Enhancing the Development of Advanced Physiotherapy Clinical Practice Skills Using Vodcasts

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Acknowledgments

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Introduction

Programme Lead: MSc/ PGDip/ PGCert in Advanced Paediatric Physiotherapy

Aim: To facilitate the development of advanced paediatric physiotherapy practitioners

Core areas of practice:
- Cardiorespiratory physiotherapy
- Neuro developmental physiotherapy
- Musculoskeletal Physiotherapy
Development of a new core module
Paediatric and Adolescent Sport and Performing Arts Injury Prevention and Management

**Aim:** to provide graduate physiotherapists with advanced evidence based knowledge and clinical skills for preventing and managing injuries in young athletes

6 days of face to face teaching: Lectures and workshops
7 e-learning units

**Assessment:** Objective Structured Clinical Exam
Multiple Choice Exam
Background and Context

Traditional approaches to teaching clinical skills

- Lecturer demonstrations
- Workshops to develop clinical reasoning
- Students then practice using notes, memory and text books
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Our Challenges

An inability to guarantee suitable paediatric models with specific clinical injuries or pathologies on specific term dates

Large classes gathering around a single model, precluding adequate repetitive exposure to the correct techniques

Some international students have limited previous exposure approach to critical thinking and clinical reasoning

Limited resources to accurately practice (books, Youtube, notes)
Information Technology in Health Education

Advances in the use of information technology to aid the development of clinical skills in medical, nursing and dentistry


Video podcasts, or vodcasts are increasingly used by a range of healthcare professions to aid development of practical skills and clinical reasoning undergraduate physiotherapy education

Hashemi M et al (2011); Hurst KM. (2016)

Nothing is known about using vodcasts to develop mastery of advanced practical and clinical reasoning skills in post graduate physiotherapy clinical education
Aim of the innovation

To enhance the development of advanced practitioner skills through a blended learning approach using in situ video recordings of the physical assessment and treatment of young athletes with specific injuries by clinical experts

We wanted to provide students with electronic video resources to support face to face lectures and practical workshop sessions
Development

Story boards developed with clinical specialists

Video recordings were made in situ in sports academy environments

The videos, including high definition close-up shots, were later edited, incorporating slow-motion repeats, text and voice-overs to emphasize key points and split into 6-8 minute learning units

These included subjective examination, functional assessment, orthopaedic tests, therapeutic interventions and management strategies

Drawing on the evidence base
Implementation

The videos were then streamed via Moodle the UCL virtual learning environment and made available for the duration of the Level 7 sports and performance module.

Vodcasts could then be viewed via computer, tablet or mobile phone.

Paediatric and Adolescent Sport and Performance Injury and Prevention Module (CHLDGC26)

Welcome to this exciting course delivered by a team of expert clinicians, teachers and researchers. The module aims to provide you with the opportunity to develop advanced professional knowledge and clinical skills relating to managing young athletes. The course is delivered via a variety of face to face lectures, practical workshops and online E-learning units and activities.

We will be encouraging discussion, exchange of ideas and collaborative learning via online forums and in face to face workshops. Please take the time to look through the various folders and check the site regularly as this will be our main point of communication.

Please introduce yourself in the welcome forum below and tell us a bit about your background and what you most hope to learn from the course. Taster and short course students will be able to do this once they are fully registered on the first day.

Module lead
Dr Jane Simmonds: Jane.simmonds@ucl.ac.uk
Richard Collinge: Head of Medical, Watford Football Club
The Hip in Young Athletes
Gym Based Functional Assessments
Dr Solomon Abrahams: Consultant Physiotherapist
Methods used to evaluate the innovation

- Anonymous online student evaluation
- Informal discussions
- Review of student grades
- Reflections from clinicians
Key findings

Feedback from the students about the vodcasts was overwhelmingly positive.

All students (n=18) rated the video resources to be excellent.
Key findings

Students used the vodcasts in their revision, claiming that the opportunity to return back to the videos when revising was particularly helpful.

International students found the videos particularly helpful, as many techniques were new to them and the videos gave them the opportunity for repeated viewing.

‘As an international student, the videos were very helpful because many of the clinical tests were new to me and I could refer to them again and again to help my practice and learn’
Unexpected finding

Helpful for students with specific learning needs….

‘As a someone who has difficulty with written information due to dyslexia, I found the videos particularly useful as I could listen and watch and practice. I wish these could be available for all modules’
Impact on Exam Results

The results for the module were high with a grade average of 71%. The OSCE grade average was 66%

The average mark for the OSCE station where videos had been made available (lower limb assessment and treatment) were 6% higher than the upper limb and cervical spine stations
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Could be that the lower quadrant is easier?
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Let’s make some more vodcasts?
Cathy Barrett: Shoulder specialist – Central Health Shoulder Academy
David Bartlett: Middlesex County Cricket Academy
Feedback from Students

Students again very positive about the vodcasts

‘Great ideas which I can take immediately back to clinic and refer to the videos’

‘Clinical reasoning shoulder video, really helped me understand how to think through complex cases’

Feedback from Clinical Educators

‘Making the videos was big project with considerable time commitment. It was good for me. I had to think hard what was needed and how to get the key messages across’

‘Brilliant Jane. Great idea. I can use the videos for staff training. I also want to get them out on Youtube’
Summary and Key Learning Points

Vodcast resources enhanced skill practice outside of tutor led sessions, promoting psychomotor skill and clinical reasoning development.

Vodcasts may offer the optimum learning experience for skills based teaching.

Enhance the learning experience for international students and students with learning needs.
References


Thank you for listening

I would love to hear your views and answer any questions

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