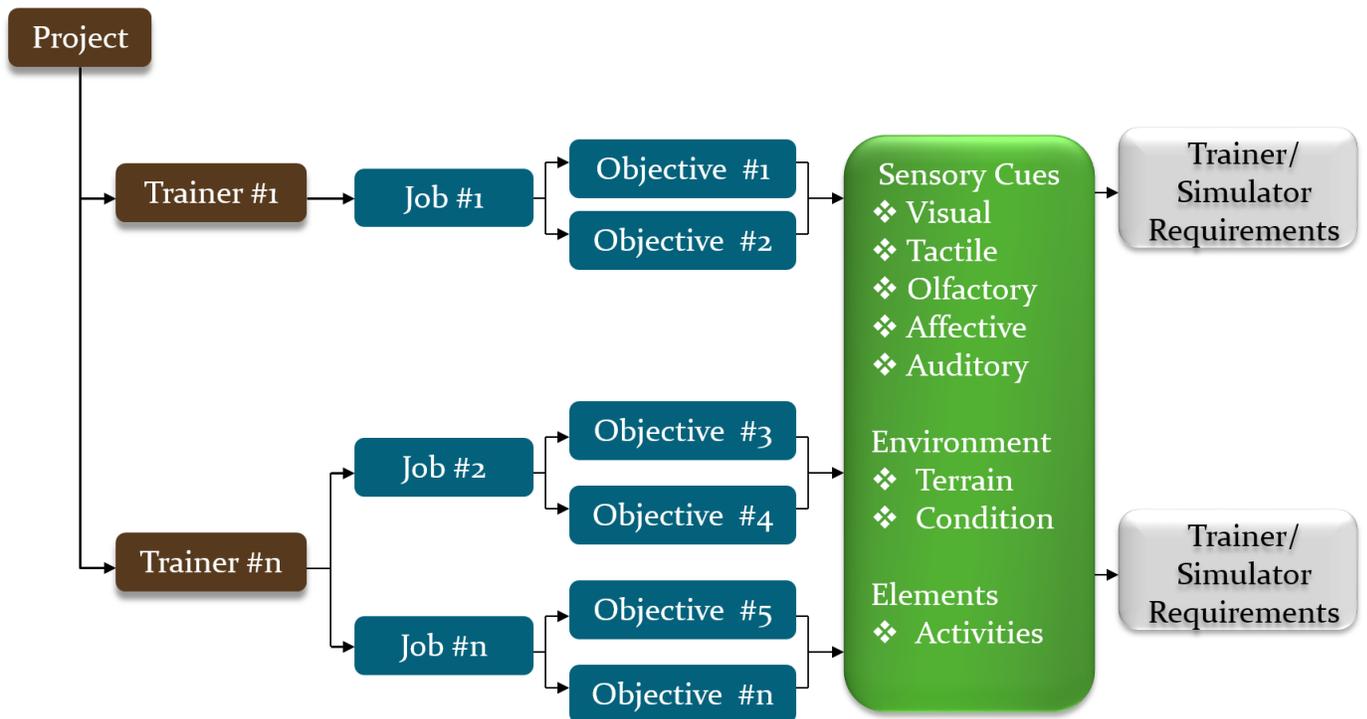


Module #3: Fidelity Analysis

In general, Trainers and Simulators offer several advantages including the simulation of dangerous, life threatening situations; safe training environment; learning from doing; opportunity to make mistakes, as well as a more efficient learning environment. To achieve these benefits, Trainers and Simulators should allow students to practice all relevant tasks, within realistic environments, under preset conditions, with sufficient level of fidelity to attain the desired level of competency. In other words, the requirements for Trainers and Simulators should be driven by learning needs and performance objectives.

Whether you are investigating the viability of off-the-shelf trainers/simulators or procuring a custom-built trainer/simulator, the types and fidelity of visual, tactile, olfactory, affective and auditory sensory cues; as well as the synthetic environment requirements and elements should be clearly articulated. With accurate, factual data in hand, you can maximize the benefits of your trainers/simulators investment by zeroing-in on requirements that offer the greatest value.



Trainers/Simulators Fidelity Analysis Requirements

Challenges ...



Defining the specifications for training/simulators can, however, be complex, time consuming and costly, for the following reasons:

- ❑ Involves multiple subject matter experts for data collection and analysis.
- ❑ Requires in-depth understanding of trainer/simulator functional requirements. In other words, performance and learning objectives that trainer/simulator should support.
- ❑ Requires in-depth understanding of the synthetic environment requirements. In other words, the conditions under which tasks (training/performance objectives) should be conducted.
- ❑ Requires the identification of relevant sensory cues, elements and environment to maximize the benefits and ensure that all critical requirements have been met.

- ❑ Requires an objective assessment of the impact of each option. In other words, identify need-to-have versus nice-to-have functionality.
- ❑ Involves trade-offs – i.e., training activities can/cannot be supported for each set of trainer/simulator specifications.
- ❑ Meets the requirements of various standards.
- ❑ Generates trainers/simulators system requirements report in desired format.



ADVISOR Added Value ...

Speeds Analysis ♦ Minimizes Duplication ♦ Improves Efficiency			
	Speed data collection. Performance and learning objectives including standards and conditions can be collected offline using Excel.		Quickly search and copy relevant sensory cues from one device to another.
	Facilitate collaboration and sharing of data. Store all data in a centralized database accessible anytime and from anywhere with a Browser.		Focus resources on trainer/simulator requirements that would generate the greatest value.
	Quickly identify performance/learning objectives that can/cannot be supported as trainer/simulator specifications change.		Meet clients' needs by ensuring that proposed solutions will attain the desired outcomes.
	Minimize waste by avoiding trainers/simulators that do not meet learning needs and performance objectives – i.e., costly decisions based on faulty assumptions.		Generate Trainer System Requirements Report, in a single click; and conduct multiple what-if scenarios within a few minutes.

Contact us for Info – Briefing – Trial