

The place of podcasting in Physiotherapy skills based education

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Abstract

Background, aims and methods: Video podcasts are increasingly used by a range of healthcare students. Video podcasts have great potential when used as a pedagogical tool, embedded within a curriculum and this has relevance to the teaching of physiotherapy. This article aims to consider the existing literature regarding podcasting in medical education and then contemplate the implications of the use of mobile technologies for the acquisition of clinical skills in the physiotherapy curriculum.

Results: The educational theories underpinning such interventions are also discussed, and recommendations for the use and integration of video podcasts into the physiotherapy curriculum are provided. Video podcasting has been well explored within the existing medical education literature and video podcasting could serve to further engage and enhance the experiences of student Physiotherapists when learning and mastering clinical skills.

Conclusions: The challenge in Physiotherapy education is to develop and embed innovative and engaging ways of delivering the Physiotherapy curriculum into traditional curricula, that meet the needs of this generation's busy learner, promote mobile learning and enhance the teaching of skills, at the same time as taking into consideration students' learning preferences.

Keywords: Curriculum, video podcasts and teaching physiotherapy.

Article

Introduction

Physiotherapy is an allied health profession which requires graduates to have competencies in practical, psychomotor skills in a range of clinical specialties (HCPC, 2012). Current physiotherapy university curricula are designed to equip students with the underpinning knowledge and skills in a range of clinical areas before students use clinical practice to consolidate and apply their physiotherapy skills to patients in various healthcare settings (Thomson et al. 2014).

Integration of theory and practice is central to the undergraduate curriculum and therefore the teaching of practical skills is a core component of Physiotherapy education (HCPC, 2012; CSP, 2011, 2012). The physiotherapy curriculum tends to be delivered using more traditional learning and teaching strategies such as teacher demonstration and discussion of supporting theory and clinical reasoning, learned through the use of

case studies, lectures, tutorials and practise (Snodgrass et al. 2010; Bowley & Holey, 2009). However, the emergence of new information and communications technology, coupled with expectations of the current generation of students, referred to as the “Net Generation” (Kennedy et al. 2008) bring new challenges to physiotherapy educators when developing physiotherapy curricula.

E-learning is the use of information technology and the internet for learning activities (Zehry et al. 2011). Video podcasts are an evolving educational tool and are one particular form of e-learning technology, defined as digital audio or video files made available to students via the internet, to download to mobile devices (Salmon & Edirisingha, 2008). More recently, mobile or m-learning has emerged as a subset of e-learning, supporting the acquisition of knowledge and skills through the use and access to learning via mobile technology ‘anytime and anywhere’ (Hashemi et al. 2011). This has created new opportunities to explore the ways that skills based education is delivered to students in Higher Education, more specifically those ways that engage students in a multi-media learning experience (Maag, 2006; Beetham & Sharpe, 2013).

Bowley and Holey (2009) suggest that mobile or e-learning has a place in the development of manual therapy skills (one form of physiotherapy skill practice), when embedded sensitively and selectively within a traditional curriculum and that it supports the development of novice clinicians’ psychomotor skill acquisition. Video podcasts have great potential when used as a pedagogical tool, embedded within a curriculum and this has relevance to the teaching of physiotherapy (McKinney & Page, 2009; Heilsen, 2010). When learning any technical skill, a multisensory approach is favoured, whereby the learning environment utilises a range of approaches ranging from traditional lecturer based tutorials and classroom demonstrations to video podcasts of skills and techniques which students can access at anytime, anywhere (Vogt et al. 2010; Biron et al. 2013).

Researchers in higher education report many benefits of video podcasts in enhancing learning and teaching. These include greater student engagement by motivating students via a medium with which they are familiar (Mann & Eland, 2005; Sadideen & Kneebone, 2012; Boulos et al. 2006). This serves to reinforce concepts taught in the classroom (Bloomfield et al. 2010), allowing convenient and flexible learning, whenever and wherever the student decides (Sandars, 2011; Strickland et al. 2012). Video podcasts, if integrated into a well-designed Physiotherapy curriculum, could offer a multisensory, audio-visual resource, serve to deepen levels of engagement and offer the Physiotherapy student an accessible and repeatable learning experience (Sadideen & Kneebone, 2012; Kamel Boulos et al. 2006). It has been suggested that those learning experiences utilising video resources, tutor feedback and practice could also help to improve a learner’s self-efficacy when mastering a new skill (Mann & Eland, 2005; O’Dunn-Orto et al. 2012).

Fields of healthcare education such as medicine, dentistry, nursing and physiotherapy all share the common aim of developing competent clinicians in a range of skills specific to their profession (HCPC, 2012; GMC, 2013). Skills are first learned as undergraduates in the university setting and then practised with patients on clinical placement. There are parallels in the teaching and mastery of skill acquisition within existing literature that can be applied to all fields of medical education. The use of podcasts has become more commonly adopted and researched in nursing (Lin 2013; McKinney & Page, 2009; Bloomfield et al. 2010; Clay, 2011; Kelly et al. 2009; Strickland et al. 2012; Moule et al. 2010; Vogt, 2010; Marrocco et al. 2014), medicine (Gormley et al. 2009; Sandars, 2011, Kennedy et al. 2008; Back et al. 2014; Pierce & Fox 2012; Biron et al. 2013; Matava et al. 2013) and osteopathy (Mann and Eland, 2005; Browning, 2010) and there is support for such innovations. Browning (2010) believes that there has been very little research into how practical motor skills are learnt and taught in the field of osteopathy, which shares many parallels with physiotherapy education. To date, no studies have yet explored the use of podcasting in physiotherapy education.

Therefore, this paper considers the existing literature regarding podcasting in medical education and then contemplates the implications of the use of mobile technologies for the acquisition of clinical skills in the physiotherapy curriculum. Educational theories underpinning such interventions are also discussed. Suggestions are then made regarding the implications of these studies findings, as to how physiotherapy skills could be effectively taught, to best enhance and engage student physiotherapists when learning and mastering clinical skills.

Relevant literature exploring podcasting in the field of healthcare education will now be considered. General podcasting literature will firstly be reviewed, followed by literature pertaining to audio and video podcasts.

Lastly those studies using podcasting in an embedded manner and the theory underpinning skills acquisition will be discussed.

Literature review

Gormley et al. (2009) conducted a survey to assess 269 second year medical students' perception and experiences of engaging with e-learning. Of particular interest was the part of this questionnaire concerned with the perceived value of e-learning towards clinical skills learning. Students valued the use of e-learning and rated online video as the most popular medium (37.5% agreed and 56.5% strongly agreed), providing further support for the use of video in clinical skills education. Gormley et al. (2009) discuss the importance of medical educators in providing a teaching environment that promotes deep learning. Gormley et al. (2009) also carried out further statistical tests and found that motivation to learn and engage with the learning material was crucial to success. Those students who displayed deep learning traits and a preference for e-learning for clinical skills also performed better in clinical skills examinations. Gormley et al. (2009) thereby conclude that learners want to engage with many forms of teaching but in a blended approach, and that exactly how learners engage with, and approach the many different learning environments is worthy of further exploration.

Moule et al. (2010) employed a mixed methods approach (questionnaire, focus groups and interviews) to investigate nursing and healthcare students' experiences and the use of e-learning over a 2 year period. Students reported that e-learning offered support for clinical skills, particularly when the materials were visual (e.g. pictures) and maximised interactive capabilities.

A survey was conducted by Matava et al. (2013) which explored the preferred content, formats and usage patterns of podcasts in 151 Canadian anaesthesia residents. Respondents demonstrated a strong preference for video podcasts that contained procedural skills, mirroring the findings of Marrocco et al. (2014) and adding support for the use of podcasts in skills acquisition.

O'Dunn-Orto et al. (2012) conducted a systematic review to identify those interventions that were effective in teaching musculoskeletal skills to medical trainees and physicians in Canada. A total of 24 studies were critically reviewed, with 18 focussed on undergraduate medical education. The authors found many advantages of non-traditional teaching methods, especially computer assisted learning (CAL) and small group interactive learning. They reiterated that deliberate practice with feedback was essential in promoting mastery in clinical skill acquisition (O'Dunn-Orto et al. 2012).

Audio podcasts

Strickland et al. (2012) explored the use of audio podcasts, used in a supplementary way to enhance undergraduate student nurses' understanding of research. A questionnaire based survey was conducted to explore the use of these podcasts. However, a low response rate of 15% was achieved. The authors acknowledge this as a limitation; however nonetheless conclude that podcasts were greatly beneficial in developing students understanding of the topic area. They concluded that, when podcasts have been used as a pedagogical tool, they have had more benefit, than merely being used as a catch-up opportunity. Strickland et al (2012) recommend that future research explores how best to maintain a sense of tutor personal interaction, the use of such tools in revision and the need to cater to other learning preferences.

Marrocco et al. (2014) developed and introduced podcasts into a graduate nursing curriculum and evaluated the students' experiences. It was found that the podcasts were positively received. Interestingly, one example of successful podcasting related to the "talking through" of a clinical examination, prior to clinical experience. However, it must be acknowledged that these podcasts were solely audio-based. Given the emphasis placed upon stimulating two complementary multisensory modes of delivery, i.e. visual and auditory, it would be beneficial to explore video podcasts when developing clinical skills (Mayer, 2009).

Vogt et al. (2010) compared the examination scores achieved between nursing students who were presented with content either via traditional lecture format or audio podcasts. No significant differences in examination scores were found between the two groups of students. However students reported being satisfied with audio podcasts and the portability and flexibility of audio podcasts as learning and teaching resource. The authors concluded that further research needs to explore the effect of podcasts on learning and student satisfaction. Moreover, Vogt et al. (2010) and White et al. (2011) acknowledge that such podcasts may benefit auditory learners especially. This raises the question of whether multisensory, video podcasts should be favoured, which utilise both audio and visual approaches to teaching a skill (Biron et al. 2013).

Video podcasts

McKinney and Page (2009) evaluated the use of lecture podcasts within an undergraduate nursing pathophysiology module. Two traditionally taught lectures were replaced by podcasts and the students could either listen to this as audio resources, or view hand-out slides alongside the podcast to visualise the images simultaneously. All other lectures and tutorials were delivered in the traditional format. A questionnaire was used to gather 125 students' views. The majority of respondents believed that such multimedia resources assisted their understanding of the topic of pathophysiology, from a knowledge-based perspective. However the lack of face to face contact, feedback and opportunity for tutor clarification was highlighted. The authors concluded that such resources would be more advantageous when effectively integrated into the curriculum and involved with structured dialogues between lecturer and peers. The findings of McKinney and Page (2009) lend support for a blended learning approach that marries traditional teaching methods and tutor contact with emerging technological innovations.

Bloomfield et al. (2010) developed and evaluated an interactive computer-based resource. This was designed to enhance the revision of clinical skills in 242 nursing students, prior to summative practical assessments, borne out of a need to create a less resource-intensive formative method of clinical skills assessment. The authors propose that digital multimedia such as computerised images and visual graphics (no video podcasts per se, but still worth commenting upon) offer real scope for clinical skills teaching, revision and assessment specifically related to safe, structured practice, reinforcement of concepts and procedures and the replication of realistic situations. Bloomfield et al. (2010) sought student feedback and found the resource was beneficial as a formative revision tool and as a reminder for theoretical knowledge. However students indicated that more personal interaction and face-to-face skills were preferred. The authors indeed acknowledge that when dealing with clinical performance, constructive feedback is crucial to allow learners to integrate knowledge and skills and gain competence and confidence. This supports the notion of a more blended approach to support clinical skills teaching, that combines face to face with more digitally based resources. The authors conclude that, whilst the most effective way of teaching clinical skills has yet to be determined, strategies should be designed to appeal to a variety of learning preferences (Coffield et al. 2004). The paper by Bloomfield et al. (2011) has relevance to the teaching and learning of clinical skills. However it must be noted that the study didn't use actual podcasts. Further research should investigate the student's views of the impact of various educational strategies in relation to clinical skills education and performance.

Shantikumar (2009) similarly investigated fifth year medical students' perceptions of a series of enhanced podcasts used for revision. The enhanced podcasts meant that students viewed a graphic PowerPoint slideshow which used voice over narrative. A total of 211 students completed an evaluation questionnaire and 96 of these students reported having watched the podcasts. Feedback overall was positive and students found these resources very useful, particularly when revising. Students reported finding them to be well explained and easier to understand than reading a textbook. Shantikumar (2009) concludes that the enhanced audio-visual podcasts were welcomed by students and support the use of enhanced podcasts with the visual component added to a traditional audio-only podcast. Whilst this study lends support for the use of enhanced podcasts in a general surgery module, it may be best to investigate the use of video podcasts, as opposed to a visual, slideshow format.

Clay (2011) carried out a small scale survey with eight midwifery students and evaluated the use of mobile learning to support skill acquisition when learning how to carry out a newborn examination. Students were provided with i-pods, loaded with videos outlining each aspect of the physical examination of a new-born infant. The expectation was that the mobile device would be used within clinical practice and students could view the videos at a time convenient to them. The aim was to use the device synchronously when performing an examination. Students positively evaluated the authenticity of the videos when accomplishing skills. The majority of students felt that the use of mobile learning was conducive to their individual learning styles. Clay's (2011) study supports the flexible use of mobile and visual /auditory cues in the development of clinical skills in practice. These results are encouraging, however it was a small scale survey and it was difficult to ascertain whether these videos served as a prompt or promoted active learning. Although the mobile devices and videos were used in clinical practice, further research is needed to fully explore the pedagogical benefits of embedding mobile learning into the curriculum to support skill acquisition.

Kelly et al. (2009) conducted an evaluation of 134 student nurses' attitudes to learning clinical skills through the use of video. The authors developed a set of instructional videos which were available online to students. The students' views were positive in terms of flexibility and self-management aspects of using this approach. Students also felt that the videos were useful in preparing for taught sessions. However, the students were dissatisfied at being unable to ask questions, thereby endorsing the presence of an "expert" when learning a clinical skill. It was concluded that such innovations are best used to complement rather than replace lecture based demonstration when learning a skill. The findings of this study serve to support a blended learning approach to the delivery of skills based teaching.

Lin (2013) conducted a pre-test-post-test experimental study to compare the effect of technology-based cooperative learning to technology-based individual learning with 98 nursing students when acquiring the nursing skill of catheterisation. Six videos were made available to all students, designed to cover procedures and commonly made mistakes. All students were encouraged to view and download these videos. In addition, the students in the cooperative learning group were encouraged to work as a team to fulfil their learning goals. Whilst the different approaches showed no significant differences in their performance of the skill, the cooperative learning group demonstrated greater gains in critical thinking. Lin (2013) concluded that technology enhanced cooperative learning helped nursing students to discuss and understand the theory prior to applying the notion to practice the skill. These findings support the use of video podcasts and cooperative learning when learning a new skill.

Podcasts used in a blended / embedded way

Back et al. (2014) developed additional e-learning resources for 5th year medical students and evaluated students' performance and experiences of this blended learning approach. Resources included videos of clinical skills examinations and common pathologies. This pilot study revealed a positive student attitude towards this e-learning approach, for introducing theoretical concepts and practical skills. Face-to-face sessions were still viewed as the preferred format for practicing practical skills and gaining feedback. Back et al. (2014) concluded that blended learning does support the development of theoretical knowledge. However, future research should explore which blended learning scenarios may best support a students' learning of practical skills.

Pierce and Fox (2012) implemented a flipped classroom model whereby pharmacology students viewed video podcasts of lectures prior to scheduled classes. They then developed a process oriented guided inquiry learning (POGIL) where prior engagement with technology (video podcasts of lectures) fed into a structured interactive and case-based taught session. Students' final examination scores improved compared to the previous years and also students' opinions were mainly positive in improving self-efficacy, repeated exposure to materials and also the interactive class activities. The video podcasts in this study were designed to replace existing lectures and were very positively evaluated. The findings of this study support a flipped classroom model and suggest a particular value in the context of applied learning. They also support the notion of using a flipped classroom model as an approach to student-centred, active learning and believe that future studies

could explore the impact of such a teaching model and the perceived benefits to the students' learning experience.

In this study, Pierce and Fox (2012) developed a structured multisensory curriculum designed to develop knowledge, clinical judgement, technical skill and confidence. Students were instructed to firstly view a video podcast or prior to taught sessions, secondly observe an expert demonstration and thirdly practice the skill amongst their peers on cadavers with feedback from tutors. The authors examined a random selection of students' practical assessment scores and assessed students' confidence levels pre and post this learning experience. They found that all students were competent at carrying out this skill and that the student's confidence improved following this learning experience. Students displayed a preference for this style of learning, in keeping with Mayer's multimedia learning theory (Mayer, 2009). Pierce and Fox (2012) believe that this multisensory teaching model is easily applicable to most medical school curricula. It could also be argued that such a model could be adopted and explored in other health professions, including physiotherapy, whereby students' are also learning skills, prior to clinical placements.

Biron et al. (2013) evaluated the efficacy of an innovative, multisensory approach to teaching a technical skill to medical students. A blended model of teaching clinical skills encompassed video podcasts, expert demonstrations and practice of a demonstrated skill. One hundred and twenty, fourth year medical students were recruited in order to evaluate the efficacy of a multisensory teaching approach in skill acquisition. This approach was designed to develop the necessary knowledge, technical skills and confidence to perform a common medical procedure. The students viewed a video podcast of a clinical skill, then observed an expert demonstration and subsequently practised the skill, under the supervision and guidance of an expert. A significant improvement in the students' confidence levels was achieved following this blended approach to skills teaching. Moreover, all students were able to technically undertake the skill and the majority of students demonstrated a high level of knowledge retention. The authors concluded that a multisensory teaching intervention, utilising auditory, visual and kinaesthetic experiences, improves knowledge, skill and confidence. This structured blended learning approach, when video is embedded into a curriculum, offers real support to its use when teaching clinical skills and is in keeping with Bloom's taxonomy. It enabled students to obtain knowledge, comprehension, application and synthesis of cognitive processing when learning a clinical skill. It could be argued that such a multisensory approach has implications for other healthcare educators, such as in Physiotherapy education, whereby clinical skills are being taught.

Mann and Eland (2005) assessed the changes in self-efficacy scores in 83 osteopathy students when learning a therapeutic psychomotor skill. A blended learning approach was utilised which encompassed instructor demonstration of the skill, paired student practice, independent practice using hand-out and video resources and performance feedback from a tutor. The authors found that traditional training methods such as demonstration and paired practice produced low self-efficacy scores in isolation. The use of additional mastery learning techniques e.g.: hand-outs and video demonstration, followed by individualised expert feedback and correction produced significant gains in self-efficacy. The findings of this study support the use of a multisensory blended learning approach, and the use of instructional videos when mastering a clinical skill. This has implications regarding how physiotherapy skills are best taught to undergraduate physiotherapy students.

Skill acquisition

Mastering the practical, psychomotor skills needed in the different areas of physiotherapy requires deliberate, repeated practice, coaching, feedback and self-efficacy to perform a skill (Ericsson, 2014; Mann & Eland, 2005; Sadideen & Kneebone, 2012). Video podcasts need to be rooted within a curriculum that supports problem solving, decision making and clinical reasoning.

Teaching the technical skills needed to become a competent physiotherapist requires four essential components. These are: the specific procedural knowledge (e.g. the different components of a shoulder assessment and the underpinning theory in terms of anatomy and pathophysiology); clinical judgement or

reasoning; the technical ability to carry out a skill or procedure; and self-efficacy to carry out the skill (Biron et al. 2013).

The teaching of practical skills can be modelled on recognised educational theory. The acquisition and execution of a practical, psychomotor skill can be explained by Fitts and Posners' (1967) three phase theory of motor skill acquisition. This is composed of 3 phases: a cognitive phase (whereby a skill is learnt), an associative/integrative phase (where the learner becomes skilled in their performance) and an autonomous phase (where a skill becomes automatic without much thought). In the first phase, a learner would intellectualise the skill and understand the mechanics of a skill. Sadideen and Kneebone (2012) believe that with continuous practice and relevant feedback the learner reaches the associative phase, whereby the knowledge is translated into motor behaviour. Therefore, such an innovative curriculum that blends traditional teaching (demonstration, practice and expert feedback) with the use of technology in a meaningful and structured way has greater potential to allow a learner to move from the cognitive to the associative phase of skill acquisition (Sadideen & Kneebone, 2012; Bowley & Holey, 2010). The undergraduate physiotherapy student also represents the novice level of skill acquisition, as outlined by the Dreyfus model of skill acquisition (Benner, 2004; Krackov & Pohl, 2011). Expert performance represents the highest level of skill acquisition and is acquired through extended experience, often spanning years post qualification (Benner, 2004; Sadideen & Kneebone, 2012). Krackov and Pohl (2011) believe that curriculum planners should provide sufficient feedback opportunities so that a learner can progress up the scale of skill acquisition. A blended approach could therefore achieve this sufficient of feedback more effectively.

In his commentary, Browning (2010) applies Fitts and Posner's (1967) theory of learning to the learning of osteopathic technique. He draws similarities between this and Vygotsky's theory whereby the learning starts with interaction and tutor demonstration, which leads to student practice. Internalisation next occurs where a skill having being learnt becomes automatic. It then takes experience and further refinement and practice to progress to the final stage, referred to as "confusion." This is where the learner is almost consciously incompetent, until expertise is achieved (Browning 2010). The importance of practice and feedback when learning a skill is reiterated, mirroring the work of Benner (2004) and Sadideen and Kneebone (2012).

Many factors have been identified as being crucial for the mastery of a new skill: expert feedback, interaction, repeated practice, and motivation (Zhang et al. 2005; Sadideen & Kneebone, 2012; Browning, 2010). Constructivist theory highlights the importance of learner- facilitator interaction and of the learner constructing new knowledge based upon their experiences (Zhang et al. 2005). Jones and Sheppard (2008) describe physiotherapy education as experiential, student centred and one that adopts a problem based learning approach in order to develop active, life-long learners.

It could be argued that Physiotherapy undergraduate education links with both instructivist and constructivist theories in its underlying pedagogical approach. An initial mimicry or improvisation of a newly learned skill may represent an instructivist level of learning (Schon, 1987). This is developed further with practice, understanding and refinement using a constructivist approach (Schon, 1987). Constructivists place emphasis on engaging students in the process of learning and call for richer learning environments that contrast with more typical non-interactive environments (Zhang et al. 2005). Therefore, a blended use of video podcasts, embedded in a curriculum that supports a constructivist approach, may serve to engage and motivate the Physiotherapy student to become more actively involved in their learning. Ng'ambi and Lombe (2011) believe that using podcasts within a constructivist paradigm cognitively scaffolds learning and facilitates scholarly knowledge construction as students are given extra opportunities to engage with content, at a pace that they can control.

Mayer's multimedia learning theory asserts that people learn more deeply from words and pictures than from words alone (Mayer, 2009). This multimedia principle underpins the use of video podcasting and provides further educational support. Video is a powerful and expressive non-textual way of capturing and presenting information, providing a multi-sensory learning environment (Mayer, 2009; Zhang et al. 2005; Biron et al. 2013).

Implications for Physiotherapy

It can be concluded that the use of video podcasting supports the acquisition of clinical skills when embedded within a structured curriculum that supports active, case based learning (Mann & Eland, 2005; Biron et al. 2013; Pierce and Fox, 2012). It is recommended that Physiotherapy educators develop video podcasts that provide flexible learning opportunities and supplement the development of psychomotor skills, in novice physiotherapy students. Physiotherapy educators are urged to provide multisensory resources, such as video podcasts that are accessible anywhere and anytime, through mobile devices meeting the needs of the “Net Generation” of learners (Zehry et al. 2011). Furthermore, there is a need to evaluate such resources when they are embedded within a curriculum and are designed as a pedagogical tool for learning and to report such findings with other healthcare educators (Heilsen, 2010).

The teaching of clinical skills has been explored in the health disciplines of nursing, medicine, dentistry and osteopathy and the literature supports the use of video podcasts to engage, support and develop undergraduate healthcare students. Given the emphasis in higher education on technology enhanced learning, the use of video podcasts and the underpinning pedagogy for clinical skills education is an area that is under researched, especially in the context of physiotherapy education. What is of particular importance is the need to explore how exactly such technologies help students to develop their clinical competencies.

It is also clear from the literature that, despite the students increasing levels of engagement with technology in the rapidly developing digital era, students do continue to value traditional methods such as lectures or tutorials, as a way of covering key underpinning concepts and learning new skills. In terms of skill acquisition, expert demonstrations and tutor feedback are valued methods of teaching. Video podcasts should be used to supplement and enhance existing teaching methods instead of replacing them (Heilsen, 2010).

Conclusion

Whilst mobile technologies place learning firmly in the hands of the learner (Clay, 2011), the challenge for Physiotherapy educators is to ensure the effective educational use of video podcasts when embedded within a curricular to best support the acquisition of skills. There is a need to utilise the existing body of evidence on podcasting in healthcare education and develop the use of podcasting in the physiotherapy curriculum. Exactly how video podcasts are blended into the curriculum and are structured needs careful pedagogical consideration and further research should explore the best combination of teaching strategies when teaching practical skills (Sandars, 2012). The challenge in Physiotherapy education is to develop innovative and engaging ways of delivering the Physiotherapy curriculum that meet the needs of current learners, promotes ‘m-learning’ and enhances the teaching of skills, at the same time as taking into consideration the pedagogical benefits for all learners of mixed modes of teaching.

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