

ACETS Exemplar 10

What's in a head: an Introduction to the Head and Neck Anatomy

Patricia Revest

Queen Mary University of London

ACETS Project Exemplifier 10: Baseline Survey

Teacher/academic's name	Patricia Revest
Teacher/academic's position	Senior Lecturer, Head of Educational Technology, School of Medicine and Dentistry,
Teacher/academic's institution	Queen Mary University of London
Range of subjects taught	Medicine & Dentistry
Contact information	p.a.revest@qmul.ac.uk
Principal interest	anatomy
ACETS Officer	dleeder
Date of survey	5/6/2003
Do you know how to make web pages?	a lot
Have you used the web in your teaching?	a lot
Do you use anything that you would consider a 'learning object' in your teaching?	not at all
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?	good / average
How would you rate your own use of CAL against those of your colleagues?	expert
How much relevant staff development and training is available?	a little - none
How much relevant staff development have you actually made use of?	a little - none
Do you have access to support in making electronic learning materials?	a little- none
Is this available as a free service?	completely
Have you made use of this support service before?	a little
Would you expect that you would need to use this service to use learning objects in your teaching?	a little
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)?	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?	I do this
How easy is it for you to get teaching materials online?	very 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 little
Extra notes	None

ACETS Exemplar 10: Interview

<i>Exemplifier</i>	Trisha Revest
<i>Exemplar description</i>	"What's in a head?" An Introduction to Head and Neck Anatomy for MBBS and BDS students
<i>Interviewer</i>	Dawn Leeder
<i>Date and location of interview</i>	2/2/05 1.26 Medical Sciences Building, Queen Mary University of London
<i>Context of use</i>	The target audience is MBBS year one, though year two students may also be interested and BDS year one students as well. As part of their cardio respiratory system overlapping with possibly metabolism.
<i>How did you go about putting the exemplar together? Was it hard to design and/or conceptualise your exemplar?</i>	The starting point was a working group, because we realised with the organisation of the new curriculum we discovered there were some aspects of anatomy, particularly the anatomy of the head and neck which had somehow managed to drop out and because this is a cross system subject of interest to respiratory alimentary and neuro our job was to find a way to plug the gaps and one of the recommendations was to set up an online resource to teach basic head and neck anatomy. This was as long ago as January 2003. I had some discussions with the anatomist who used to run the dissecting room, Phil Adds. We discussed the possibility of various types of online resource some of which have turned out to be too difficult and others like this which we did do. It wasn't really hard to design or conceptualise. Once we had an idea of what we wanted to cover the route map through it seemed fairly straightforward.
<i>How did you approach this work? How quickly were you able to come up with the activity design?</i>	It was helped a lot by going to the ACETS meeting in Manchester, where we did your workshop on designing a learning resource because that narrowed down our focus. We'd had grandiose ideas before that which weren't realistic. Whereas thinking about the structure of a learning component followed by a self-testing component followed by an evaluation made us think about how it was actually going to be put together. Once we got the structure then the problem was actually finding the time to do it.
<i>Was the kind of activity something the students were familiar with?</i>	They are very familiar with online resources, we have a huge database for them where they're used to picking up everything from course documentation to having PowerPoint lectures. They already do all their microanatomy teaching online, both in interactive classroom situations where there might be 70 of them in an IT lab with a micro-anatomist but they also have that resource for self paced learning either when they've missed it or for revision purposes.
<i>How did you find/identify your third-party materials?</i>	I wanted to find good quality anatomical images because they'd be difficult and expensive for us to make. I'd decided right from the beginning that I was going to write the text because it's the only way to get the text as simple or as detailed as you want. Because there was a fairly clear map through the project I did a lot of searching around. I looked at some of the official resources as well but in the end ended up with Google searching, some of the American sites are medical information and they list other sites which list other sites and so on
<i>What third party materials did you use?</i>	Images from SEER (http://www.training.seer.cancer.gov) funded by the U.S. National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program and from Muscular Dystrophy Association of the United States (http://www.mdausa.org/)
<i>Did you use ACETS listed links and sources?</i>	I tried some of them. I tried Jorum but it was fairly complicated and it wasn't immediately clear how you get the resource or whether you get permission to use it or anything like that. I wanted to find a resource where it was very obvious who owned it so you knew who to contact. The Bristol Biomedical images was almost impossible to get into - for some reason ATHENS wasn't allowing you in - and one or two other ones. There were quite a few clinical image banks but no basic pictures.
<i>Did you look at/use JISC sources?</i>	Bristol Biomed. It would have to be as easy to use as Google images and very clear about copyright permissions and who to ask.
<i>Did you use commercial sources?</i>	No they're all from non-commercial websites and it turned out one of the websites was a charity and one was funded by the US government with no copyright restrictions. I looked at the Elsevier "Flesh and Bones" - it was mentioned on the ACETS sites that

	they were trying to negotiate with Elsevier for use of their images and that would be brilliant as a resource because with the amalgamation of lots of imprints under the Elsevier name the totality of the resource is huge.
<i>Did you need permission to use the 3rd party materials?</i>	I decided which images I wanted to use and then I contacted the site administrators directly by email requesting use, the terms of usage and what I was going to use them for and so on. <i>[Email requests and permissions included in notes]</i>
<i>How did you go about getting clearance and with what success?</i>	For both sites, I was emailed back and given permission within 48 hours. They requested certain citations on the resources page but that wasn't a problem.
<i>Was the exemplar easy to put together?</i>	The first part was quite tricky because although I had an idea of what I wanted it to look, I dithered over how to present it. I had thought about PowerPoint but I'm not a great PowerPoint user and to my understanding you can't actually have interactions with PowerPoint in the same way you can with JavaScript and HTML. Also I've been extensively studying script for two years - I'm half way through an OU course - so it's nice to apply that knowledge. And I wanted the exemplar to be completely accessible and you can't do that in PowerPoint.
<i>What tools did you use?</i>	[Macromedia] HomeSite which I use as my basic HTML code, partly because it does things like tag completion, code check and validation - so it was written in that using HTML and CSS. CSS particularly for accessibility so people can resize text and images. For the interactions I used [Macromedia] Dreamweaver with the Coursebuilder learning extension which you can download from their site. I had to modify Dreamweaver because the interactions I wanted were more complex than it provided for - without understanding HTML I couldn't have done it.
<i>Did you get any help?</i>	No, well there's an enormous amount of help on the Internet.
<i>Were you pushing your skills in doing this?</i>	Yes, particularly with the Coursebuilder stuff and also doing a lot of the CSS positioning. It cemented a lot of things I probably knew already but hadn't spent that much time on and the Coursebuilder was something I had never used properly before.
<i>Did you use pre-existing services/tools?</i>	For presentation we decided to use our own website but also WebCT. I'd originally thought of WebCT if I'd had problems with permissions, as our WebCT is registered student access only which would have meant that restricted permissions could have been applied.
<i>Did you engage with colleagues in your own working context?</i>	In the initial stages we made a long wish list of all the things we wanted to put back into the course. We then allocated some things to some systems where people were going to either add them into the system or make sure they were covered somehow in commonplace learning and then others that would have to be dealt with independently. A couple of my colleagues will be looking at the presentation to check for factual accuracy, typos but also to comment on anything missed out etc. I like to have staff evaluation as well as student evaluation.
<i>Would that be the normal way you work?</i>	Yes. I usually work pretty much on my own at least on pilots. Now I would try to disseminate this to other people who were interested so that if people wanted to set up something similar it would give them some ideas as how to do it.
<i>Did you engage with the ACETS project or X4L programme?</i>	Not with X4L. There was a lot of interaction at the Manchester workshop and discussion about what people were going to do, I'm still a little concerned about what an RLO actually is, I was worried by the conflict even between members of the ACETS group.
<i>Did you engage with other external bodies?</i>	No
<i>Was the exemplar easy to deliver/use?</i>	Yes once it's up and running, it was easy for me to put it up and students seem to find it easy to use, I've had one student email me to say they weren't able to access it but on their own admission they had been tinkering with the privacy settings on their computer so I'm not sure it wasn't just a problem with their firewall

<i>Did it give pedagogical benefit</i>	We will know really whether it's had a significant effect at the end of the year because it's only then that it will be formally assessed. The students seemed to think that it taught them something.
<i>Did it give economies of scale and efficiency</i>	Well in the sense that all web based stuff does when you've got 300 students. I spent some time doing it but now it's there it doesn't require maintenance and students can use it over and over again. So yes.
<i>Did it give diversity of approach and experiment</i>	Diversity in the sense that they had the material in a classic sense in the dissection room where they've had models, pictures and prosections, this is reinforcing it by doing it in a different medium.
<i>Have you evaluated it?</i>	Yes. A web-based form which the student filled in when they had completed the activity. It was not obligatory but as it was anonymous they were encouraged to do so.
<i>What was the result of the evaluation?</i>	So far we only have assessment from 20 odd students, but they are unanimous in liking it, that it was easy to use, and it taught them something. I was concerned it was rather too basic but I think with year one students you can't assume any prior knowledge, particularly now there's much less human science in Biology at A Level and in double science. Starting right at the bottom actually levels the playing field for all students
<i>Did it meet your expectations?</i>	At the end of the day I liked it better than I thought I was going to. Like any project you have moments where you think it'll be great and moments where you thought it'd be horrible and you wish you'd never signed up, but at the end of the day I'm happy with it.
<i>How easy was it to use third-party materials?</i>	Very easy, click of a mouse.
<i>Has this enhanced your teaching? In what way?</i>	Well it's filled the gap in the curriculum, and it shouldn't be too difficult to update it if required.
<i>Has this enhanced your students learning?</i>	It's difficult to know yet, but the feedback from the evaluation is good
<i>Can you report back on the success of this assessment?</i>	We'll know in June so we'll report then. That will be from almost 300 students
<i>How important was it that you were able to get hold of 3rd party materials to use in your teaching?</i>	Very important. Although we could have done it entirely ourselves, that would have taken a lot longer. I have to say that some of the images we've used are very high quality, much nicer and obviously by professional artists. I'd have been stuck for a lot of it.
<i>Has the use of learning objects made your work easier?</i>	Difficult to say.
<i>Would you do it again?</i>	Yes probably. In a system based curriculum, cross system things are ideal for putting on the web
<i>Was it hard to adapt materials or teaching practices to do this?</i>	No because we have a fairly IT based ethos here anywhere
<i>Has this changed your practice?</i>	It's encouraged me to think about doing more of it rather than less, but we'll have to see how the students respond. Students like multiple learning environments, web based resources are excellent for our foreign students who can go at their own pace.
<i>Any other points or comments?</i>	At the end of the day it all came together!

ACETS Exemplar 10: Reflective Diary

Stage one: resource discovery

Initial trawls through recommended resources were unproductive. I found some of the repositories hard to access. For example the Bristol Biomed is unusable. Others whilst containing good stuff it wasn't clear how they could be used and what were the limits. In the end it was down to good old Google searches and links from sites. Browsing until I found material which was useful and then downloading it directly.

After identifying material I wanted to use I contacted the 'owners' by email. I made it clear what use the material was going to be used for and the scope of the project. I was emailed back and there were no problems about using material from other sources. This saved a lot of time as although we could have generated our own illustrations this would have taken a long time

Stage two: preparation

The main content of the RLO was determined by a meeting held with colleagues to discuss the material which had dropped out of the course. I thought that the RLO should be very basic and start at the bottom. Students who found it easy could go through it faster whilst those with less prior knowledge could work more slowly.

Stage three: creation

Initially I thought about using PowerPoint but I am not very experienced with this and wanted to do something with more interaction. Being that I have been studying HTML based technologies I thought that would be good practice and would help to develop my skills. I decided to use CSS and HTML with Homesite to develop the basic pages. I want to make the RLO accessible which I can do with CSS.

The quiz part was done using Dreamweaver and the CourseBuilder extension. This then had to be extensively edited as the interactions I used were much more complex than those suggested by the program.

Stage four: use and evaluation

Students were informed that they should carry out this activity during week 3 of the 1st year cardio-respiratory course. It will be online as part of our Knowledge base web site and also via WebCT. Both routes have an evaluation form attached which can be missed out but hopefully students will fill in. This was kept short in order to encourage students to fill it in.

The student feedback is generally good. They wanted EMQ type questions as well as the labeling one but this is probably just a reflection of the fact that EMQs are used in exams.

Stage five: reporting and closure

Although there were times when I cursed having got involved. Mainly when feeling guilty about not having finished I am pleased with the result. The students have a resource which will last for some time and which they find easy to use. I have a set of templates and ideas which will make it easier to develop further materials. If I can get colleagues to provide the subject content I can produce further RLOs with much less effort.

I will now go back and edit the RLO in the light of student feedback and try and address one or two points. I want to get some staff feedback to find out what they think of the RLO.

ACETS Exemplar 10: Semi-structured Learning Design Statement

<i>Learning Design Name:</i>	An introduction to the head and neck anatomy
<i>Learning Designer(s):</i>	Patricia Revest
<i>Institution(s):</i>	School of Medicine and Dentistry, Queen Mary University London (QMUL)
<i>Course Context(s):</i>	MMBS and BDS in the context of Cardiorespiratory, Metabolism and Neuroscience systems
<i>ACETS exemplar ID:</i>	10
<i>LD period:</i>	Years 1 and 2 MBBS, Year 1 BDS
<i>LD duration:</i>	Open ended. Activity lasts 25-30 minutes in total. Left on web for students to use on own, whenever they want to, as part of Term 2 coursework.

<i>In order to attain the following learning objective(s):</i>	Specific learning objectives	Minimal: Be able to label major structures of the head and neck (oral, nasal cavities, larynx and pharynx). Optimum: Students will be able to give details of head and neck structures (as above), outline the functions described in the text and briefly describe the pathologies outlined in the text which are associated with those structures.	
	General learning outcomes	Minimal: Students will have a basic awareness structure and function of the head and neck. Optimum: Students will integrate this information with other information about the head and neck, structure and function.	
<i>With prerequisite(s):</i>	Term 1 (Fundamentals of Medicine or Fundamentals of Dentistry). Program is fixed and courses are mandatory. Must have completed Term 1.		
<i>Trigger(s):</i>	START: Students are directed to the resource LO by the systems director for Cardiorespiratory (the 1 st system in term 2). END: Students are told they should complete the activity by June when they have their major assessments.		
<i>The following persons/roles:</i>	Name	Type (staff, student)	Description
	Tutor	Staff	Designs, directs and maintains project, informs students and colleagues.
	Student learner	Student	Completes resource and any associated assessment (mandatory) and completes evaluation (optional).
<i>Perform:</i>	<i>Which roles?</i>	<i>Do what?</i>	
<i>Learning activity(s):</i>	Tutor	Directs students to resource LO by email, notice board and in lecture.	
	Student	Must do resource LO on own. Students log onto Web and do activity.	
<i>Support activity(s):</i>	Tutor	Monitors activity and fields queries. Can monitor from WebCT but not website, and most students seem to prefer using web site [difficult to determine since responsibility of doing resource belongs to individual student].	
	Student	Integrates information from resource LO with other activities, particularly learning landscape (models, photos and prosections).	
	Student	Integrates into lecture course, PBL, Practical sessions, microanatomy, gross anatomy and other web-based activities.	
<i>Using:</i>	<i>Which roles?</i>	<i>To do what?</i>	
<i>Tool object(s):</i>	Tutor	Places resource LO on the web (large web site) and in the learning environment (WebCT). Updates only in the case of errors.	
<i>Knowledge object(s):</i>	Student	Accesses resource LO via either Knowledge Base (web-based information resource) or course area in learning environment (WebCT). Material is posted in both environments (web site and WebCT) students can choose which they prefer.	
<i>Test object(s):</i>	Tutor	Sets in course and end of year assessments. A question regarding the resource is placed on the end of the year assessment. No other forms of testing are used.	

	Student	Is examined using in course and end of year assessments
<i>Search service(s):</i>	n/a	
<i>Communicate service(s):</i>	Students	Email tutor
	Tutor	Use Email, WebCT, noticeboard to communicate with students
<i>Announce service(s):</i>	Tutor	WebCT, but email mainly, using a listserv. More effective to use email, as most regularly check email, but not all log onto WebCT. Texting in the future may be another method of reaching the students.
<i>Other elements or notes:</i>	<p>URL of site: https://courses.stu.qmul.ac.uk/smd/kb/cardioresp/acets/</p> <p>Third Party Images:</p> <p>All images marked SEER are from http://www.training.seer.cancer.gov; funded by the U.S. National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program, via contract number N01-CN-67006, with Emory University, Atlanta SEER Cancer Registry, Atlanta, Georgia, U.S.A.</p> <p>Images marked MDA are from the Muscular Dystrophy Association http://www.mdausa.org/ Used with permission of the Muscular Dystrophy Association of the United States. CMDA, Inc.</p>	