



Need to make a decision?

Dynamic, high stakes decision making is at the centre of all military operations; it is an essential skill, yet difficult to train. Leveraging decision making and training theory together with interactive 3D multimedia applications may offer a viable context-rich training option.



Fig. 1 CODE Level 1 opening screen. The fire team are given their patrol orders



Fig. 2 Fire Team C/S Delta debus and begin their patrol



Fig. 3 Students select pertinent cues from a complex environment



Fig. 4 At key decision points students make a choice between a number of possible options

The HFI DTC has developed a tool to support decision making training. The concept demonstrator is known as CODE - the Combat Operation Decision Environment. CODE is being developed around an Afghanistan urban foot patrol scenario to help improve the decision making agility of private soldiers with little or no operational experience, being deployed to complex, high tempo and high stakes operating environments.

CODE is being built using interactive 3D multimedia applications, selected to support the training overlay, which in turn is underpinned by learning and decision making theory. The decision making theory stems from research into heuristics and biases, to improve students' handling of negative information. Situation assessment and awareness theory, will help train soldiers to identify and interpret cues which may be combat indicators, and to decide how to act on that information.

The first CODE 3D concept demonstrator (see figures 1 to 4) has been built, and is undergoing user centred evaluation to validate the fidelity and training approach. The training scenario and training overlay will be developed further to produce a more functional and versatile decision making training prototype. An updated functional prototype will then undergo further user centred testing.

Military Benefit:

CODE has the potential to help improve the decision making agility of novice decision makers operating in current theatres, and assist with their training in the implementation of rules of engagement. Although CODE has been developed around an Army context, the design approach could be exploited across all three military services, and to civilian applications such as the emergency services, safety critical and high risk industries.