

Simple Games, Advanced Outcomes



Media-rich simulation and virtual reality games capture learner attention with engaging tools, but they're not right for every situation. Simpler games, such as those using multiple choice and multiple select, might not garner the blog space of their flashier VR cousins, but they are an amazingly versatile tool that can have lasting and measurable results.

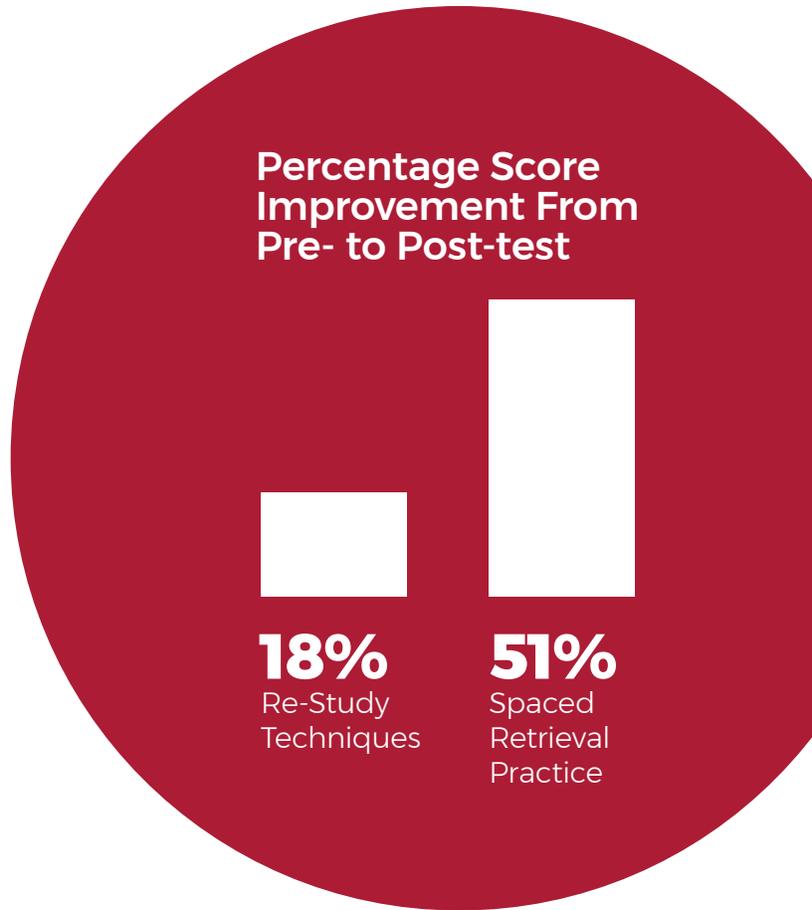
Research Says

“Spaced retrieval practice improves knowledge retention.”

Retrieval practice is a learning technique where learners attempt to recall learned content from memory rather than re-reading or re-studying it. Ever used flash cards to study for a test? Then you've used retrieval practice!

Spaced retrieval practice builds upon this by asking learners to complete multiple retrieval practice events over time in spaced intervals (days, weeks, or months between events). A study using Continuing Medical Education (CME) courses compared pre- vs post-test scores of participants who used only spaced retrieval practice vs participants who used only re-studying techniques. The spaced retrieval group saw an increase in scores more than 2 times that of the traditional re-study group (see chart).¹

Simple games are an easy, engaging, and effective way to leverage the power of spaced retrieval practice. The same game content can be used multiple times for the same learner groups or mix up game types and content among the spaced events.



Learners Say

“We expect to play games as part of a curriculum.”

A 2013 survey showed that 74% of K-8 teachers use digital games for instruction.² Those students will soon be part of our workforce and will have an understanding that games are a tool used in a structured learning environment. Plus, the use of digital games in the classroom has only increased since that study. With virtual learning becoming more prevalent, our future employees will not only accept games as a learning tool but EXPECT games as part of a robust and well-planned professional learning approach.

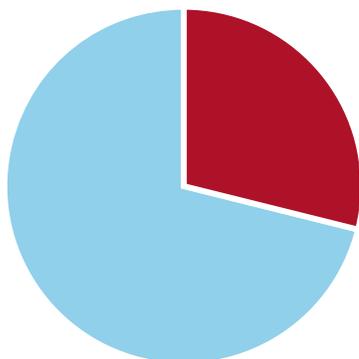
“Games help us learn from mistakes.”

Present a learner with multiple-choice questions in a formalized assessment setting and failure is simply a binary outcome—the learner either passes or fails. Use the exact same questions in a game setting and now failure becomes a tool for positive learning outcomes. If designed correctly—with simple audio/visual cues, corrective feedback, and the chance to fail in a risk-free environment—even multiple-choice questions can help facilitate learners’ desire to explore and review content.

Learning Professionals Say

“Games help uncover learning gaps.”

Confidence-based games are a particularly robust analytics tool. In these games, learners answer multiple-choice or multiple-select questions and then are asked to rate their confidence in their answer by wagering points or using a confidence scale. In a game system that tracks learner analytics, like Red Nucleus’s Rcade, learning professionals use these confidence ratings as a way to uncover “blind spots” in a learner population. Blind spots are question that learners rate as high confidence that they’re correct, but in reality are answering incorrectly. For example, a recent Red Nucleus client used our You Know It! confidence-based game in a weekly salesforce knowledge competition. Question 8 was a question related to where to send HCPs when prior authorization is needed. **Through analytics, we uncovered that almost one-third of their salesforce was CONFIDENTLY sending HCPs to the wrong resource.**



29%
confidently giving
wrong information
to HCP

Within a week of delivering the game, the Learning and Development team was able to quickly communicate a course correction to the field.

1. Larsen DP, Butler AC, Roediger HL 3rd. Repeated testing improves long-term retention relative to repeated study: a randomised controlled trial. *Med Educ.* 2009;43(12):1174-1181.

2. Takeuchi LM, Vaala S. Level up learning: a national survey on teaching with digital games. 2014. New York: The Joan Ganz Cooney Center at Sesame Workshop. Accessed October 13, 2020. https://www.joanganzcooneycenter.org/wp-content/uploads/2014/10/jgcc_leveluplearning_final.pdf

About Red Nucleus

Red Nucleus is the premier provider of learning, performance, and process solutions for the life sciences industry. We work exclusively within the life sciences industry to ensure our team intimately understands your business, products, processes, and challenges. Our team is composed of more than 390+ full-time employees whose commitment to creativity, quality, and on-time delivery is unrivaled in our space.



Curious about how Rcade can bring your game strategy to the next level? Get in touch.

info@rednucleus.com



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