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Integration of Computer Based Learning in an Electrotherapy Module

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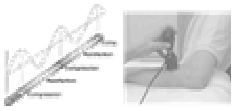
Background – Why?



- Student evaluation identified:
  - Difficulty with the theoretical components.
  - Textbooks difficult to understand.
  - Wanted more time spent on practical application.
  - Wanted more technique demonstrations.
- Staff evaluation identified:
  - Poor level of theoretical understanding.
  - Wide range of entry knowledge.
  - Need more quality time spent on practical application.
- Increasing constraints of time and resources.
  - Limited time for face to face teaching.
  - Large groups of students, same number of staff.

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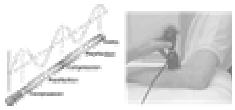
Purpose



- What we needed.
  - Enable students to learn the theoretical background.
  - Increase student skill in application.
  - Increase time spent on application.
  - Reduce the time spent on demonstration.
- Develop flexible interactive resources to enable students to learn the theoretical background and the process of application.

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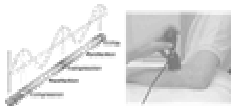
Addressing the Needs



- Available resources:
  - A personal interest in computer based learning.
  - A virtual learning environment (VLE).
  - Successful application for funding from the University.
- Develop interactive materials that could be integrated into the module.

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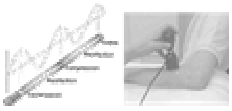
The Process



- Consideration of alternative methods of delivery.
  - Meeting the learning needs /styles of the students.
- Present material in a variety of formats:
  - Text based through to highly interactive online materials.
- Integration of the material into a well planned module programme.

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Integration into the Module

- Each topic introduced with a key note lecture.
- Students required to access the available resources online before the relevant practical class.
- The timetabled sessions made available by this approach were used to increase the time spent in practical application of the techniques.

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The Materials

- Superficial Thermal
- SWD – Electromagnetic Energy
- Ultrasound
- Stimulation Currents

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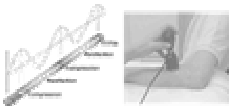
Results



- Staff evaluation.
  - Increased time face to face in a practical situation.
  - More time to consider and practice applications.
- Student evaluation.
  - Valued the diagrammatic representations and animations.
  - Valued the flexibility of the approach.
  - Flexibility was identified as being particularly useful to the mature student.
- Improved success in practical assessment.

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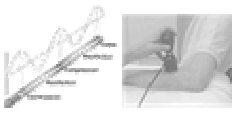
Conclusion



- The use of computer based learning materials to support a module with a high practical component has been very successful.
- It has enhanced the learning experience for students and staff and should serve to ensure that graduates are safe and effective practitioners.

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