

## **ACETS Exemplar 05**

# **Pain and its Management**

Professor Danny McQueen

University of Edinburgh

## ACETS Exemplar 05: Baseline Survey

Teacher/academic's name: Prof Daniel McQueen  
 Teacher/academic's position: Professor of Sensory Pharmacology  
 Teacher/academic's institution: University of Edinburgh  
 Range of subjects taught: biomedical sciences  
 Contact information: 0131 650 3525  
 Principal interest: communication skills  
 ACETS Officer: Rachel Ellaway  
 Date of survey: 11 August 2004

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| Do you know how to make web pages?   | not at all      |
| Have you used the web in your teaching?  | a little        |
| Do you use anything that you would consider a "learning object" in your teaching?                  | a little        |
| How would you rate your own computing skills against those of your colleagues?                     | good            |
| How would you rate your own teaching skills against those of your colleagues?                      | expert          |
| How would you rate your own use of CAL against those of your colleagues?                           | good            |
| How much relevant staff development and training is available?                                     | a little        |
| How much relevant staff development have you actually made use of?                                 | a little        |
| Do you have access to support in making electronic learning materials?                             | a lot           |
| Is this available as a free service?   | completely      |
| Have you made use of this support service before?  | a lot           |
| Would you expect that you would need to use this service to use learning objects in your teaching? | a lot           |
| Do you have a VLE (or equivalent) available to support your work?                                  | Yes             |
| What is the system called (eg WebCT, or equivalent local system name)?                             | EEMeC and WebCT |
| Does it allow you to put teaching/learning materials online for your students                      | a lot           |
| If so, do you do this or is it done centrally for you?   | done for me     |
| How easy is it for you to get teaching materials online?   | quite easy      |
| Do you have your own computer at work  | Yes             |
| Do you use a computer at home for work   | Yes             |
| What level of computer access do you think your students have in the institution and at home       | very good       |
| how much of this is internet-enabled   | A lot           |
| How much teaching and learning materials are provided online for the students                      | A lot           |
| To what degree do you expect the use of learning objects to enhance your teaching                  | A lot           |
| To what degree do you expect the use of learning objects to enhance your students learning         | A lot           |
| To what degree do you expect the use of learning objects to make your work easier                  | A lot           |

**Notes:** I regard this as an investment for the future rather than an immediate benefit for me personally. Also need to cope with larger numbers, particularly in areas of assessment (self/formative and summative). I find problems of students accessing materials on the LAN so moving to the web as an equivalent of a reading room.

**ACETS Exemplar 05: Interview**

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| <i>Exemplifier</i>   | Professor Daniel McQueen  |
| <i>Exemplar description</i>  | <p>A website for a new BSc Honours degree course on Pain and its Management. Ours was a rather broad course moving out of standard basic biomedical sciences into broader realms including management, palliative care, ethics, the psychology of pain and how pain is represented in art and literature. The website was the focus of all the teaching on the course and it was for both staff and student. It consisted of a mixture of materials provided by individual lecturers and a selection of third party RLOs.</p> <p>The third party materials mostly came from the Wellcome Trust who had created and collected a body of materials around an exhibition on Pain at the Science Museum in London. This material comprised of videos and essays written by a variety of academics from around the world. Other third party materials included online books and a selection of other relevant websites. There were also links to commercial CAL programmes.</p> <p>The whole vehicle was run within EEMeC [the VMLE for undergraduate medicine in Edinburgh].</p>  |
| <i>Interviewer</i>   | Rachel Ellaway. Note that the interviewer was also the learning technology support contact for Professor McQueen and therefore provided assistance and support for delivering his exemplar.   |
| <i>Date and location of interview</i>  | 16 December 2004, MVMLTS Edinburgh  |
| <i>Context of use</i>  | A one semester non-mandatory BSc Honours course on Pain at the University of Edinburgh. Honours students are mostly a mix of final (4 <sup>th</sup> ) year science students and 3 <sup>rd</sup> year intercalating medical students (a third of Edinburgh medical students take an additional one year BSc Honours degree between their second and third years of their medical studies). This was a pilot year and therefore only had 24 student participants. Some were medics, others from various biological sciences degree programs and others still from humanities subjects such as business studies.   |
| <i>How did you go about putting the exemplar together? Was it hard to design and/or conceptualise your exemplar?</i> | Because the new course was so broad, linking basic sciences and clinical sciences and introducing issues such as ethics and bringing together expertise from within the medical school and beyond, the problem was how to focus it all together. The decision was to use a website. Because students came from a spread of degree programs, the need for a base that was independent of their various originating contexts was particularly important. The students found it very useful and those staff that decided to use it also appreciated its value and found it very useful.  |
| <i>How did you approach this work? How quickly were you able to come up with the activity design?</i>                | <p>The ideas came from discussing pain management with various clinical colleagues and realising that textbooks probably aren't the best way forward and reading journals is very time consuming for a student on a compressed course. We wanted ways where we could get them to the information quickly - something more sophisticated than just telling them to go and Google. The idea was to steer them in to particular websites and make them a core but without stifling their initiative. An electronic source seemed the best solution to all our needs. Having seen what was possible within EEMeC, it was important to develop an efficient tool, rather than something that was airy-fairy. To be honest though I wasn't sure how it would turn out.</p> <p>The broad idea of what would be included only took me a day or so to come up with, particularly once I realised that the Wellcome Trust had already done much of the work for me by preparing material on a CD - ranging from art to video clips interviewing clinicians on chronic pain and their patients. Some of those patients were talking about aspects of pain we don't usually engage with such as emotional pain following bereavement, or the break-up of a relationship, as opposed to the pain of a severed limb, migraine or cancer. There were also 20 to 30 essays available on the Wellcome Trust's web site, which we were able to use by giving a brief account and then directing students to read them online.</p> |
| <i>Was the kind of</i>   | It seemed a bit novel to them initially because they weren't used to going to secondary   |

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| <p><i>activity something the students were familiar with?</i></p>  | <p>sources in such an organised way. Previously it seemed that it had been rather ad hoc going to the odd reference they had been given by lecturers, or they were given dozens of references and didn't know where to start. They liked the idea that there being set of on a trail and as they went along they might go off and find other things that were relevant. They liked the security of knowing that there was an identified and clearly established trail of "core" information that they would be expected to know beyond which they could explore on their own. The staff liked it because they could go in and see what their colleagues were talking about, particularly in their seminars.</p> <p>The concept that threw most of the students was basing the philosophy of the course upon a C19 Tolstoy novel "The Death of Ivan Ilyich" which deals with how pain was managed in the case of a lawyer who develops an illness; sadly things haven't changed very much –or have they? The class was required to read the novel, and form their own opinions – in relation to the seminar programme which included a variety of topics from experts in specialized areas relating to pain and its management. Students initially baulked at reading "literature", but the feedback subsequently was that they hugely enjoyed it, partly because the general preconception that medicine has got nothing to do with literature, nor anything to learn from it, was clearly wrong. Most had no personal experience of chronic pain, and Tolstoy's description of Ivan's experiences was powerfully impressive. We were opening up new dimensions.</p> |
| <p><i>How did you find/identify your third-party materials?</i></p>  | <p>I came across the Wellcome materials through one of my colleagues who was a contributor (I had been asked to contribute originally but was too busy to get involved) and who had mentioned these materials were there. The Wellcome Trust has quite a good educational website and there was reference made to the Pain Exhibition. I never got to the exhibition but I looked through the materials online. The other resource I had identified was the Tolstoy novel – I bought some copies for the library (had to ferret around to find them via Blackwell's help – eventually got 10 copies from USA, which I donated to the Library – which had no funds (£30) to buy them. Then discovered via Rachel Ellaway that the novel was available on line! (though cost of printing off from web version would have been about same as I paid for the book). So library copies plus access via our web site to on-line version meant all class of 24 could read this short novel.</p>   |
| <p><i>Did you use ACETS listed links and sources? Did you look at/use JISC sources or commercial sources?</i></p>                                      | <p>I started using the ACETS site but I got a bit discouraged because several of the links citing what appeared to be useful material were inactive when I clicked on them: I didn't get anywhere with 'page not available' or 'access denied' coming up regularly. Presumably the URLs had changed. Some of them I did find quite helpful by reading some of the others' comments, particularly early on it helped me avoid making the same mistakes they had made. I was maybe coming at it from a slightly more sophisticated angle reading some of their comments as I had done quite a lot of work over the years with putting things online. Overall it didn't really leap out at me and so I didn't use anything from there. Maybe I should have done but I didn't.</p> <p>Some additional materials did come in but to be honest it could have ended up as too much so I decided to keep it fairly constrained in terms of what was presented otherwise I would have had page after page of things to do.</p> <p>But I got some ideas from looking at the web and indeed the Wellcome materials linked on to other materials. The Wellcome Trust has a large education department and they had researched this pretty well so I wasn't too surprised that they had the bulk of what I deemed to be a desirable course already on their disc [the exhibition CD-ROM + the Wellcome Trust Pain site], which made things a lot easier.<br/> <a href="http://www.wellcome.ac.uk/en/pain/microsite/index.html">http://www.wellcome.ac.uk/en/pain/microsite/index.html</a></p>   |
| <p><i>Did you have to get clearance/permission to use the third party materials? How did you go about getting clearance and with what success?</i></p> | <p>The main material being used was from the Wellcome CD and getting permission to use it turned into a bit of a saga because I passed around the Wellcome organisation between different people who because my request for permission to use the material was made during the summer holidays when people were away, nobody seemed quite sure what to do. It seemed quite novel to them that anyone was asking permission, as they are an educational trust, so almost by definition assumed that people could make use of their materials. In the light of local regulations relating to use of copyright material on "our" web sites, I wasn't happy proceeding unless I had the Trust's permission in writing, and getting that took a good six months. I had to ask you [RE] for help at one point and I don't think you got any more response than I did! Eventually however by persistence I tracked down the right people (complicated because the WT</p>  |

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|  | <p>was linked with the Science Museum for the exhibition, and material had come from various individuals and sources. I almost wish I hadn't bothered and had just gone out and used the CD without the formal permission and just put an acknowledgement on the site (which we did anyway, after getting permission to use most, but not all, of the material).</p> <p>I feel that obtaining permission to use copyright material is an area that needs to be more tuned and sorted so that academics can get fast track permission to use learning material that's already out there, or alternatively there should be global declarations in websites that you can contact for a designated person for permission.</p>  |
| <p><i>Was the exemplar easy to put together? What tools did you use?</i></p>                                     | <p>Yes it was, because of your [RE] help. Had I been trying to do it on my own the business of learning how to edit things within EEMeC [laughs] ... I have the ability to go in make simple changes but editing HTML is not my thing, working out whether a &lt;p&gt; goes here or there ...</p> <p>My main decision was whether to put in WebCT or EEMeC. As long as a system such as you're offering is available then I'm happy to get on with the other things I do such as research. I don't really want to turn in to a programmer, but at the same time I think there were things that would have been useful if I had been able just to go in and do it. I didn't know how to add a new learning object or CAL for instance.</p> <p>Your service was splendid and I didn't have any problems, the only thing that came back from the students was that lecturers weren't putting up their lecture notes speedily (i.e. within a few days of the seminar). One member of staff regarded the notes/PowerPoint presentation as their own property – not to be made available to anyone - while for others it was just tardiness. I had asked them all to send copy in for placing on the course web site within EEMeC, and unfortunately it became a bit of a pain (no pun!). In future we need to make it clear to staff that it's not a big deal to send their materials as email attachments and we'll guarantee that it won't be put up before their lecture as this was something a number of them worried about. Either I or the course Secretary could learn how to upload material to the web site, saving EEMeC staff time.</p> |
| <p><i>Did it give pedagogical benefit</i></p>  | <p>Having a range of up to date materials that the coordinator and the teachers could go and visit themselves seemed to be very novel in comparison with what I had been doing before. Having everything in the one site with a brief overview of the objectives, the course handbook, and so on meant that for the eight different academics involved everyone could work together and easily integrate what we were all doing. From the students' perspective I think the idea of being able to immediately draw down the documents and resources they need was important. They could just go and read an essay or view a video without having to go through elaborate steps to get hold of these materials wherever they might be. We weren't stopping them reading books in libraries - we were just saying that here is an electronically-based core of the course for your benefit.</p> <p>It represented an attempt to make self-directed learning a lot more positive for them. The frightening thing for an honours (final year) student trying to get a good degree in what is a very tight timescale is that there is a large amount of literature to read. This course gave them something that was tailored and laid out for them as a multifaceted core, which they could expand according to their own interests.</p>   |
| <p><i>Have you evaluated it? What was the form of the evaluation? What was the result of the evaluation?</i></p> | <p>Yes, through a questionnaire. I'd also had informal chats. These new forms of degree programmes that commenced in September 2004 following semesterization of the University after 400+ years of "terms" aren't so user-friendly for the staff because in the past you'd have students stay for a week in your area and therefore get to know them quite well. In these sessions, which were designated by the "curriculum project" which undertook to standardize all courses, teachers can only teach students for a maximum of a few hours (guideline is 1 hour per week) on a designated day once a week and therefore you don't get to know them.</p> <p>To address this we had a reading party where we went away to the University's field station and discussed things. While participating in an outdoor activity, or standing in a bar, you get better feedback than on forms because once individuals establish that you're learning too then you get good forthright feedback. Some of the [non-EEMeC using] science students had some problems getting access to the course web site</p>   |

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|  | <p>initially. Maybe we just need to be more explicit – students tend to delete messages instructing them how to proceed, and therefore their login details are often lost - leaving them in limbo. Nothing was said to me directly but it figured in the survey [note that the survey report is an annexe to this exemplar]. There were problems incorporating students from different streams into the one system but I guess that's an administrative problem arising from the curriculum project really.</p>  |
| <i>Did it meet your expectations?</i>  | <p>Yes, it was fine, it was good. From a teacher's point of view it meant that it was much more efficient for me because although I had to invest some time in setting it up one can see the benefits in future years, in that I don't need to set it up again – tuning and updating will be needed. I might change one or two of the elements in the light of staff and student (and exam results!) feedback, but the hard work has been done now.</p>  |
| <i>How important was it that you were able to get hold of third party materials to use in your teaching?</i> | <p>Very important, because for me to have given them that type of material would have required me to have gone away and read it and then rewritten it and represented it to the class.. Creating this digested form would have taken literally hundreds of hours of activity. By being to use RLOs I was really able to avoid reinventing wheels and the fact that it was very much up to date was a bonus.</p>  |
| <i>Has the use of learning objects made your work easier?</i>  | <p>Yes.</p>  |
| <i>Would you do it again? Are you going to do it again?</i>  | <p>Yes, I'll extend the format a bit and originally the idea was to get a single page with as much material as possible [this was a 1-page resource list]. However once you get to the equivalent of one and a half screenfulls that's probably as far as you want to go before splitting it up in to sub-screens – it was important and easier to stick to just the one page holding all the material. This was more important for the staff than the students who are fairly adept at moving around the web. Some colleagues are verging on the Luddite, wrt their use of IT.</p>  |
| <i>Has this changed your practice?</i>   | <p>Not substantially but it's meant that I don't need to give so much detail in a lecture – I can focus more on discussing concepts and ideas; I tell them to go and read up on the details. I can also help students more by explaining the general overview. This is a new kind of course however with less scientific detail and more of a focus on understanding concepts and how different facets can be brought to bear in pain management. It's not just drugs – you can bring in things like spiritual dimensions. These different facets were dealt with by different academics. To draw them all together I used technology and Tolstoy's novel.</p> <p>Tolstoy wrote this story in the 1880s and identified what the problems were with pain. Students found it interesting to say 'gosh, I hadn't realised how perceptive he was but sadly also how things haven't changed much since then'.</p>   |
| <i>Any other points or comments?</i>   | <p>Not really. I appreciated your [RE] help in pointing me to this opportunity. I probably wouldn't have done this without your prompting and assistance. The concept kind of forced me to go into an area where I would have been a lot less efficient and without deadlines I might have left it to drift on and it might have ended up a bit half-baked. I found by having a real run at it, and using this [ACETS + reflective diary] as a steer and as a prompter, it was a good way for me to get this done.</p> <p>My fears that I would end up as a kind of super programmer were not realised because I was able to rely on you, but my question is whether that support would be there indefinitely. I think it is important to have the IT specialists who can deal with some of these areas. We have specialist technicians in the labs to set things up and it is a better use of my time to focus on the pedagogy and philosophy rather than electronics. Maybe I should learn more, and we are, for example, being pushed to think more about WebCT within the School of Biology, but I still really believe that if there is a simple way of doing the front end of it and leaving you to do the back end is best, that's the best way to proceed. Had I had to do it myself, well I don't know.</p> |

## ACETS Exemplar 05: Reflective Diary

### Stage one: resource discovery

Discovered that if type in this box, then open another web site to copy a location, inadvertently closing the web link, diary signs off and typed material is lost – plus there is no spell checker to pick up typos. First lesson - prepare entry in Word, then copy to this box. Second attempt 18 Aug 04. Met with RE (Learning and Teaching Section) on Aug to discuss my requirements in general, and added value to me of getting involved in ACETS for a new course (module) on Pain & its management. I want to use various aids for teaching this course, which is for intercalating medics, Biol Sci, and Biol Sci + Management students – ie all are taking their BSc Hons year. Course starting mid-Sept 04 to coincide with introduction of semesterisation. Agreed that by developing a teaching resource for developing students' academic skills, including communication, I shall in the longer-term benefit from the exercise. Hopefully... Wish list: on-line resources to be used by students (and teachers) on the course:

1. Access to current electronic curriculum (EEMeC) so this cohort can access some of the teaching aids, including the pharmacology suite of programmes. <http://www.pharmacology.com/> In particular the Report writing programme, TLRP 19 "Right Gud Repports" (How to present reports correctly). Problem – ok, challenge: This programme has not been upgraded, so is only available in an old format which is not directly accessible via EEMeC. Contacted BPS, and an Internet version may become available, but not in near future. Solution: put it on the degree programme (BSc Hons Medical Biology) web site. Challenge: There isn't a web site, yet. Solution – make one, but who is going to do that. Biology Teaching Organization? Ask programme leader to solve.
2. For a Reading Party to be held half way thru the course, get students to read articles and then summarize the content for fellow students. Work in groups of 4, all to present via PowerPoint talk, plus a handout. Develop ability to abstract information, collate it, work with colleagues to structure the material, devise a suitable presentation (15-20 min talk) and allocate each person a theme within the presentation (all 4 to talk). Answer questions (and ask questions, if in the audience). Focus on articles that have been published on a CD prepared by the Wellcome Trust in collaboration with the Science Museum in London for an exhibition (Feb-June 2004). Pain – passion, compassion, sensibility. ISBN 1 841290505 £2 (free copy from WT). Contains some excellent reviews on Pain written by national and international experts. There are 14 essays, and these would be an excellent background for students to use, in conjunction with more advanced information available on the Wellcome Trust web site: <http://www.wellcome.ac.uk/en/pain/microsite/index.html> Challenge: On the CD the hypertext link to the articles doesn't work – or not on the CD I received. Solution: open the files from the CD using Adobe to print the pdfs. Challenge: asked the LTS to mount the material from CD on EEMeC. They are prepared to do so, but need written confirmation that this is acceptable to WT Trustees, who have registered copyright 2004. Contacted the Wellcome Trust in Jan, Feb, May, June, July – either no reply to e-mails and phone calls, or someone would get back to me. Eventually phoned Ken Arnold, WT Curator. He passed it on in July to publications section, and e-mails have established that permission can only be granted by someone who is away until end-Aug. His colleagues think permission may be given for educational purposes, provided material is within an environment only accessible to our students via secure log in. Use of some photo material on CD will not be allowed – to be specified. Time spent getting permission so far – about 3-4 hours. But without permission, I can't put the material onto our server, so just have to hang in there... does seem a bit of an irony that Sir Henry Wellcome set up the Trust primarily for educational purposes!
3. Video material on the Wellcome CD – to see how others communicate about pain via videoed talks, films, and demonstrations (e.g. of an amputation; fake expts where operator is told to give increasingly painful electric shocks to subjects who give the wrong answer to a question, or don't answer fast enough – operator doesn't know stimulation and associated screaming is faked). Again, would like this accessible via EEMeC, but need permission to do so before this can be done. Challenge: emerged from discussions that the science students do not have access to EEMeC, as the site is for medics only. Solution: ask for hons biol sci students who are taking this course to be allowed visitor rights on EEMeC for their hons year. RE to see what can be done
4. Get access to a Tolstoy novel via Internet? Exemplar of how a leading author describes pain in "Death of Ivan Ilych". The whole book is about communication skills – between Ivan and his work colleagues, wife, family, servants, physician and ultimately God. May be problems in steering students to web site, and cost + time of running off copies makes it dodgy. As it is core reading, buy copy. Some eyebrows raised about using classical literature in a biomedical course, but defend the decision. Will need to await students' feedback at end of course to establish whether cynics are correct in saying that students will not bother reading this short (110 page) novel. Challenge: copies of Penguin version are out of print, and nobody seems to do it. Have a nice day, But young American is asked to search the computer database and eventually finds a publisher of an English translation – she initially offered it in Russian, which may stretch

students' communication skills. Solution: order a copy from Blackwells of a Bantam Press version @ £3.99. Sound s ok, get 10 for the class, placed order early July. Challenge: Mid-August: contact Blackwells as 3 week promised delivery expired....on checking they find it is not available in UK. Sorry about that. Solution: nice man at Blackwells phones back to say he thinks he can order it from USA, about same cost, 1 week delivery. Gratefully accept! Time so far about 3 hours, including filling in order form. No course budget, so no official order number, so buy 10 copies from my personal account. 5. Consider using some science CAL programmes, and decide how best to advise students on preparing talks - ?use PPT help and exemplars, or let them Google up a suitable site. Will look and enquire locally to see what's available – don't have time to send the group on a course, and it may be they have developed some of the skills in previous years. 6. Think about looking to see what others are doing in ACETS, but first have to complete grant application and some expts before going on holiday.

How to lend copies of book to class? The Library will do this, but I have to give them the books as a donation. Not clear that they can be held in reserve just for this class - anyone can borrow. ?Better for me to issue them via the course Secretary - doubt if she will be keen, but pursue this possibility and keep the material closer to the course home base. Better do some thinking about metadata!

Looks like some of what I wrote above above would be better in stage 2 and/or 3. Also looks like best enter items as small bites as system removes par breaks.+

18 Aug - more! Discovered that I couldn't print my Diary notes, or the ACETS Metadata model (for holiday reading)- lost about one third of page - chops the R side. Seems to be something to do with Mozilla and my settings - computer guru unable to solve, tho he has seen this happen before. Suggests I ask RE to sort it. I tried again after accessing site using Explorer, and it works ok - time spent 30 mins Suggests I had best ditch using Mozilla for this project.

### **Stage two: preparation**

19 Aug 04 Started looking for additional on-line communication skills material via Resources Jump page in ACETS. Most I would like to look at were denied access, not found, refused connection or otherwise inaccessible. ? Because I use Mozilla. Tried Explorer and got same - on Aberdeen communications, and Medethex. Did find some links worked. Frustrating, and wasted 30 mins.

Good news. e-mail from Wellcome Trust allowing use of material on their CD, but imposing certain restrictions. Arrange to meet with RE next week to work out how best to make this prime LO for the course accessible to students and teachers via web.

Decided to use a web-based deliver for the learning objective. Met with RE to discuss how best to achieve this, which involves getting a cohort of students registered to use EEMeC. Met today and very positive outcome – just need to send names, matric number and probably e-mail contact details of the particular students. Focus will be 14 essays in PDF format which will be copied from Wellcome Trust Pain CD – copyright will be acknowledged. Get each group of 3 to select a (different) essay and summarise it in PowerPoint for the rest of the class. Final slide is to be key issues, conclusions, items for further investigation. Also us a website for basic reminder of core skills on PowerPoint. RE helpfully pointed to a web site where core compulsory reading can be downloaded free – saving time and money (PDF = 33 pages, so approx £1.50 to print off) Cheaper than buying the Tolstoy book. Also decided to incorporate a local anaesthetic CAL into the core so that students can learn more about local drug actions – at their own speed. When return from holiday will plan out the details and add to next section.

### **Stage three: creation**

Have now identified the main objects that I want to use to facilitate my teaching. It comprises educational material on a CD prepared by the Wellcome Trust and the Science Museum, essays by leading scientists that are on a difficult to find Wellcome Trust site, public domain, some CAL programmes that we already have purchased for medical student use, a Tolstoy novel, free download available from web, and a variety of self-instructional aids to facilitate a variety of personal skills (preparing presentations and reports; writing essays). There will also be links to "good" web sites that are useful sources of critically evaluated evidence relating to the course theme: Pain and its management.

Next stage is to liaise with Rachel Ellaway and colleagues in EEMeC - to find how best to create a course web page within the existing EEMeC shell. Have set up a spreadsheet containing the various documents and http links, and e-mailed it requesting guidance and assistance. Degree programme will not use WebCT, and may opt for EEMeC as site for the web info, but just for one year. See if what I am doing in EEMeC for this year can be switched to WebCT next year - if that's feasible. My wish is to have a sub-site in the degree programme for my course home page, which would then have 6-8 buttons guiding students to different resources that can be accessed on line. Summary of what I would like to achieve is in Excel file: Info for pain course EEMeC site.xls

Contacted EEMeC: I have started editing the site <http://www.eemec.med.ed.ac.uk/node.asp?id=inmepm00> Need help, tho not instantly, on : how to put the Course handbook (a word doc, attached) as a link in the box how to put the PDFs (from Wellcome Trust CD) - attached as a Doc, onto the home page? how to make the http address "hot" - ie click and go. Some are "cold" at present. how to make my e-mail address into hyperlink how to added the video clips from the Wellcome Trust Pain CD - if this is feasible Looking good, and this is achieving more than I expected.

Thanks to Rachel and EEMeC the course web site is now active - few minor links yet to go live, mainly involving video clips and PDF files. But great to have it in place (one week) before course starts, and to be looking and operating much better than I expected - again, thanks to expert help received. I worked out how to do some small-time editing of the site using the text editor rather than a special editor, particularly wrt hypertext linking. Delighted that with help I have been able to put in place a fairly comprehensive teaching object that links to and develops material from other resources.

Design now completed, bugs removed, and the various elements are all working well. Activities are centred on a Pain Management course web site, which all students can access; that required negotiation for science students, who normally don't get access to the medical site, EEMeC. Sorted by Rachel and colleagues who dealt with most of the up loading. I have editorial access, and can make minor changes myself, which is convenient. Not sure that I want to learn how to upload PDFs etc, tho it may not be too difficult. The prime teaching object is a collection of critical review essays prepared by the Wellcome Trust as part of their remit to support medical education. This will be supplemented by seminars and associated lecturers' notes which will be mounted on the home page. Some of the PPT talks include on-line free material (illustrations, summaries, tables) and linked notes from e.g. ImagesMD.com. The speakers' notes will be available to students (and staff) as a learning and teaching resource; knowing what previous lecturers have dealt with facilitates preparation of later lectures/seminars. Students will also prepare material, using on-line guides to presentations and use of PowerPoint and, after giving the presentations during a Reading Party, will also lodge the talks on the web site for other groups to read and use learning and revision aids. Other objects being accessed include a classic novel by Tolstoy, together with notes on the interpretation of various aspects within the novel. To facilitate learning about particular drugs, links to CAL programmes (PharmaCALogy.com) have been included on the home page. This makes use of the fact we have a site licence, paid for by the medical course. The course handbook is also available on line, as is the reading list. Preliminary reaction from students and staff has been favourable. Next step is to evaluate the learning objects via a structured questionnaire, which will be done in December, at the end of the semester.

#### **Stage four: use and evaluation**

Informal discussion with students during the Reading Party confirmed that brining together the various learning materials via a web site has been very popular because of the ease of access, reliability, and comprehensive nature of the site. They also liked the fact that teachers used the site to co-ordinate seminars, and to appreciate what the course objectives were. Initial scepticism about the value of using a Tolstoy novel as the basis for a course on Pain Management was turned to considerable enthusiasm when they read the short novel and through it gained some insight into what chronic pain means to the patient, but also to the doctor, relatives, colleagues. There were 8 members of staff involved in the teaching, and they all found the web site helpful for planning and delivering their session. Most posted a copy of their talk, plus additional notes, for access by the class of 24. A particular advantage of the web site as a focus for information (excepting direct communication with the class, which is done via e-mail list outwith the web site) is that information has become very fragmented in the new modular honours courses. Students now have less than 50% of their degree on "core" programme, and attend various optional courses such as Pain Management. We have students from six degree programmes, and it would have been a logistical nightmare trying to provide them with learning material on an individual basis using "old" technology (handouts, reading lists). The web site meant all could access the learning material, then move on from that to additional web and other resources. The system worked well because support staff in EEMeC were superb in loading learning material provided by staff, and sorting any problems that arose when linking to the site (e.g. Mozilla would not run some programmes that Explorer did. As course coordinator I greatly appreciated the technical support, and it meant that I could focus on the teaching objectives rather than the IT aspect. I undertook minor editing of the node, and that greatly facilitated management of the site.

Objective evidence was obtained from students regarding the course web site and its value to their education (see below for a summary of the questionnaire, which 71% of the class returned - high for a voluntary anonymous questionnaire). Bottom line: 91% thought the site was important for their learning, and 88% thought it a useful feature of the course (none of the other courses in the various degree programmes had a similar feature) and they were well-pleased with this innovation - as was I.

#### **Stage five: reporting and closure**

I met with the ACETS coordinator and reported my experiences, and those of staff and students. The feedback from students was very positive, and I shall extend this pilot next year for double the number of students, with only minor adjustments needed. I had expected input from staff - in the form of suggestions for additional RLOs, or requests for modification to the existing material, but that was not forthcoming. Most just seemed delighted to use the facility in a passive manner. Educationally this pilot course has been a great success, and the RLOs have been pivotal in developing what has turned out to be a most successful course. Poor points were very few: difficulty in accessing some of the ACETS discussion and Links - sometimes got page not available (or I was denied access). This may have been peculiar to my web browser (Mozilla), or a lack of understanding about refreshing web pages. Some students had difficulty getting a password (i.e. those from other colleges couldn't get into the web site because it was in medical area and they were denied access). They were told what to do, but didn't follow instructions - or "lost" them (by deleting e-mail!). In future probably best if CO sets this up, and runs through the access procedure in the introductory session. Good points were the students' enthusiasm and appreciation of a focal point for accessing RLOs, and the fact that staff could keep tabs on what was being covered by others - which was a valuable aid for integrating the teaching. Overall the teaching was much better than it would have been without the web based access to RLOs, and it meant staff could consider principles, knowing students had access to details via the RLOs. Not sure whether it will be possible for others to access the site <http://www.eemec.med.ed.ac.uk/node.asp?id=inmepm00> but this may be possible by e-mailing [eemed@ed.ac.uk](mailto:eemed@ed.ac.uk). Finally, it was a stimulating experience - bringing together teaching material from a variety of sources, particularly the Wellcome Trust Pain CD, and packaging it in such a way that students from various degree programmes in three separate Colleges, and teachers from a number of departments, hospitals and industrial companies could access it and use it to benefit learning and teaching. Finally, many thanks to Rachel Ellaway for encouraging me to undertake this ACETS project, without which the course would have been deprived of web-based access to RLOs.

**ACETS Exemplar 05: Semi-structured Learning Design Statement**

|                              |  |
|------------------------------|--|
| <i>Learning Design Name:</i> | Pain and its Management Honours Course |
| <i>Learning Designer(s):</i> | Daniel McQueen                         |
| <i>Institution(s):</i>       | University of Edinburgh                |
| <i>Course Context(s):</i>    | BSc (Hons)                             |
| <i>ACETS exemplar ID:</i>    | 05                                     |
| <i>LD period:</i>            | Semester 1 2004                        |
| <i>LD duration:</i>          | 12 weeks                               |

|  |  |  |  |
|--|--|--|--|
| <i>In order to attain the following learning objective(s):</i> | To get an overview and understanding of pain management in its broadest sense: what is pain, is there a problem in managing it (both pharmacological and resource management), who is involved, palliative care, removing and reducing pain and its causes, ethical dimensions and so on |  |  |
| <i>With prerequisite(s):</i>                                   | To be an undergraduate student at the University of Edinburgh. No other academic prerequisites were required. Medical students would have had a grounding in pain, pharmacology and related topics the others mostly would have no particular relevant experience.                       |  |  |
| <i>Trigger(s):</i>   | Start: having selected the course at the start of semester 1 from a range of options attendance at the first seminar starts the course.<br>End: end of course marked by end of 10 <sup>th</sup> seminar.   |  |  |
| <i>The following persons/roles:</i>                            | Name   | Type (staff, student)  | Description  |
|  | Course organiser   | Staff  | Organises, designs and runs the course, sets the exam, recruits lecturers, communicates and supports students. |
|  | Student  | Student  | Participates in the course.  |
|  | Lecturer   | Staff  | Delivers timetabled seminar on specific topics.  |
| <i>Perform:</i>  | Which roles?   | Do what?   |  |
| <i>Learning activity(s):</i>                                   | CO and students  | First meeting of the class to discuss course structure and protocols.  |  |
|  | Students   | Students were strongly urged/required to read the <b>Tolstoy novel LO</b> . One of the end of semester exam questions was based on the relevance of pain management, as described in the novel, to the contemporary situation  |  |
|  | CO and students  | Participate in 10 weekly seminars during which digested material would be presented to them in a condensed form. 45 minute talk followed by 30 minute discussion then directed to materials on the web to follow up each seminar. Seminar contains core material.  |  |
|  | Students   | Self-study based on <b>video LOs, essay LOs and other website material LOs</b> as directed during weekly seminars. Self-study contained additional material.   |  |
|  |  | Use of CAL programs  |  |
|  | CO and students  | Weekend reading party at the University's Firlush Centre in the Scottish highlands. This was to enable students and the course organiser to get to know each other and discuss and explore issues regarding pain in more personal depth, in non-assessed (important – promotes communication skills without fear and competition associated with formal appraisal) presentations in the classroom. Different topics were given to students (in groups of three) beforehand for them to research and prepare to discuss during the weekend. |  |
|  | Lecturer and students  | Lectures on specific topics  |  |
| CO and students plus volunteer                                 | Visit to hospice to meet patients and staff and see pain management at first hand.   |  |  |

|   |   |  |   |
|---|---|--|---|
|   | members of the public and NHS staff.                                | Visit to post-operative patients in pain at the Royal Infirmary (students were guided to what might be appropriate and inappropriate types of questions).                      |   |
|   |   | Visit to working clinical laboratory to get students to perform somatosensory testing on themselves  |   |
|   | CO and students   | Exam – during the last seminar slot. 90 minutes long and in two parts: general short-form essay questions reflecting the nature of the course and an in-depth essay to follow. |   |
| <i>Support activity(s):</i>                 | None  |  |   |
| <i>Using environment(s) or scenario(s):</i> | CO, lecturers and students  | Seminars and lectures  |   |
|   | CO and students plus volunteer members of the public and NHS staff. | Various fieldwork venues   |   |
|   | CO and students   | Reading party venue  |   |
|   | Students  | Libraries, own computer, University computing labs, libraries etc  |   |
| <i>Using:</i>                               | <i>Which roles?</i>   | <i>Use what?</i>   | <i>To do what?</i>                                      |
| <i>Tool object(s):</i>                      | All   | Course website, computers  | Access materials  |
| <i>Knowledge object(s):</i>                 | All   | Tolstoy novel, Wellcome videos, essays and other resources, other websites and other readings.   | Self-study  |
|   |   | Lecture notes and slides   | Reviewing and checking course content                   |
| <i>Test object(s):</i>                      | CO and students   | Exam (paper-based)   |   |
| <i>Search service(s):</i>                   | Students  | Any web search as purely optional follow up  |   |
| <i>Communicate service(s):</i>              | All   | Email  |   |
| <i>Announce service(s):</i>                 | Course Organiser  | Email  | Some students failed to check email on a regular basis. |
| <i>Other elements or notes:</i>             | None.   |  |   |

#### Completion Survey

|                      |  |
|----------------------|--|
| Recorder:            | Rachel Ellaway   |
| Date:                | 16 December 2004   |
| Other meta-metadata: | Completed at MVMLTS, University of Edinburgh with Professor Daniel McQueen |