SUPPORTING COLLABORATIVE PRACTICE IN PHYSIOTHERAPY EDUCATION – THE ‘WIKI EXPERIENCE’

Dr Caitriona Cunningham  B. Physio, MSc, PhD
MMACP, MISCP
School of Public Health, Physiotherapy & Population Science, University College Dublin, Ireland
A Wiki is a web communication and collaboration tool that can be used to engage students in learning with others within a collaborative environment and involves learners in their own construction of knowledge.


Free cross platform editing and redistribution of original content.
Pedagogy

- A sound pedagogy must underlie all curricular design choices (Rowe, 2012)

- Collaborative learning approach enhances learning through increasing student engagement with subject matter (Schaffert et al, 2006)

- Educational environments need to model environments in which students can learn to be collaborative and creative (Bruns and Humphreys, 2005)

- There is evidence that user-created content software encourages deeper engagement with learning through the act of authoring because an awareness of an audience encourages more thoughtful construction of writing (Jacobs, 2003)

- Wikis are therefore generally regarded as supporting the collaborative and social constructivist learning paradigms (Parker and Chao, 2007; Bruns & Humphreys, 2005)
Roles of OMT Therapist – Competencies

• The OMT Physical Therapist as an expert / clinical decision maker / clinician

• The OMT Physical Therapist as a **communicator**

• The OMT Physical Therapist as a **collaborator**

• The OMT Physical Therapist as a manager… **teamwork**

• The OMT Physical Therapist as a health advocate

• The OMT Physical Therapist as a **scholar** – retrieve, integrate, present/apply knowledge

• The OMT Physical Therapist as a professional
Wiki Group Assignment (5 students)

- To produce a Wiki regarding exercise for a specific clinical population (e.g. bone health) which will act as an evidence based resource for peers/physiotherapy practitioners

- 12 week semester

- Replaced an individual written assignment

- Blackboard v. 9.1 – UCD’s virtual learning environment
BONE HEALTH

AND

FALLS PREVENTION:

ADAM Loïs, AHERN Dónal, CROSBIÉ Sarah and HALEWYCK Sarah
Positive Learning Experience?

- Overall high level of student engagement
- Students produced excellent learning materials
- More novel material - eg homemade videos, web link to evidence based guidelines, YouTube
- Learned re collaboration even if some have preference for individual work and grade

- Valued learning resource they had produced .... ‘proud’ of it

- Learning outcomes met
Pilot Study

- To explore the student experience with wikis
- UCD Human Research Ethics Committee
- 57 Stage 3 students
Methods

Online Journal Individual Assignment

• To document reflections on Wiki learning experience in an Online Journal over course of semester

• Minimum number of entries

• Initial prompts given for journal
Data Collection

- Random sample (n=10) of Online Journals

- All students made six to seven journal postings and produced approximately 1400 words of journal data each
## Results

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ experience of using a novel educational platform</td>
<td>- Initial apprehension</td>
</tr>
<tr>
<td></td>
<td>- Issues with Wiki software</td>
</tr>
<tr>
<td></td>
<td>- Reluctance to edit Wiki</td>
</tr>
<tr>
<td></td>
<td>- Focus on ‘perfect’ end product rather than process</td>
</tr>
<tr>
<td></td>
<td>- Need to meet outside Wiki</td>
</tr>
</tbody>
</table>
Initial apprehension

‘had no idea what a "wiki" was never mind how to go about making my own wiki. To make matters worse the thoughts of group work made me feel ill’ (110)
‘I don’t feel comfortable with changing someone else’s work because I don’t think that I know the subject any better than them so why should I change their entry’(104)
Focus on ‘perfect’ end product

‘Personally I am the kind of person who likes to have their work perfect before showing it to anyone….None of us would like to produce ‘bad work’ and as a result huge amounts of work go up in the very last week’(107)
Meet outside Wiki

‘We all felt that it is much easier to get our point across face to face and to discuss any problems anyone may be having’ (104)

‘It can be hard to give constructive criticism to classmates face to face and over internet seems worse’(108)
Frustration with Blackboard Wiki Software

‘If Wiki were to be used again, some of the software glitches would need to be fixed or an alternative software found’ (108)
<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork and Collaboration</td>
<td>■ Communication important-need to learn skills</td>
</tr>
<tr>
<td></td>
<td>■ Preference for individual work</td>
</tr>
<tr>
<td></td>
<td>■ Need for leadership</td>
</tr>
</tbody>
</table>
Learning Collaborative Group Skills

‘I feel it has granted me a deeper insight into skills such as working within a group dynamic, communication and interpersonal skills. Such skills are absolutely critical in the development of a physiotherapist particularly within the multi-disciplinary team’
Preference for Individual Assignments

‘I think individual work is a far more effective way of assessment. It is up to the individual how much work they want to do and also when they want to do it’
Need for Leadership

‘The biggest issue in our group was the reluctance of anyone to take the lead and therefore there was a lack of direction’ (106)
## Results

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Opportunities</td>
<td>▪ Learning resource</td>
</tr>
<tr>
<td></td>
<td>▪ Learn from different approaches</td>
</tr>
</tbody>
</table>
'The combination of text, pictures and video help to serve as an effective means of illustration. Overall each wiki page is very informative and hopefully will act as a useful learning tool for me when on future physiotherapy placements'
Learning Resource

‘I thought the wiki was quite a brilliant learning experience. Once you got used to it, it was quite easy to use. What I love most about it is it can be constantly updated (105)
Learn from others

‘I think a group dynamic is a massive benefit in this regard as each person brings unique thoughts to the brainstorming stage’ (107)

‘I feel your mind opens up when you’re talking to other people about topics’ (108)
Collaboration

Collaborative Creativity

Learning in a Community of Practice (Parker & Chow, 2007)

Content for ‘an audience’ rather than examiner only
Issues Identified

• Lack of familiarity with social media as learning tool

• Reluctance to edit online

• Working towards end product-need to value process

• More prompts for journal- eg. encourage reflection on usefulness of tool as graduate/did you find anything interesting this week?

• Need to consider group work versus group grade

• Preference for individual assignment-students who excel in traditional may not like change
Teaching Developments

• Orientation Session
  - Show an exemplar
  - Demonstrate navigation of wiki - comfort level of students will influence success
  - Remember even ‘net generation’ need strong orientation

- Wiki etiquette… evolving, use discussion tool, comfortable posting drafts

- Greater online presence of academic coordinator plus technical expertise
Teaching Developments

Moved to Wikispaces

- Created groups in blackboard-random allocation as before

- Student sets up wiki in wikispaces and invited rest of group to be members via e mail plus module coordinator

- Value process as well as product-learn to share ideas. Less about ‘perfect end product’
Wikispaces

Make this the class they remember forever

Wikispaces makes managing your class a breeze, with tools to handle day-to-day work and features to tackle the special activities you’ve only dreamed of.

Get a free, private, secure space for your class today.

Start your wiki

Join 6,955,248 students and teachers

What is a "wiki"?

A wiki is a space on the Web where you can share work and ideas, pictures and links, videos and media — and anything else you can think of. Wikispaces is special because we give you a visual editor and a bunch of other tools to make sharing all kinds of things easy.
Developments

Peer assessment
- Valid assessment as Wiki produced for peers
- Developed assessment rubric with students
- Clear criteria - helps students internalise what’s expected of them & allows students to reward effort and other non-content specific criteria - allay some of the workload anxiety issues
Framework for the integration of a social collaborative environment in Health Professional Programmes
IFOMPT?

• Graduate education-creation of local or international online communities among motivated group of professionals

• More novel material, links to websites, peer reviewed papers

• Create own digital resources .. eg. Video of manual techniques, clinical reasoning in action

• Evolving resource- Incorporate latest evidence
Conclusion

• Wikis represent a valuable learning tool which can be used to facilitate collaboration and creation of media rich open learning resources

• A framework for integration of wikis/ other web 2.0 technologies into curriculum has been developed
• Dr Grainne O Donoghue, Dublin City University & Teaching Colleague University College Dublin

• Dr David Jennings, Centre for Teaching and Learning, University College Dublin
References & Related Resources


Lokhoff J, Wegewijs B, Durkin K, Wagenaar, R, González J, Isaacs AK,


• University of Delaware. Wikis in Higher Education.
  An exploratory report about the value of wikis in higher education, from a faculty perspective.
  Retrieved from www.udel.edu/mathieu


