



## Simulation Training Series – Article II

FAAC Simulation Training Series: Benefits of Training In Real Time with Real Life Situations

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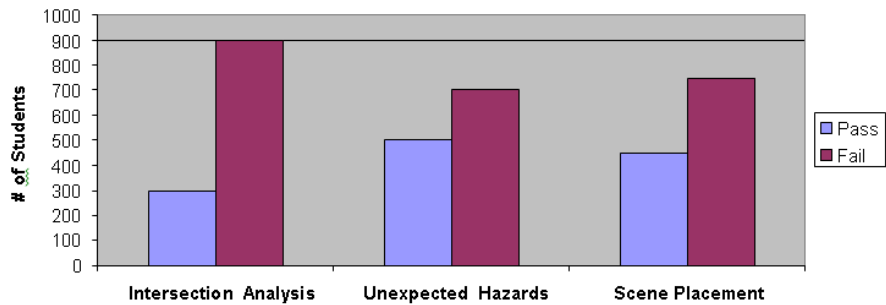


Since 1980 the EVOC program has trained more than 300 new recruits annually with a program of didactic and practical skills sessions. During that period, collision rates remained steady even though several changes had occurred within the curriculum and the service.

In late 2003, the EVOC program received its first driving simulator to complement its existing driver training program.

FDNY officials worked with the simulator manufacturer, FAAC Incorporated, to develop a simulator that would include a variety of scenarios and hazards that emergency vehicle operators were exposed to during a typical shift.

**Initial Simulation Training 2004-2007**



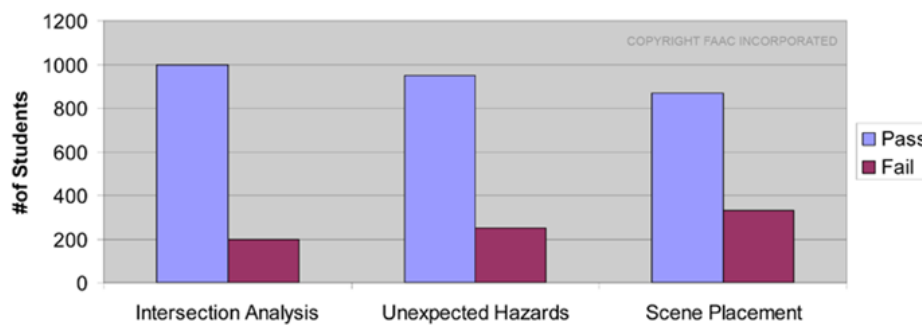
The combination of real-time driving performance and immediate reinforcement proved to be a powerful learning tool, especially for young students who are more accustomed to the dynamic virtual learning environment of the driving simulator.

The simulator enabled instructors to be much more efficient. Lectures took up to 8 hours, but the practical application, critique, instruction, and re-driving the scenario might only take 15 minutes.

Another benefit of simulator training was the advantage of having the student crash; this may seem counter-productive, but in the simulator students learned more from their failures than

from their successes.

**Secondary Simulation Training 2004-2007**



Simulation training allowed students to immerse themselves into a virtual world and apply the theoretical concepts learned in the classroom, such as

physical forces and intersection analysis, to name a few. The decision process is performed in real time with real-life situations; when students are involved in the “collision” they must report to the “dispatcher” the same information that would be required in the field.

The instructor elicits information from the student using a Socratic approach as to why the collision occurred, what were the events leading up to the collision, and the resulting short and long-term consequences. This examination brings a more tangible understanding to the student's actions.

Several studies have identified that driver behavior has a larger emotional than analytical component and that 80% of the driving experience is composed of attitude. In other independent studies documented in medical journals, they identified that the frontal lobe of the brain does not fully mature until the age of 25 years. The frontal lobe is responsible for the control of:

Impulse Behavior  
Judgment  
Problem-Solving  
Motor Function  
Socialization  
Coordination

Spontaneity  
Memory  
Executing Behavior  
Working the Memory  
Planning  
Self-Control

It is this very reason that simulation training helps in teaching the new driver; instructors are able to stimulate and enhance the learning process through a life-like, situational episode that elicits immediate action, reaction, and reinforcement.