

ACETS Exemplar 14

Introduction to Anatomy

Ian G. Parkin

University of Cambridge

ACETS Exemplar 14: Baseline Survey

Teacher/academic's name	Ian G. Parkin
Teacher/academic's position	Clinical Anatomist
Teacher/academic's institution	University of Cambridge
Range of subjects taught	Anatomy
Contact information	igp20@cam.ac.uk
Principal interest	anatomy
ACETS Officer	dleeder
Date of survey	4/17/2003
Do you know how to make web pages?	not at all
Have you used the web in your teaching?	not at all
Do you use anything that you would consider a 'learning object' in your teaching?	a lot
How would you rate your own computing skills against those of your colleagues?	poor
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?	non-existent
How much relevant staff development and training is available?	a lot
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?	not free
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?	no
What is the system called (eg WebCT, or equivalent local system name)?	n/a
Does it allow you to put teaching/learning materials online for your students	n/a
If so, do you do this or is it done centrally for you?	n/a
How easy is it for you to get teaching materials online?	n/a
Do you have your own computer at work	yes
Do you use a computer at home for work	no
What level of computer access do you think your students have in the institution and at home	average
How much of this is internet-enabled ?	a lot
How much teaching and learning materials are provided online for the students	a little
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
Extra notes: <ol style="list-style-type: none"> 1. Is a cadaver a learning object? If so, LOs used a lot! Keen for students to learn by doing (dissection). 2. Lots of staff development available – no time to do it. 3. A/V unit in department. Not free. Time charged against teaching budget 4. VLE exists but IP unaware of it. There is no consistent strategy for its use in Medical education in Cambridge – this is mainly a legacy issue, the result of a lot of fragmented sub-departments. Pre-clinical taught by Faculty Board of Biology, post-by Clinical School. There is no medical school s such. 5. IP has no familiarity with VLEs 6. Don't know at home. Very patchy across institution because 30+ colleges all have 	

<p>their own systems and different levels of services. i.e. some still don't have sound cards, some COs refuse to install plug-ins, although all colleges have broadband access.</p> <p>7. Expectations: IP would like to produce propadeutic material in anatomy so that students can "hit the ground running" – and if they subsequently trip over they can come back to it. He would like to give them advance warning of what to expect in the dissection room and to prepare them for the experience, and thinks that images would be very useful. IP has high expectations for this, although little or no experience of creating digital learning resources.</p>	
---	--

ACETS Exemplar 14: Interview

<i>Exemplifier</i>	Ian Parkin (anatomist), John Bashford (technical), Ian Bolton (Developer)
<i>Exemplar description</i>	"Introduction to Anatomy"
<i>Interviewer</i>	Dawn Leeder
<i>Date and location of interview</i>	24 th March 2005, Anatomy Department, Cambridge University
<i>Context of use</i>	IP To be used at home by medical students before they arrive in Cambridge, in the transition period between school and University and to give them the background to get to the department but mainly to provide them with the anatomical terminology so that they're up and 'walking' we can't expect them to be up and 'running' before they get here. On arrival they are inundated with masses of paperwork – too much for them to read. The only way we thought we could pre-empt that was to give them time at home before they came to look at something which was mobile and interactive – hence the website. We also expect them to start learning anatomy immediately and they are quite severely hampered because they don't know the language so if we can introduce that in advance we hope that they'll find their first few weeks a lot easier and a lot more efficient.
<i>How did you go about putting this together?</i>	IP Two years ago I started, let's be honest you started for me because we sat together and you got me going on the web, because I made it clear I wasn't used to going on the web and looking for material. After that initial trawl we then passed everything to John and particularly Ian who also then spent considerable time looking at a whole range of anatomy sites. Mainly sites from other anatomy departments to see what they had, to see what might be suitable for us to use.
<i>Was it hard for you initially to design and conceptualise this resource? I suppose that's a question for all of you as it was a team effort?</i> <i>Ian (developer) how did you go about building this?</i>	IP Can I lead on this? It was probably easier for me actually which is why I'm saying I'll lead on it because I think the difficult parts were done by John and Ian rather than me. My concept is present in the introductory pages of any anatomy textbook but as we've said we didn't want to give them paper because pictures in textbooks don't move. So my concept was get it out to them early make it move make it short sharp to the point and attractive so after that the concept was really essentially you Ian. JB That's why it was required to be a website rather than another 'wodge' of paper because Ian's saying this stuff goes out to them from college years in their vacation between sixth form and starting at University, they get 'wedges' of paper they aren't going to read another 'wodge'. Give them a website to look at – it's far more attractive, far more encouraged to do it. IB Well the information we got from Ian Parkin was a list of things he wanted to show, the types of basic anatomy terminology, different types of planes. Then you could figure out how to design a site how to break it up into different areas, bits of dissection, a basic introduction to the anatomy department. And then we formed a visual team and looked at different pictures, photographs which were needed. Then we took original photos which we couldn't find anywhere. So it wasn't difficult to conceptualise.
<i>What we're asking about now is the actual activity of you like, there is a, as you were saying earlier Ian, there are activities inherent in the materials that you wanted to produce to engage the students. How quickly were you able to come up with that activity design?</i>	IP I think we started off with the basic still images then wanted to bring in movement not only of the planes – a plane is essentially a static thing – but to actually have that plane moving aids the understanding of it even though the end point is static. Then there are all the joint positions which clearly involve movement. So we started off with a whole series of still images that Ian then started to work on and I think again – that's where you should take over because this is where it became difficult. I mean we knew what we wanted to do but it wasn't as easy as we thought it was going to be. IB: That's when we realised we didn't have the right software, and with your help we identified Flash and Director and we came to you for help with using Flash to do things. And so we had the movement put it and also then identifying pages which did have just pages and pages of texts, trying to find some relevant images and apply movement to those images as well to keep the interest going. JB: I was going to add to that, (having just left the room for a moment) don't forget we've actually covered searching websites with the initial aim of finding these images to put this site together from images that already exists
<i>This is the next question what third party materials did you use and how did you find and identify them</i>	JB Ok I think we jumped ahead a little there. IP Before we go tracking down RLO's the other thing that Ian did was take images of our early dissecting sessions that I had always thought were static anyway. There's a picture of the vertebral column, identify the following and Ian then added to that and interactivity to slide the cursor across to identify different bones, different parts of the bones, so he added to me – something that was extremely attractive to the whole process.

<p><i>So would this be something you think your students are familiar with? This approach are they subjected to this sort of material</i></p>	<p>IP: the reason I've gone quiet Dawn is because we're aiming this at people coming from school – so 'I don't really know' is the simple answer.</p> <p>DL: You need to ask them don't you?</p> <p>IP: The media would have us believe that all students are arriving here totally computer literate and regularly using websites and using the sort of thing we're talking about. So my gut reaction would be to say to you yes I think they probably are familiar with it. The trouble is when they arrive here it's actually quite surprising how many of them are not any more computer literate than I am, and that is rather sad. Equally there are a lot of them who are very computer literate but a lot of them aren't.</p>
<p><i>Ok so coming on to this third party materials question now? I just want to find out what if any you used and how did you find and identify them?</i></p>	<p>IB: Well that was a search for – I found it was difficult, by changing a few words in the search engine you found a list of sites which came up varied greatly, from things that were no use at all to several sites which could but useful but were all...</p> <p>Dawn: What sort of things were you searching for then?</p> <p>IB: Well first we started off searching for just basic anatomy. A lot of them were American and some were very good, but they were far too complex for our course. Some British sites were there. I then searched for plane terminology, things like 'axial plane' but the results were far too basic too crude and it was just text mainly, illustrations of separate planes</p> <p>JB: and you could never find a complete set could you, you might find a website that had some of the information and another website that had other bits but never the complete package and unless you had, could put together the complete package it's not of great value</p> <p>IP: Just one link on the planes page I think went to a page that had the complete set but it was an American site and we had to put a warning on there to students that the terminology was completely different and the spelling</p> <p>JB: It makes all of the American websites almost completely non-usable. You decided didn't you Ian because of terminology and spelling it would be more confusing.</p>
<p><i>Did you use any JISC sources?</i></p>	<p>IB: I think we used the skeletons project</p>
<p><i>Did you look at any commercial sources?</i></p>	<p>IP: I think there were some of the standard national textbooks all have images and like lots of these sites they have some very clever, very nice images some of them animated and 3-dimensional things that are often more about how clever it is to do that, than actually any real anatomical content. You do have to say that happens very often doesn't it. But it was a case of finding a collection of images that were suitable for the message that we wanted to get across, and they weren't there whether they were commercial or university or whatever based</p>
<p><i>So how much of the end result came from third party sources?</i></p>	<p>IB: We just supplied text links to other websites I think six or seven links. We have a visual link to the e-skeleton page.</p>
<p><i>Did you get third party clearance for that?</i></p>	<p>IB: Yes and it's just from two different websites, it was fairly straightforward and we didn't have any problems with it</p>
<p><i>Are you looking to use any of these materials outside of the context you're using them in now? Effectively reusing what you're already done?</i></p>	<p>IP: Yes in that we've clearly said we want this to be going out to students before they get here. But in the first couple of weeks that they're here it's the sort of thing that I think would be very helpful for them to look at again. And not all of them will have looked at it during their vacation.</p> <p>Dawn: Are you planning to build it into the curriculum then, in any structured way?</p> <p>IP: No I don't think so, it's there available in the background for those people who arrive who are still struggling a little bit with the terminology and who think, I'll just have another look at the website</p> <p>JB: But if they're going to get through the first couple of weeks or so they will have learned this stuff. So there is a need for it to reoccur later in the course</p> <p>IP: We may well look at the whole site and say well what else can we put on this. I think one of the things we haven't said yet and it may come late, sitting here talking about it I realise how little we've used other sources and that what I wouldn't want is to give the impression that we've rather arrogantly looked at everything else and said 'that's not good enough for us we don't want that', it definitely wasn't a case of that. As an introductory site we were specifically preparing students for our course with a sequence of – it starts with the vertebral column, continues with the upper limb and so our requirements were so specific that I also think that made it extremely difficult to use other material and it's one of the reasons that we had to come back to say well we've got to prepare our own</p> <p>Dawn: I think that's a very valid point, and I think you're right to stress that, and also given that I think that actually you have used quite a lot of third party materials given the constraints of the</p>

	<p>project. That you've actually used them quite creatively so I wouldn't be too worried.</p> <p>IP: I think it would also be fair to say that where we have introduced and covered what we wanted to do for our course, the links that Ian has added augment what we've done, they give a little extra something to the basics that we've given them. We could put another layer on top of that with the links we've put in.</p>
<i>How easy was this to lay out and put together in a technical sense?</i>	<p>IB: The layout was fine just using Dreamweaver and it was then just using Macromedia Flash to do the interactive, make the images move. That was the only problem I had because it was completely different from the software I'm used to using. Then trying to think of a way could you make the images move (not just for the sake of it) but actually get something out of the movement. So that was the only problem I had</p>
<i>Did you need any help to do that?</i>	<p>IB: Yes with the Flash side of things I went to CARET for a morning's help which was very useful because it actually helped to move me forward quite a way. Without that I think I still would be struggling</p>
<i>Will You be able to use the skills you picked up there in the future?</i>	<p>IB: Yes I think so. I've used them several times on other things since then so it was a useful process.</p>
<i>Were you pushing your skills in doing this?</i>	<p>IB: Yes!</p>
<i>Did you use any pre existing services and tools?</i>	<p>IB: Dreamweaver and Flash</p>
<i>Did you engage with colleagues from the anatomy department or colleagues from other departments?</i>	<p>JB: I think it was Ian and the three members of staff of the audio visual unit in anatomy, myself Ian and Adrian, who took all the original photographs</p>
<i>Was it easy to deliver and use?</i>	<p>IB: It's web-based so yes, very easy.</p>
<i>Did it give pedagogical benefit?</i>	<p>IP: the general feeling looking at students in the dissecting room, and this is talking both to the students and to the staff, particularly to the staff, is that they settled in more quickly got to grips with the course and what we expected them to do more quickly than in previous years. Now I can't quantify that I haven't got data to prove it, but this was a discussion with all the staff and just observing the students in the dissecting room who came in picked up their tools and got on with their learning, more quickly than in the past.</p> <p>JB: We have since then discussed how we might enforce a questionnaire in their first few days in the department, to see how many have used it etc.</p>
<i>Did it give economies of scale and efficiency do you think?</i>	<p>IP: No I think where the students have struggled in the past with all the terminology in anatomy, the struggle was decreased. So to me that's a huge educational benefit.</p> <p>JB: But at the same time it might have cost a bit in all our time and efforts but we've, that's all something we're learning from and benefiting from anyway. There are benefits all round from this experience aren't there, for students, from our own personal view of moving on for the future. Not only are the students up and running, we're up and running.</p>
<i>Have you evaluated this, and what form did the evaluation take?</i>	<p>IP: We asked students to look at the website and complete a questionnaire. We put this in the reflective diary, and they rated it good to excellent, in the main found it easy to use, found the introduction very helpful and some of them used it once or twice at the start of term, some of them used it many times. 'would you recommend the site to another student?' and all of them said Yes.</p> <p>JB: They made fairly obvious comments, asking for more of this sort of thing.</p> <p>Our group was about twenty students that Ian supervises so it was a focus group really</p>
<i>Has the use of learning objects made your work easier?</i>	<p>IP: Oh definitely because of those early weeks, as I say the students that the students had was less, therefore our workload was. We were able to concentrate on the anatomy rather than helping them with the terminology so there was a lot of benefit from that point of view</p> <p>JB: From the students point of view they benefited because they didn't spend their first two practicals learning the terminology. They spent the first two practicals learning what they were there to learn.</p>
<i>Would you do it again?</i>	<p>IP: It'll run every year yes.</p> <p>JB: we have done other things since we started this, we've had other things running along at the</p>

	<p>same time and there was a clear idea in the department, well certainly between us to have more of these. The subject cries out for it doesn't it, to have more stuff that's on the department website, students ask for it, little reviews things of all the practical sessions.</p>
<p><i>Did you enjoy it? You hated it at first didn't you lan?</i></p>	<p>IP: Yes I hated it at first and I have to say that yes I ended up enjoying it because it does get you out of your office to go and have conversations with John and Ian and you end up discussing anatomy but in a completely different way, and that was enjoyable. I do not like trawling the web, you know that, I can't be doing with it, and that makes me terribly old and terribly old fashioned. Ian trawled the web for me and when Ian found good things called me in to look at it so I was then able to enjoy what he had found.</p> <p>IB: Overall yes, the final product I was very happy with, there were times when I felt like banging my head against the wall but overall I learned new skills and I'd quite happily expand on it.</p> <p>JB: Yeah very much so, it's always nice to have something like this as a bit of a challenge from my point of view it's sort of – Ian's few problems with software, but it gives him new skills it gives the unit new skills. We have the facilities to create these sorts of images and for everybody to work together and do something different, do something creative and I think we've actually ended up creating a lot of useful information out there and there's a point here now I think if Ian goes back and does an internet search using some of the search terms he did to start with what's interesting is that our sites comes up all the time there now. It's a justification that a lot of the information that we wanted wasn't there beforehand, and it's nice to feel you've created something.</p>
<p><i>Any other points or comments?</i></p>	<p>IP: That the site as well as introducing the students to the terminology etc also introduced the first two practical sessions in the dissecting room which meant that it contained pictures of sections. I thought this was perfectly acceptable because when we went on the web you can find cadaveric pictures all the time, so I didn't query it and we put it up there, public access so incoming students could look at it. I now gather from the inspector of anatomy that it is if not illegal not far off being illegal contravening our British Anatomy Act to have cadaveric photographs on the web</p> <p>Dawn: I guess the individuals have not consented to that?</p> <p>IP: that's exactly the point, so it really doesn't matter if an American institution puts their cadavers on the web the fact is our cadavers have being donated to us without knowing that photographs of their body would go on the web, and this is a problem</p> <p>Dawn: So what happened as a result of this</p> <p>IP: As a result we left it up while we did the evaluation with the students but we will now have a word with our computer officer to password protect it. Now at the moment that doesn't matter because we don't have any incoming students and we will make sure next summer when the colleges write to students and let them know about the website in the first place we will make sure that they have an appropriate password to be able to open it. So that is a complication</p> <p>JB: the other thing is we don't actually know whether that's adequate, we're just flying with it</p> <p>Dawn: why can't you use the American material that's freely available?</p> <p>IP: this again comes back to the specificity that we wanted to introduce <i>our</i> first two sessions where the students will actually be looking at the prosections that we photographed and put on the web, and they are again specific to us.</p> <p>JB: And the quality of the material is often not that good is it, as a comparison to the quality of prosections produced in this department that everybody's used you. As our own prosector said when looking at some of the sites we showed him ' they look like the dog's been chewing them'. You know but this bit of chewed sample might be sitting there available three-dimensionally and all sorts of other clever technical things but the actual specimen is of little use.</p> <p>IP: the department has good specimens and the photographs are better than a lot of the other ones on the web</p> <p>JB: But we're starting with premium material, the staff who produce these prosections now annually win the anatomical dissection competition, don't they?</p> <p>IP: Yes</p> <p>JB: Three people on the staff have dominated that for years almost to the point where one of them now, has been asked not to enter any more because they now he'll take the award. It's a bit like Michael Schumacher in F1 isn't it. But if you've got that sort of material being produced in the department, which the department has always employed staff to do this sort of thing, you can't not use it</p> <p>IP: The other spin-off is that having done this as an introductory site for the ACETS project we have also now put quite a lot more material on the web, so it's a different project but in a way triggered by what we've done with ACETS. It's a different project as it can't go out for public access, it is more or less radiological material more in the way of prosections that is completely specific to our students when they're here.</p>

ACETS Exemplar 14: Reflective Diary

Introduction

The aim of this project was to excite and inspire incoming medical students by the creation of a web site that each year introduces them to their course in clinically applied anatomy, and to anatomical terminology.

Stage one: resource discovery

The Anatomy Department, University of Cambridge takes 300 medical students annually. Over the years the course has evolved and no longer follows one particular textbook. Therefore students could not be expected to obtain a text and prepare in advance. The course is intense and we have found that student learning has been hampered by their lack of knowledge or understanding of basic anatomical terminology and positioning. Such knowledge is also essential for the rest of their clinical careers.

The modern solution to this problem is to create a web site containing all of the relevant information, and easily accessible at the homes of prospective students prior to their arrival in Cambridge.

We set about many hours of internet searching via all the commonly available search engines, other anatomy department web sites, and book web sites. From the multitude of sites that were found, many were produced by American institutions, which made the terminology and spelling impossible for us to use. Others were too technically complex, using 3-D images, and displaying anatomy at a more detailed level than required by our introductory site.

For example:

www.anatomy.wsc.edu/teaching.html

www.scoi.com/anat.htm

www.pedheart.org/practioners/anatomy/index.html

www.vh.org/adult/provider/radiology/NormalRadAnatomy/index.html

www.med.wayne.edu/diagRadiology/Anatomy_modules/page1.html

www.bartleby.com/107/164.html

www.sirinet.net/~jgjohnso/intro.html

It became apparent that from the small number of remaining sites there was not sufficient appropriate material to construct a site that satisfied our specific demands.

For example:

www.leeds.ac.uk/chb/lectures/medweb.html

www.madsci.org/~lynn/vh/planes.htm

www.floyd.edu/academics/divisions/smpe/biology/th/2121/intro.htm

www.classes.tncc.edu/eburke/other_notes/intro_Anatomy.htm

www.sohp.soton.ac.uk/biosci/anatomy.htm

www.insitefitness.com.au/lessons/Anatomy/anatomy%20intro.html

www.rca_homework.com/sciences/biology/printables/introductiontoAnatomy.htm

www.spineuniverse.com/displayarticle.php/article1023.html

Some were password and copyright protected, but of those some have been included as "links" and therefore present no restriction. However all were approached by e-mail out of courtesy:

www.becomehealthynow.com

www.eskeletons.org

Stage two: preparation

To plan the essential elements that would enable students to arrive in Cambridge at least "up and walking".

1. A general introduction to Cambridge, with a map of how to get to the Anatomy Department.
2. An overview of the anatomy course, its aims, objectives, teaching methods, and staff.
3. A clearly presented, interactive introduction to anatomical planes and positions.
4. A visually attractive, clear and interactive presentation of joint movement, with the appropriate terminology.
5. To introduce the first two Dissecting Room sessions.
6. To investigate and purchase appropriate software to create an interactive web site i.e. "Macromedia Flash" and "Director".

Stage three: creation

The textual elements required in the web site were already available to be lifted from our departmentally created, and course-specific manual (1, 2 and 5 above). However, these probably rather dry tracts of text have been livened-up by the inclusion of interactive, specifically created illustrations.

The main thrust of the site (3, 4 and 5 above) required precise, accurate, photographic original illustrations. The department was searched for the necessary skeletal, radiological and prosected cadaveric material. A live model was enlisted to display the anatomical planes, and movements. Time was then spent in the department's studio digitally photographing all the above material to create the basic illustrations to fulfil the plan. Many hours were then spent using "Flash" to convert these still images into an exciting, interactive, annotated, user-friendly web site. Animation was built into the images to more efficiently illustrate movement. Information was augmented, and learning enhanced, by the addition of links to suitable material on other sites. All Colleges in Cambridge issue their incoming students with a preparatory pack during the August/September before term starts. This was the obvious vehicle by which to deliver the web site address.

Stage four: use and evaluation

The web site was piloted with a number of students and the use of a brief questionnaire, which yielded the following:

Q. How would you rate the design and layout of the FAB web site?

A. Good to excellent.

Q. Did you find the site easy to use/navigate?

A. OK to easy.

Q. How useful did you find the site as an introduction to anatomy?

A. Very helpful.

Q. How often did you access the site at the start of term?

A. Once or twice to many times.

Q. Would you recommend the site to another student?

A. All said yes.

(Comments made on the questionnaires: "Its very useful. Given a clear idea of what to expect and not to be thrown into the deep end when term begins". "Perhaps a link to a timetable").

During the early part of the first term, academic staff in the Dissecting Room were asked if they had noticed any difference in student knowledge, and in their ability to learn during practical classes. There was a distinct feeling that compared to previous years the students more quickly adapted to the required style of learning. They seemed more comfortable with the course and gained more from the first few Dissecting Room sessions.

ACETS Exemplar 14: Semi-structured Learning Design Statement

<i>Learning Design Name:</i>	Introduction to Anatomy
<i>Learning Designer(s):</i>	Ian Parkin (tech support John Bashford, Ian Bolton, and Adrian)
<i>Institution(s):</i>	University of Cambridge
<i>Course Context(s):</i>	Used by new students prior to arrival in department. A package containing information for new students is sent out by the colleges during the summer months, the resource is described and students are encouraged to complete resource on their own time prior to the beginning of term. Website is given and benefits are described.
<i>ACETS exemplar ID:</i>	14
<i>LD period:</i>	Open – no set date, but students encouraged to complete prior to beginning of term
<i>LD duration:</i>	Approximately 2 hours depending on own work habits/needs of individual student.

<i>In order to attain the following learning objective(s):</i>	<i>Specific learning objectives</i>	To learn specific terminology for anatomy course. This will also provide a foundation of basic knowledge which will be used throughout the course and duration of time spent in the program. Engaging with learning object will give students preparation prior to start of term.		
	<i>General learning outcomes</i>	To understand and apply course concepts throughout program. To view pictures of pro-sections in advance to be better prepared for term. Will help students to familiarize themselves with course content.		
<i>With prerequisite(s):</i>	First year standing as medical student			
<i>Trigger(s):</i>	Package arrives in mail from colleges, containing all information for new students, also contains a description of the learning resource, including benefits of undertaking and website address (open access i.e. Public access, to be password protected in the future)			
<i>The following persons/roles:</i>	<i>Name</i>	<i>Type (staff, student)</i>	<i>Description</i>	
	Student learner (SL)	student	First year medical students taking anatomy course	
	Subject expert (SE)	Instructor (Ian Parkin)	Organizes and teaches anatomy course to first year medical students	
<i>Perform:</i>	<i>Which roles?</i>	<i>Do what?</i>	<i>How?</i>	
<i>Learning activity(s):</i>	SL	Complete learning activity LO . There is no real 'start or end' point.	Students access the Internet from their choice of location. They can do resource in bits, and can navigate through various chapters or by subject.	
<i>Support activity(s):</i>	-	None, navigation through exercise is self-explanatory, although instructions contained in initial introductory package sent during summer term		
<i>Using environment(s) or scenario(s):</i>	All	Internet via departmental website		
<i>Using:</i>	<i>Which roles?</i>	<i>Use what?</i>	<i>To do what?</i>	
<i>Tool object(s):</i>	All	Internet activity	Learn terminology and concepts pertaining to anatomy	
<i>Knowledge object(s):</i>	All	learning activity LO: diagrams, text, images, x-rays	Learn terminology and concepts pertaining to anatomy, student can click and object becomes 'interactive'.	
<i>Test object(s):</i>	SL	None, only been one year so far, will evaluate at later date. Second group of students enrolled now,	Preliminary findings suggest that students found useful. Instructor can locate number of hits, but	

		this means that 600 students will have been exposed to learning object. Some questions pertaining to learning object may appear on dissecting exam. Few reflective questions used at end of activity.	not on what items looked at or by whom.
<i>Search service(s):</i>	Some external links provided, no search service used.		
<i>Communicate service(s):</i>	None, although email is available, as is a general discussion forum.		
<i>Announce service(s):</i>	None.		
<i>Other elements or notes:</i>	Inspired to do more because of ACETS project. Will build on knowledge from experience of doing, 'pushed our interests'		

Completion Survey

Recorder:	Erin Mills
Date:	April 19, 2005