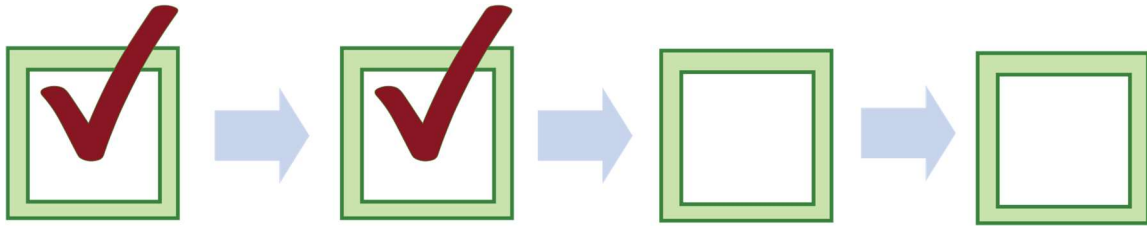
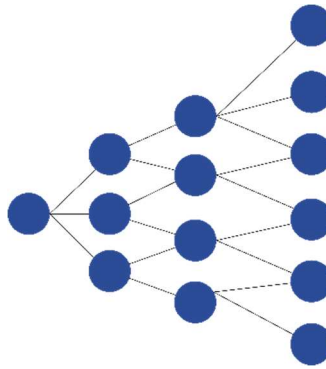


Figure 1.2 Structures/Architectures in Simulation



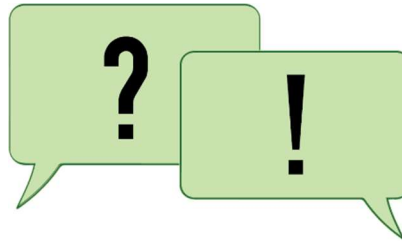
Procedural

- These virtual simulations are designed specifically to teach about a manual procedure or other step-wise process. The flow of a scenario may resemble a linear or pseudo-branched case, but the focus will be on the procedure.



Branched

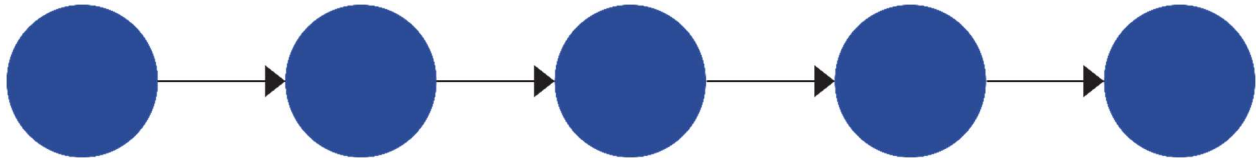
- Again the simulation progresses from node to node, but at each decision point the scenario will progress differently based on the choice made by the learner. At each decision point, typically a limited number of options (2-4) are presented to the learner. The ultimate outcome of the simulation depends on the learner's choices.



Communication

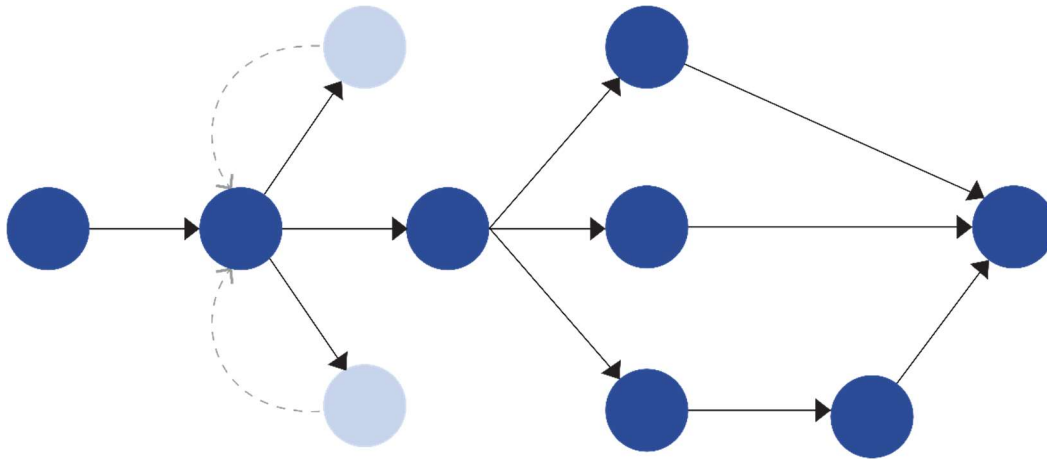
- Some platforms focus on re-creating communication between a service provider and a client, or among providers. They use natural language processing and artificial intelligence to interpret questions asked by the learner then to provide appropriate responses. Other platforms focus on the nuances of how to phrase communications and are built more like a branching case, but with a relationship and trust with the client that can be built or lost.

Figure 1.2 Structures/Architectures in Simulation



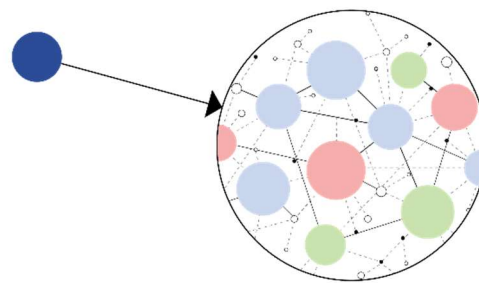
Linear

- The simulation follows a single navigation path, from node to node. Each node represents a step or point in the simulation, that may contain information, media (images or video), self-assessment questions, decision options, or other interactions. This presents limited interaction to the learner, as choices they make do not affect how the scenario unfolds, but they help keep the learner on course and are simplest to create.



Pseudo-Branched

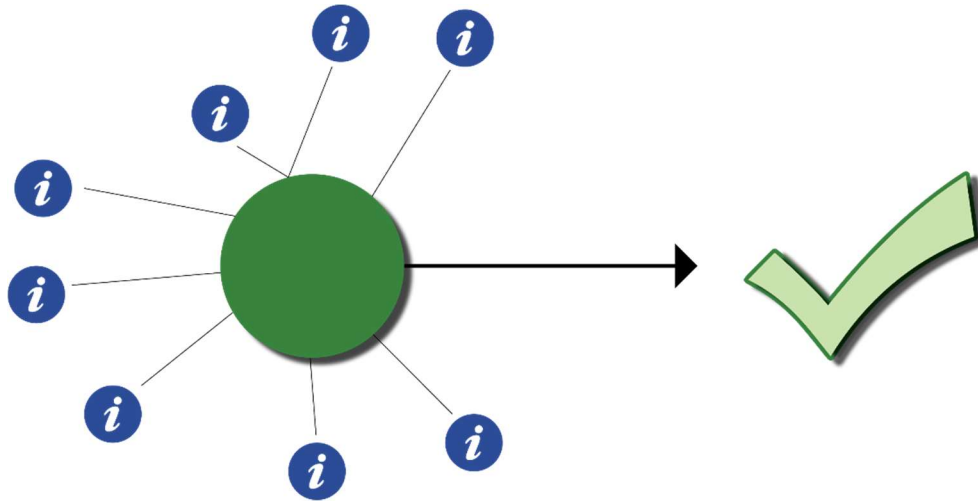
- Similar to branched cases, but authored in a way to limit the number of possible paths and outcomes of the simulation. Some choices may bring the learner back to a previous node to choose another option, or some paths may merge back together.



Responsive

- Responsive virtual simulations are also open-ended, but powered by an engine (e.g. in healthcare it would be physiology engine), so learners can choose assessments and interventions, and the simulator will respond in real-time to their actions. In healthcare, these are typically used for emergency or critical care simulations, where interventions like intravenous fluids or endotracheal intubation have rapid effects.

Figure 1.2 Structures/Architectures in Simulation



Exploratory

- These simulations are open-ended, allowing the learner to explore a situation and decide what information to gather. For example, these take the form of a meeting between the professional and a client where the learner can choose what questions to ask, what assessments or investigations to perform, and other information to gather. Once the learner is ready, they are asked to commit to an assessment of the situation or an action plan. Learners receive feedback on information gathered, information omitted, their efficiency and their ultimate decision.