

Core Skills Trainer

Professional Game-Based Learning

Skills Development

Using a single simulator, the **Core Skills Trainer**, the student can practice the primary elements, the "core skills", to improve **dexterity** and **perceptual** ability as a basis for a whole range of procedures e.g.

- Abdominal Palpation
- Surgical Procedures
- Clinical Breast Examination
- Digital Rectal Examination e.g. Prostate
- Pregnancy Diagnosis
- Equine Colic
- Etc.



Solving the Problem

Using a **haptic** (touch) feedback device the trainee can feel and sense a 3D object in a virtual environment.

The **benefits** of using the Core Skills Trainer:

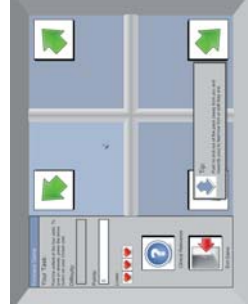
- Students can practice the skills that are fundamental to many examinations and procedures
- Complement existing clinical training methods
- Use prior to examining patients
- Progress is recorded and displayed
- Enables repeated practice and can be used in own time
- Built in tutorials means no instructor needed
- Appealing game-based learning environment

What is the Core Skills Trainer?

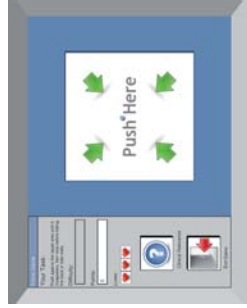
The Core Skills Trainer is a collection of computer games that use haptic technology to teach key dexterity and perception skills important to all health professionals.

The Haptic Games

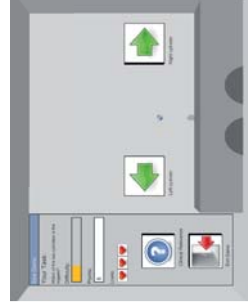
Each game represents a different core skill which has been identified as critical by consulting with clinicians. As the player progresses a set of skills are collected that help 'build the clinician'.



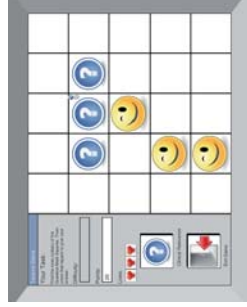
Firmness Game
Feel for the softest of four pads



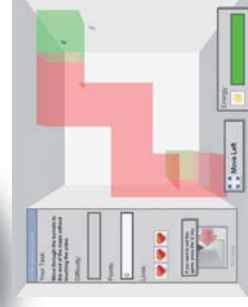
Force Game
Pierce the panel using the correct force



Size Game
Feel and differentiate between 2 objects based on size



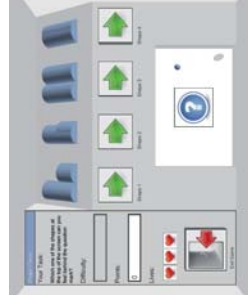
Texture Game
Compare textured squares across the grid to follow the trail



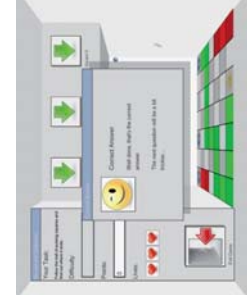
3D Movement Game
Move through the 3D maze without touching the sides



Motor Control Game
Control the height of the plane by using precise pressure



Shape Game
Identify a hidden shape using touch



Movement Detection Game
Compare pulsing squares across the grid to follow the trail