety, but they also cause constant worry about failing and being judged.
- Incorporating other engaging activities that also assist with evaluation of learner knowledge enhances learning, provides a positive learning culture, and increases learner buy-in.

LEARNER POPULARITY OF ASSESSMENT TOOL



Implications

- Providing a test at the end of an educational program is still appropriate, however, other methodologies should be included throughout the class or program to better gauge learner understanding.
- Continue to incorporate different modalities that enhance assessment of learner knowledge.
- Incorporating a variety of methodologies would better appeal to multiple learning styles and assists in a more comprehensive measurement of outcomes.

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