# Interactive Learning Lends to Enhanced Engagement, Leading to Behavioral Change in Adult Learners

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Research Methods IS_LT 9450

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May 9, 2021

| Response to Reviewers | |
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| **Feedback** | **Response** |
| Larger bolded/italicized font on the research questions may not comply with APA 7. | I have fixed the text throughout to be aligned with APA format. |
| Look for more ways to synthesize (how articles tie together or may highlight the gap/issue you are wanting to explore). | I have re-reviewed the literature section to further highlight how certain articles relate back to both the gap identified and to each other. |
| A few minor spelling/grammar issues found in the Literature Review. I am also not sure about the increased font plus bold and underlined for second-level subheadings; I think just bolding the text is more aligned with APA 7. | I have re-reviewed this section for spelling and grammar issues and resolved them. I have also removed the underlined sections and kept the bolded text. |
| I was unsure about the hypothesis statement. It does not seem to align with your question as it sounds more like a "whether it benefits" (yes/no) issue. Consider revising hypothesis statement to align more with question. | I opted to leave the hypothesis as is. I felt that it did align with my question and fit with my title.<br><br>"This study is designed to test the hypothesis that adults that take online learning that includes interactivity, are more engaged and empowered in their own learning and are thus better able to achieve desired learning objectives and make behavioral changes." |
| Ethical considerations could maybe use a bit more detail, maybe related to confidentiality within the employee's organizations? A more detailed timeline would be beneficial as well, perhaps adding estimated timelines for participant identification, gathering, interviewing data analysis, and reporting. | I Agree and I added confidentiality of workplace as an ethical consideration, as well as any illnesses or disorders that may impact learning. I also added more details around the timeline, including data analysis and reporting. |
| Readers may benefit from a brief introduction, a definition and even some background information, to interactive learning. | I added an introduction to provide readers with some additional context into interactive learning. |
| Readers may benefit from knowing why it is especially important to get detailed information from the learners' perspectives in particular. Would this provide more context to the problem or is there a deficit of data? | I agree and have provided a few sentences that explain why it is beneficial to get the learner's perspective. |
| The literary review may benefit from including one or two introductory sentences at | I have added an introductory sentence or two to each main header to summarize the topic. |

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| the start of each new theme that summarizes the main ideas or key takeaways. | |
| Page numbers and a running title beginning on the title page need to be included. | I have added a running title and page numbers. |
| Reconsider the use of first person "I" in the literature gap section. | I have revised to not include first person. |

Online learning has evolved significantly over the past several years. With this evolution, enhancements to the technology that makes this kind of learning possible have also been made. Many of these enhancements include making the ability to provide interactivity more accessible. Interactivity helps developers create innovative learning experiences. It can include complex interactions, custom multimedia, games, and other tasks that require the learner to engage with their learning environment. This presents an opportunity to explore how these enhancements may positively influence the achievement of learning objectives.

**Original Research Question: "How does interactive learning impact or contribute to desired behavioral change of learners?"**

**Literature Gaps:**

Based on the literature reviewed, the main gap observed from the original research question was that the articles found were oftentimes geared towards high-schoolers or, just a school setting in general. In many cases, the articles were related to college students. Also, some of the resources were framed in more general terms of the topic of interactivity as a whole. Many of the articles analyzed or reviewed including interactivity in learning but did not go as in depth about "how" the learning led to behavioral changes. When the original research question was formed, the term "behavioral change," referred to learners being willing to do x to get to y (learning objective).

**Revised Question: "How does interactive learning impact or contribute to adults' ability to absorb intended online learning objectives?"**

## Background and Significance of Research

The Adult Learning Theory, developed by Malcolm Knowles in 1968, states in one of its principles that adults enjoy active learning more so than they enjoy just reading or even, listening to content. It also implies that adults desire to have some level of control over that learning in order for them to fully buy into giving it their full attention. As the demands to perform at a higher level in various industries are increasing, so are the needs to marry those demands with training. This includes both continuing education and new concepts. Organizations are increasingly investing in understanding how to best meet learner needs and many of them are finding that employees have to be motivated. Additionally, they have to know the value of the instruction they will be receiving before they will fully invest in the process. One way to meet both of these needs is through the use of interactive learning.

It is thought by many industry leaders that the ability to provide users with a hands-on, self-controlled experience while learning will both lend to a willingness to complete training in a timely manner and a desire to be engaged with the content. It is thought that these elements can also significantly impact learners' ability to truly understand the key learning concepts. Brunken, J. (2019), speaks to these ideas and provides four options that harness different levels of interactivity to maximize the potential of learning experiences (see Appendix, Table 2).

## Problem Statement

The problem with interactive learning for adults is the fact that more research is needed on the topic in order to come to a solid conclusion on whether or not the return on the investment is significant enough. As of now, many researchers seem to be split down the middle with several believing that learning benefits depend upon or are impacted by certain accompanying conditions. These conditions include elements such as a learning debrief needing to be included

in the learning before there is any real benefit. A learning debrief in these terms, can be defined as a recap of reviewed lessons that is provided at the end of the course to reinforce key takeaways. With these conditions in mind, there is a need to get far more detailed information, especially from the learners themselves on how interactivity impacts their experience.

### Purpose of the Study

In order to answer the question of "how," a solid conclusion on if interactive learning does indeed help to produce behavioral changes more so than learning without an interactive element needs to be determined. More research is necessary. This study will use qualitative methods to explore the elements that are derived from the addition of interactivity being implemented into adult learning environments. A qualitative approach will allow researchers to gain more specific data, obtained directly from a population that represents the learner group. The overall purpose of this study is to gather and analyze data that will answer the question of "how" interactive learning helps adults understand and learn desired concepts. The participants involved in the study will all be adults employed in a corporate environment that utilizes online learning.

## Literature Review

The following review of literature is meant to gather background information and make connections between data that explores the concept of improving adult learning experiences through the integration of interactive learning. Moreover, this literature review intends to explore the concept that through interactive learning, engagement is elevated and comprehension is increased. These changes in engagement and comprehension may lead to behavioral change. In the pursuit of exploring some of these concepts, underlying issues that may impact an adult's ability to maximize their level of learning comprehension and long-term knowledge absorption

were also considered. To start drawing initial connections to the beforementioned ideas, foundational information related to the topic of interactive learning, the perception of the adult learner, the benefits of interactive learning and the absence of a significant positive impact in interactive learning was analyzed. The primary database used to retrieve scholarly articles was Elsevier. In the initial literature topic, Underlying Issues and Foundational Information, information important to understanding the adult memory, which could be the underlying element that impacts all learning, was reviewed.

**Foundational Information and Underlying Issues**

The literature surrounding foundational information and identified issues that relate to the benefits of interactive learning are plentiful. Much of it relates back to the factors that influence learning in any capacity. Alt, A. L. (1999), brings the topic of interactive learning back to a base level that significantly determines one's ability to learn. The author focuses in on the ability of the adult memory. Additionally, they touch on a few factors that influence our memory's capabilities such as: attention, acquisition and encoding of material, rehearsal, experience, and retrieval. These are important determinants of memory ability. It was important to explore these elements as they may point to underlying conditions that significantly impact or determine whether or not an adult has the ability to receive enhanced learning for interactivity. Alt, A. L. (1999), also keep in mind that some of these identified elements may change according to one's circumstance. Page 54 states, "Acting under a defining set of circumstances, memory allows for choosing from that original multiplicity of possible actions those ones representing useful responses to the immediate environmental situation" (Alt, A.L., 1999). The article goes on to tie into the subject matter of interactive learning and explores memory in a deeper way by assessing ways in which adult learners can be trained to enhance their memory skills. The author's

research demonstrated various memory enhancing techniques, collected by both qualitative and quantitative methods. They then evaluated the successes and benefits of each method. Additionally, the author explored learning preferences, group versus individual learning and learning style variability. In this, it was found that there were favorable outcomes in one's ability to memorize information with interactive learning. The author's information presented a comparison that lends to the conclusion that interactive learning may help to tackle some of the underlying issues that can affect adult learner's ability to retain pertinent information.

To further deepen the topic of how memory impacts learning, Dousay, T. (2016), proposed the Cognitive Load Theory by noting:

> Overloading working memory impairs learning while underloading does not generate interest. This finding clarified that an overwhelming effect negatively impacts how new information is processed. Additionally, if information is presented through a singular mode, i.e., visually or aurally, there is a potential negative affective implication wherein there is less engagement with the new information (2).

This theory lends to the argument that adding a variety of learning approaches, such as interactive learning, can lead to more engagement with learning content and thus, enhanced knowledge absorption. Many researchers feel that the argument of memory must also be married with the specific learning strategies that are being used in order to thoroughly assess short and long-term impacts. This concept was explored further in an article titled *Activating learning at scale: A review of innovations in online learning strategies.*

In *Activating learning at scale: A review of innovations in online learning strategies,* Davis, D., Chen, G., Hauff, C., & Houben, G. J. (2018), took a widescale approach to the

overarching theme of online learning strategies. The authors made use of historical theoretical and empirical findings in previous literature and then, synthesized it. According to the authors, "the results synthesized 126 studies, including 132,428 participants, (1)." It's also important to note that the article focused on scalable innovations in learning, meaning learning that did not require an individual to manually grade the results, provide feedback or even have a physical presence in order for the learning to happen. Davis et al. (2018), aimed to find out why some of the learning in scalable areas has been unable to hold the attention of their learners for long. They stated that this issue led to some users feeling dissatisfied with their learning experience.

Davis et al. (2018), aimed to find out, through analyzing previous data, what led to their dissatisfaction and exactly what types of learning proved to be the most promising strategy for effective learning. Their findings showed that there were 3 top choices: Cooperative Learning, Simulations & Gaming, and Interactive Multimedia. The article speaks to both sides of the interactive learning argument. It provides evidence that can be used to prove that interactive learning positively impacts a learner's ability to absorb knowledge. However, it also provides some doubt on the extent that engagement can be impacted, as well as, what elements affect it. This article speaks to some of the gaps that can impact a learner's experience, but ultimately, it comes to the conclusion that interactive learning has been proven, through a number of research efforts, to provide positive results for adult learners. While these results seem favorable, many researchers in the field of adult learning point to several "issues" they feel need to be addressed when dealing with assessing interactive learning.

**Issues With Interactive Learning**

Research on implementing interactivity elements into adult learning materials has left more questions than solid answers. Cairncross, S., & Mannion, M. (2001), challenges whether or

not interactive learning environments really lend to a higher quality learning experience. The article examined the "evidence" that interactive learning may not be as beneficial as it is perceived to be. While the article does not explicitly deny that interactive learning environments can provide learners with benefits, the authors do propose that its necessary to approach the build of interactive learning from a user-centered approach and that the user-centered approach element may just be what's missing in fulfilling the promises of interactive learning. The authors began their approach to the article by reviewing the learning process for adult learners. They then moved on to examine how key elements of interactive learning, such as media, user control and the level of interactivity can either enhance the process or, leave much to be desired. The authors suggest that an educational theory must also be considered. Cairncross, S., & Mannion, M. (2001), end their article with the conclusion that interactive learning can provide many learning benefits, but that they are dependent upon the "right' learning approach. The authors also suggest that there is still much opportunity to conduct research to refine what that approach should look like in order for learners to maximize their benefits. One area that is taking the lead to help refine that research is the serious games industry.

Guillén-Nieto, V., & Aleson-Carbonell, M. (2012), explored interactive learning environments focused on serious games and the type of learning outcomes that can be achieved in using them. The authors acknowledged that there is still some uncertainty as to whether or not interactive learning enhances knowledge transfer and if it can help to change behavior. With this in mind, they aimed to provide evidence of some of the elements that do influence whether or not learning will be effective. They accomplished this through exploring the game "It's a Deal!" It's a Deal! was designed to teach intercultural business communications in business settings. Through their study, they attempted to answer three main research questions: was intercultural

awareness improved, what factors influenced the improvement, and if they did not improve, what factors contributed to the failure. The authors helped to add validity to the thinking that interactive learning does indeed influence behavioral change if, and only if, the proper steps are taken to ensure learners get the most out of the teaching. Another thought in the "if" realm some researchers have pointed to is the actual structure of the interactive learning.

Qudrat-Ullah, H. (2020), followed a qualitative approach in assessing the material their article was based upon. The author focused on debriefing in interactive learning and the extent to which it makes a difference in the learning's outcome. The authors took two experimental groups, both adults, and placed them in an interactive learning environment (ILE) in an effort to observe the level of learning they gained from the environment. The interactive learning was coupled with focusing in on an outcome-oriented debriefing and a process-oriented debriefing and then, a five-dimensional model to evaluate participants in a variety of different areas. The author pointed out that the degree to which interactive learning can be beneficial has more to do with how the learning is structured and how the learning is debriefed, rather than the degree of interactivity. The study showed that when a process oriented debrief was added in the learning, the participants improved significantly in every area. Qudrat-Ullah, H. (2020), proposed that some of the diversity in findings related to the benefits of interactive learning with adult learners is largely due to a failure to focus in on the underlying elements that most learning needs to contain in order to increase the likeness that the performance objectives will be fulfilled. The diversity in findings may also be related to a need for more real data, in terms of evaluations, surveys and interviews of interactive learning from the learner's perspective.

## Learner Perceptions

In identifying potential issues that relate to interactive learning, researchers have realized that it is imperative to understand benefits from the prospective of the learner. This view allows researchers to gain a more in-depth understanding of how learners perceive their experiences and needs. Horng-Ji Lai. (2014), aimed to evaluate what perception adult learners had of interactive learning in the classroom, more specifically, in using interactive whiteboards. All of the participants were enrolled in a master's program and thus, had a number of similarities. Research data was obtained by site observations, student reflective journals, student interviews and course websites. The data found that although it was a new concept for many of them, that overall students found value in using the boards. The author did find that the whiteboards enhanced learning, but also found that the degree in which it enhanced learning was dependent upon the instructor's readiness and competence. Participants noted that they learn best when instructors update learning plans to make the most of the interactive tool. This article supports the need to evaluate learning from the perspective of the learner themselves. It called out a running literature theme that interactives learning, more specifically, the benefits of it, are conditional, based on the knowledge of who is in control of the learning and the elements that have been considered to be included in the learning.

Ian Stoodley, Elham Sayyad Abdi, Christine Bruce & Hilary Hughes (2018), studied the experiences of visitors, managers and project leaders in the "cube," which is an interactive media area that hosts a variety of interactive projects. The authors observed the participant's experiences compared to the learning objectives that were set. The data gathered reflected the perspective of the participants. Through the article, the authors provided a view of interactive learning outside of an instructional designer viewpoint and the content lends to the question of

what impacts interactive learning can have on behavioral changes and how. The authors discussed the differences in experience had by visitors versus managers, which was quite diverse. The authors also highlighted some of the outcomes of their experience and why they were different than other user groups. In all, there was a mix of both a deficit of and a presence of positive impacts in interactive learning aimed at an adult audience.

**Positive Impacts To Interactive Learning**

There is much research that points to interactivity providing learners with an advantage over those that are not exposed to it. Much of it notes that interactivity lends to the ability to solidify knowledge concepts. Damayanti Rusli Sjarif, Klara Yuliarti, Luh Karunia Wahyuni, Tjhin Wiguna, Titis Prawitasari, Yoga Devaera, Henni Wahyu Triyuniati, & Andika Afriansyah. (2016), explored the question of exactly "how" interactive learning contributes to behavior change in adults. The authors focused on medical students and their ability to absorb knowledge about infant feeding practices. They explored adding in interactive learning practices to see if it would enhance their ability to retain knowledge. When talking about the method that they used, they stated, "A quasi-experimental study was conducted to evaluate the efficacy of the new module compared to the previous module" (p.22). The control group received traditional learning instruction and paper-based workshops. The intervention group received interactive learning. The findings indicated that the groups that received interactive learning experienced a higher rate of knowledge understanding. The authors were also able to demonstrate more comprehensive counseling skills. This article further supports the theory that interactive learning does lead to a higher rate of knowledge absorption and understanding. This theory continues to be tested in various learning environments.

De Lorenzo, R. A., & Abbott, C. A. (2004), aimed to evaluate whether or not the adult learning model truly contributes to a student's learning. The study population was two sequential groups of randomly selected junior, enlisted, active-duty soldiers with no prior formal emergency medical training who were enrolled in an experimental model of a U.S. Army Combat Medic School. The control population was a similar group of students enrolled in the traditional curriculum. The experimental model contained interactive learning elements. The study of both groups lasted 10 weeks and ultimately found that the group that has the interactive learning was better able to demonstrate their learning than the group that did not have it. The authors also noted that students, when taking part in interactive learning versus traditional learning, assessed themselves more honestly.

Nasmith, L., & Steinert, Y. (2001), explored their theory that interactive learning promotes participation and a higher level of learning than trainings that do not contain an interactive element. To prove that, they assessed adding in interactive learning techniques for adults in the medical field. They introduced a series of interactive lectures over a period of time and then, allowed students to have access to an evaluation of the workshop. The experiment group consisted of 60 faculty members and the comparison group consisted of 40 members on the waitlist. In their evaluation period, they found that overall, there was higher engagement, better questions were asked about the topics at hand, they scored higher in test questions asked, and they were able to retain information better than the other groups. In conclusion, the authors found that interactive lectures do increase student participation and the involvement in even what would be considered a large classroom. They also found that adding in interactive learning elements, even if it is a mixed approach, can be quite useful in trying to influence knowledge

transfer and behavior. This conclusion was supported by self-reports of participants and observational data.

### No Positive Impacts Due To Interactive Learning

There has also been some data, both qualitative and quantitative, that seems to support that there are no particularly impactful benefits to utilizing interactivity. However, much of this research concluded with the idea that much more research needs to be conducted. Rieber, L., & Noah, D. (2008), studied the impact that game-like activities had on learning. The authors also observed the underlying principles that led to the results. The article explored both qualitative and qualitative methods and the qualitative sessions discussed patters in instances where the game seemed to have interfered with the participant's learning. The authors worked with 70 adult university students in the quantitative part of the study. The students used an interactive computer simulation that helped to model the objectives of their learning, understanding acceleration and velocity. A total of 4 simulation conditions were studied. Overall, the authors found that there seemed to be some areas where learners received benefits but that it was always conditional and so, for the most part, the authors determined that interactive learning, game specific, did not really lending any real positive impact on learning. This article again ties back to the theme of conditional learning with interactive environments.

### Conclusion

In conclusion, the reviewed literature provided a perspective on interactive learning that includes the need to understand the underlying factors that have the ability to impact the extent to which the learning can be effective and or, lead to behavioral change. The majority of the literature, both qualitative and quantitative, seems to point to the conclusion that interactive

learning does lead to a higher, more enhanced level of learning but that it is conditional, based upon what key considerations and elements are thought about before the build of the learning, during the build of the learning and as the learning is being debriefed.

## Methodology

The literature review was used to try to determine how interactive learning can help adults better grasp learning objectives when they take any kind of online learning. Interactive learning for our purposes, is thought of as activities or tasks that require the learner to make decisions, use critical thinking and evaluation skills, problem solve and or, engage with the system to progress in their own learning. This may include elements of gamification and multimedia simulations. In essence, it is learning that is asking adults to do something other than just read and click to turn the page. The objective of this paper is to be able to identify the elements that positively impact learning and long-term memorization of key concepts. The refined question serves to further refine how identifying these elements could help to build a better case for interactive learning to become more of a norm with known benefits. The methodology that will be followed to collect and evaluate data will be qualitative.

### Method and Rationale

The research question asks how interactive learning contributes to adult learners online learning experience. Qualitative methods focus on answering this type of questions. This method aims at data that is non-statistical and lends more to gathering identifiers and attributes. It was also selected because it allows researchers to get direct feedback from the learners themselves. Having the ability to get confirmation or clarification on learner data is valuable because researchers do not have to rely on their own interpretations of what they think a learner means or

truly needs. It also provides the ability to get additional context of their provided answers and, allows researchers to identify variables that may be important to future studies. Access to verified data from the learner's perspective can help researcher in the classification and analysis process. This is important as the topic of whether or not interactive learning is truly beneficial to adult learners in terms of their ability to walk away from the training having accomplished the course objectives, seems to be somewhat split down the middle.

Although the type of research that has been conducted thus far has caused researchers to be divided on interactivity benefits, there is one element that both sides agree with. Many researchers agree that there are a number of contributors that may or may not have an impact on a learner's ability to accomplish those goals. With that in mind, more detailed information that can either prove the select identifies and or, reveal additional identifiers is necessary. The qualitative data in this research paper was obtained through texts, a case study, interviews and focus groups and, observations. These methods were necessary as they allow a greater opportunity to gain an understanding from the learner's perspective. This data will allow the analysis to present a truer representation of the adult learner population.

## Research Question and Hypothesis

**Revised Question**: How does interactive learning impact or contribute to adults' ability to absorb intended online learning objectives?

**Hypothesis**: This study is designed to test the hypothesis that adults that take online learning that includes interactivity, are more engaged and empowered in their own learning and are thus better able to achieve desired learning objectives and make behavioral changes.

## Concepts

This study will evaluate the relationship between interactive learning in online learning environments and achieving desired training outcomes. While the data needs to be representative of the adult working population as a whole (working adults over 25 that receive online training), the focus will be on evaluating learners that have already taken part in interactive online learning environments. These groups will be interviewed, observed, and will participate in focus groups where additional insight into the why behind their answers can be explored.

Key Objectives:

- Determine the elements that are directly impacted from interactive learning
- Understand the "why" behind why these elements in particular are stimulated as a result of the interactive learning.
- Gain additional insight into learning motivations
- Similarities and differences in answers

## Population

The population that will be observed are adults over the age of 25 that are employed full-time and take online courses. The population will consist of adults from various work organizations as to gain data that is more representative of the adult population as a whole. Between 200-250 adults will be involved in focus groups and interviews. Individuals will be recruited from business professional organizations, as well as e-learning organizations.

## Data Collection

Data will be collected from the American Marketing Association, American Management Association, The e-learning Guild and The American Society for Training and Development. Data will also be collected from a variety of article sources that conduct focus groups and interviews with participants that fit the population. This data collected will reflect years 2019 and beyond. Additionally, the data collection from the individuals that will be participating in the new focus groups will be collected in the monthly focus groups, conducted from February 2022 – January 2023. The data collection of the interviews will be collected at the time of the interviews.

## Ethical Considerations

Although adult learners have the ability to consent to their name being used, this identifier will remain anonymous while other aspects such as demographics related to age, race and income level may be used, provided that consent has been provided. While learners may willingly provide information related to their place of employment, this information will also remain confidential. Additional, information related to any illnesses or disabilities that may impact one's ability to learn will be kept confidential.

## Data Analysis and Timeline

Since qualitative data is many times, subjective and requires the need to sift through wordy data versus numbers in order to find key themes, similarities, and differences, we will use a software that is specifically designed to sort out the data and help us establish categories. We will use NVivo, which is a tool that can help researchers to both code and manage their data. This tool will help to find notable patterns.

The timeline for this study is 1.5 years. Since training is often conducted year around in many workplaces, a 1.5-year timeline makes sense. Participants will be gathered again, mid-year and at the end of the year to see if their answers have changed.

**Table 2 – Research Study Timeline**

| Date | Tasks |
|---|---|
| Jan 2022 | • Begin working with American Marketing Association, American Management Association, The e-learning Guild and The American Society for Training and Development to begin exploring what data is available and what data is currently being collected and will be collected in the near future. |
| February 2022 | • Gather participant information and informed consent for studies.<br>• Begin focus groups.<br>• Begin individual interviews. |
| March 2022 – January 2023 | • Continue focus groups and interviews. |
| February 2023 – March 2023 | • Compile data and perform data analysis. |

| | |
|---|---|
| April 2023 | • Generate report of findings, conclusions, and future research. |

## Summary

This study aims to find the key elements that can be affected as a result of adding interactive learning into the adult learner training curriculum. The desire is to find out from learners "how" these elements are impacted and to what extent motivation and the ability to take an active role in your own learning determines the extent of that learning.

## Resources

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# Appendix

## Table 1

Four Levels of **Interactivity**

| | Level 1: Receive | Level 2: Contribute | Level 3: Participate | Level 4: Experience |
|---|---|---|---|---|
| Participant Involvement | Passive: Participants only receive info | Limited: Participants determine order and pace | Moderate: Participants control based on learning needs | Full: Participants consequences choices |
| Navigation | Linear | Flexible | Simple branching | Complex branching |
| Assets | Static | Clickable | Custom | Simulated |
| Media | Raw | Produced | Custom | Interactive |
| Assessment | Basic quizzes | Level 1 plus simple interactive exercises (drag-and-drop, sorting, matching) | Level 2 plus simulated activities, scenario-based case studies, moderate interactive exercises | Level 3 plus 3-D simulations, gamification, digital avatars |
| Remediation | Correct/incorrect feedback | Basic justification | Adaptive, remedial instruction | Consequences for choices |
| Use | Awareness or knowledge-based content | Noncomplex or review content | Application or transfer of content | Application of practical skills or complex decision making |