Library Learning Objects UX Study - Final Report

Rationale

The purpose of this study is to discover students’ perceptions of digital learning objects and how they integrate them into their study practices. We hope our findings will be useful and provide some direction to the Digital Learning Commons initiative.

Recruitment

Students currently enrolled in CHEM 1050 were recruited to the study through an announcement in Courselink. This course was chosen as a case study because there are hundreds of students enrolled in this multi-section, required course and the students are drawn from several majors. CHEM 1050 is one of the “killer chem” courses in which students struggle to succeed. It is supported by SLGs, TAs, an optional online “Mastering Chemistry” study program and some students even hire personal tutors for the course. The Digital Learning Commons team has a relationship with the course coordinator, Lori Jones, who agreed to post the recruitment announcement.

18 first year students took part in the study.

We attracted a diverse group of students to our study. The students who chose to participate included some who had failed the CHEM 1050 midterm, some who had passed, but had expected to do better, some who had passed and were pleased with their results, and some who had passed with flying colours. The students are majoring in Biomedical Sciences, Microbiology, or Nutritional Science. They live in residence, live at home and commute, or live off campus with friends.

Research Method

Students were invited to an interview with either Juliene or Robin in self-selected groups of 2-4 students. Juliene conducted interviews with 5 groups and Robin conducted interviews with 4 groups. These small groups were composed of friends who study together and support each other through the course. Each student was thanked with a $10 Hospitality Services gift card.

Originally, we planned to ask students to respond to the following scenario:

*Imagine you flunked your multiple choice midterm. As a group, assess and discuss which resources will help you prepare for your next multiple choice exam. You have 10 minutes to complete this task.*

After one or two interviews, we abandoned the scenario approach and simply asked:
- How did you do on your midterm?
- How will you prepare for your final exam?
- Tell us about what you do to make sure you succeed in your courses.
- What do you do when you need support in one of your courses?
- What are some barriers to getting the help you need?
- What learning strategies did you use in high school and have your strategies changed?
- Show us around your CHEM 1050 course in Courselink. How do you use this site? What sections do you visit most often?

We wanted to make sure that the topic of learning objects was covered in the interview, so we provided the following items for their comments:

- The print and online versions of Multiple Choice Exams
- The video Midterm Marks Got You Down? 7 Steps to Get Back on Track
- The LibGuide Multiple Choice Exams: Start Here

Prompting questions:
- Which format do you prefer. Why?
- How could these resources be improved?
- Does it matter how a resource is "branded" (i.e. UG Learning Commons, etc)

Findings

Overview

We felt that these interviews were some of the most fascinating we have ever done as a UX team. We quoted the students extensively in this long report. We hope you’ll find it equally fascinating and worth your while!

The students were very open and eager to speak with us about their learning experiences. Whereas in other UX studies, students have admitted that they were drawn in because of the free Starbucks coupon, these students did not seem at all motivated by the incentive gift card. They showed a great deal of self awareness and insight into their motivations, study habits, and learning goals and wanted to tell us about their experiences.

None of the students we spoke to, including those who had done well on their midterm exam, experienced CHEM 1050 as a walk in the park. They found the midterm very challenging yet fair. Many acknowledged that they should have spent more time studying, or should have approached their studying practices differently. They noted that it was not enough to memorize information; they needed to apply what they had learned to novel problems. They were adept at describing the different teaching approaches of the instructors in each section of the course and had thought about which approach best matched their personal learning preferences. Some students even attended different sections because a particular professor’s teaching style better aligned with their perceived learning style.
They told us that they accepted that there were limits to how well they could do because they had only so much time to devote to any one course. Students often expressed concern that they were dedicating too much time to this course and as a result, other courses were being neglected. They took full personal responsibility for their own learning and blamed only themselves if they did not succeed as they had hoped.

- We had everything we needed. I am speaking for myself here, but I feel like I could have tried better and studied much more earlier and done way better.

- They also opened up a lot of office hours. Usually they have like one or two, but a week before the midterm they had the whole week open just in case you had questions. I never went in even though I didn’t know what I was doing, I still didn’t go in, mainly because I don’t want to ask for help because it’s like if I do then I’m afraid I’m kind of wasting their time. What if my question is super obvious or I’m just not understanding it properly? It’s a barrier for me to get better. And also I think I have too much pride in myself and I don’t think I need anybody else’s help. I can figure this out by myself. That is just who I am.

- I just feel like for me, no matter how hard I work for it I wouldn’t get perfect and there is always some concept that I guess I’m not fully understanding but if I don’t do well that means I didn’t do enough practices.

- I don’t think there is any easy way to do studying, because I think if you want to get good marks you really need to put effort into it.

The students were quite aware of many learning services and resources on campus and very appreciative of them (even when—spoiler alert!—they did not find them as helpful as they’d hoped).

- One of the things I enjoyed about this university when I came in was that there were so many resources for help. You just say ‘help’ and there are people there.

- I don’t see any barriers outside of myself. Everywhere is pretty helpful and the profs and SLGs, Science Commons, and the Library are helpful.

All the students described a serious study regime for CHEM 1050 which included some combination of attending lectures, taking notes, rewriting and revising notes, practising problems, reviewing the textbook and the lecture notes, using the lecture notes of the instructors in other sections of the course, working through previous midterms, and purchasing the optional *Mastering Chemistry* tutorial and assessment product.

We heard about a myriad of ways students sought out extra help on understanding chemistry concepts and problems by attending SLGs, Learning Peers, meeting with TAs in the Science
Commons, Googling problems, creating peer study groups, using Khan Academy and other educational videos through Youtube, creating cue cards for review, quizzing each other, hiring a tutor, acquiring an upper year student mentor, and reaching out for peer support through Facebook groups and Discussion posts in Courselink.

Of all these study strategies, the most important were practising problems and conferring with their peers. Building a learning support network began for some students even before the first day of school. Students told us they used Start Online to learn about UG resources, and visited many UG Facebook groups for advice on courses and instructors. They continued to visit these sites for ongoing course support. Students living in an academic residence cluster attested to the valuable learning support of this arrangement. Few students looked to the course instructor for additional support (this is described as a last resort). No students relied on help from family.

The students told us how important their peers were to their success.

- Well we have dinners together and stuff, with our other roommate too. So we will just bring it up. We even have study sessions together where we work at the same table and work on stuff and then say ‘Oh what is this?’ and talk about it.

- I usually go to my peers that are also in the course and just ask for help with things.

- The first thing that I do would be to go to my peers and see what their take on it was.

- Sometimes when I come back from classes when I’ve learned something new... I’ll be talking to (my friend) about what I’ve learned and she’ll have no idea about what I’m talking about, but it verifies in my head that I can say it and OK yes that makes sense and I’m on the right track and I’m doing it without looking at the notes or having someone tell it to me. If it doesn’t make sense when I’m saying it I’m like ‘Nevermind, I’m going to look back at my notes.’

- For me, I just consult my friends. I don’t know this and I wonder if one of them will know about it. Even if they aren’t in the course, they may know it because they took the course before.

- (Friends) are my first go to and if they don’t know it either I usually just suck it up or maybe just research like I said, I don’t really talk to the profs, I don’t go to SLGs. I should probably change that.

- This semester I have mostly just been asking friends general things and if I don’t find it I just Google it and if I don’t get an answer from that then I just wing it.

Conspicuously absent from the students’ list of study supports was Learning Commons learning objects. Most were aware of the shelf of paper handouts and many had picked up a pile of them during Orientation week. The few that read them did so during a lull in the tour, mere minutes
after picking them up, and then never referred to them again. Most had never come across any of the digital learning objects. Whereas students were willing to devote quite a lot of time to mastering the content of their course, they were much less interested in learning anything they perceived as outside the core, required content of their course.

- I would say though that understanding the (course) concepts is more important than knowing these tips on multiple choice exams.

- I don’t think I would ever think to be like ‘OK, I failed my midterm. Now I’m going to look for how to better do exams.’ I’d be more likely to be like ‘Wow, I need to learn how to better understand the material.’

Although the intended focus of this study was students’ views and uses of learning objects, the students told us (unprompted) much more about their experiences of SLGs, TAs, mentors, and other services and resources. We think it is valuable to share what they told us about them.

**Learning Objects**

Comments on the print handout / webpage Multiple Choice Exams.

Almost all students had seen the display on the first floor and had picked up some of the handouts, particularly the citation style handouts. Only one student had seen the Multiple Choice Exams handout before. This student said:

- Oh! During my Guelph tours the orientation leader handed them out to us and this actually really helped me for my bio midterm. [Interviewer: So you read it?] Yeah. it was just like summed up what I already know about multiple choice exams and midterms, but it did give a really good push in the right direction of what to expect for the midterms. As soon as I got it I read it on the tour and it was just like more of a summary of what I already knew, but I didn’t really know what to expect for university exams, but it just kind of like reassured me. So I kind of went into the exam with that much more confidence, a little tiny bit.

When we showed them the paper and online versions of this handout, some told us they might be interested, but they didn’t know (or had forgotten) it was available:

- I’ve used the citing sources handouts. I think for multiple choice, professors tell us how to do it so I don’t need this. I think for preparing for midterms, well, I forget about these resources. I stay home to study anyway. The first time I saw these I thought they were useful but then I forgot about them. It’s not unuseful, but a lot of people forget.

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1 The only Learning Commons resource the students had discovered on their own and were excited about was the Mark Calculator.
I think it is just me not being active enough to search out all of the resources that are available. It is not that they are not there it is just that I am not really looking for them.

I don’t think I saw the midterm resource though, but yeah that’s good.

If more, especially 1st years, came to take the time to read it over, not even study it, just look it over and see the headers, there would be a very big boost in people’s confidence and midterm or assignment writing skills because it’s people who have taken these courses who have written these I believe, so they know what they are talking about. [Interviewer: Well some of them are written by learning specialists.] Well they still should know what they are talking about. [Interviewer: Now that you know what to expect with university courses, are these handouts still useful?] Probably not, maybe just as like a quick reference. I don’t think I would take the time to read it over again. Because like I said, it is just like a review of what we already know. It is just solidifying that fact.

However, the students repeatedly told us they thought the handout was too long.

It would be helpful, but if it were way shorter. A page. A list.

I think that’s another thing that got me with the handout, it wasn’t really bolded enough to catch your eye.

They look a little bit intimidating. Oh my God, if I don’t read through all of this, I won’t do well, but it’s so much to read through that I don’t want to stress myself out. If it was little summaries like–right here it says “Multiple Choice. Do you love it or hate it?” That’s interesting, right? That’s fun, but then I see 3 pages front and back and think, no, another day, maybe.

It is a lot of text. I would say a video would be a bit more helpful.

I would say if there was less text that would be better. It’s just the same thing as a PowerPoint presentation, you know, less text and more highlights are always better than a full screen of text because students don’t really want to read a lot of stuff on this kind of thing.

I wouldn’t read all of them maybe just the bold or whatever I scan through. I guess people don’t want to read because people … want to study and have a lot of stuff to do?

Less text is better, just the main points.

I feel like it could be sectioned a little more cleanly so it doesn’t look just like all text. If it kind of separated into little boxes or something. So then the reader could like focus or commit to one box and read just one thing and then if it is helpful then continue to read.
• Like some pictures or something might be helpful. I like how there are big words for each section. Like the headings are easy to see. And I like the bullets too. That’s nice.

We also heard from some that they thought this handout is superfluous to the core learning they had to do and did not speak to their needs and goals.

• I guess, honestly, all of this stuff written here (in this handout) is just dragging on all around the central topic of: Study! What more can you do than read the entire textbook and do questions?

• The tips in there are definitely good, and right now when I saw them, I thought I might as well read them because I’m not doing anything else, but when I’m at home, it’s not something I’m going to go out of my way to do. I’m just going to keep doing what I’m doing and hopefully it will work out.

• I think something on problem-based exams would be more helpful.

• I would say a lot of these comments are a bit generic.

• (Although) I think there are good tips in here, there are some strategies I already know wouldn’t help me if I were to actually apply them.

• I feel like a lot of people don’t read these things because you feel like you already do that. Like yeah, ‘stay on top of your courses’-- of course you should do that. When people have failed and are looking for help, they are looking for something that is not what we keep hearing over and over again, which may not exist.

• I think, I’d probably never pick them up because I already have my own way of studying. It probably would be a good way to learn more things, but I’m not a very quick reader so probably not.

• Yeah, some of these things are a little common knowledge such as ‘post exam strategies’. If I’m honest, I don’t know if I would pick up one of these. I think I would just try and understand the content more of the course I’m struggling in.

• Usually I know where I went wrong when I fail a midterm. Like either not enough time studying or I just knew I didn’t understand the concepts. I don’t know if I’d use this specifically.

Students gave us a mix of responses about whether they would prefer print or online versions of the handout. Some preferred print so they could make notes and highlight sections. Others preferred the convenience of an online version. The question is somewhat moot, since they had not used either format and most were not interested in pursuing it.
Comments on the video *Midterm Marks Got You Down? 7 Steps to Get Back on Track*

Students reacted much more positively when shown this video.

- *I would probably use this (video) just because it’s more visual and I like to listen. The handout is more boring, and this is visually pleasing. It makes me want to engage. And it’s only 2 minutes so I can sit and listen to it.*

- *It’s vibrant. It tries to make it interesting. Definitely more interesting than a handout.*

- *Comparatively, it’s a lot better than this handout.*

- *If it was a video (and not a handout), I’d probably watch the video.*

- *I watched...the printing (video) because for a lot of my courses there are library videos sometimes about our assignments and stuff. I remember there was another one I watched last semester, I can’t remember which one. But always from the library. I lllllloooovvveeeeee them! I think they are very helpful.*

- *I would prefer a video definitely. It is just attractive and highlights the main points.*

For the most part, they had never come across this (or any other) Library or Learning Commons video before.

- *I literally found out about these videos 10 minutes ago when I walked into the library and saw on the screen ‘Do you need help? The library has short plus helpful videos if you want help.’ I’ve never seen them but they seem cool. They seem interesting.*

- *I think if I came across a video I would watch it, but I wouldn’t seek it out.*

- *I think I’d rather a video if I knew it was out there because like I said I’m a slow reader and sometimes it takes a while for me to understand what’s happening, but if they are like talking to me, I feel like I could relate better, but we would have to know the videos were out there. I think it is a good idea though.*

- *I think i remember someone coming up before one of my classes started last semester and mentioning it but I never went out of my way to search it out.*

Two students told us they didn’t like the tone of the videos

- *I don’t like them they are too ‘cringey.’ [Interviewer: What do you mean?] They are cheesy. It is just like they bring you down and they are talking to you like a child and I just don’t like it. [Interviewer: Which videos?] Honestly, I don’t remember because I got*
like 30 secs through and i was just like ‘Nope!’
[Interviewer plays video]
Student A: I feel like all of those animations are not necessary for a university student.
Student B: Again it is like talking down to us.
Student A: It is childish. Not that I mind it. It is fine, it looks cute, but we don’t really need it.

SLGs

Students mentioned SLGs quite often and without prompting. Only one student had had an unequivocally positive experience with the CHEM 1050 SLG:

We went to almost every session. I found the notes helpful and we could discuss if we missed something. Someone could tell me if I got something wrong, and vice versa. It’s kind of like group study--helping each other out to make your mistakes more verbal.

However, most of the students did not find the CHEM 1050 SLG met their needs for the following reasons:

1) They do not trust the expertise of the peer leader.

- I felt like the leader wasn’t sure about what she was talking about because she was learning it again. She had done chemistry in the past, but not recently so I found it was hard because she wasn’t confident in herself to teach me.

- It really depends on the SLG teacher. Yeah, because I remember the Bio one we went to it was pretty much just independent study, but you are with other people in a room. So it was like I could be doing this at home, I don’t really have to be here. It was just like ‘Define these terms and you can look through the textbook’ and in my mind I was like, ‘Yeah I could do that at home’. I need one-on-one explanations and all of that.

2) The topic of the weekly session is not in line with their own learning needs.

- Because it’s collaborative learning. They can’t tell you the answers because they’re only a student and if they tell you the wrong thing, like, that’s not good, but if you work with your peers and your peers don’t know how to do it, it’s not helping you get an answer.

- The one and only time I went, I feel like she was good with the materials, but she wasn’t really willing to help...if I asked her some questions about some other related information, that we weren’t working on that day. Of course it is related but not what she was going through on that session, she wouldn’t help me. She was like ‘OK, you can just go back to your lecture notes for that.’
They could have worked on more like problems. I was confused with some topics they didn’t cover in the SLG so I didn’t really stay very long.

They only talk about the concept during that week and you can’t really ask any questions before. They had this lesson planned just for whatever happened in lecture that week and then they move on to the next week.

I didn’t really like it because they just give you worksheets and you have to solve it on your own and they would kind of mark it with you. And like if I wanted to do that I could have done that on my own and then went to the prof and shown him my work process and asked him what I’m doing wrong. So I feel like it was kind of a waste of time for me personally. I like to study by myself first and then ask people for help if i don’t understand things.

Well I didn’t go because when they told me about it they said a group of people come together and go over the course. I thought that wouldn’t work out because the group is too big. There is not enough people to help every single person. And also I knew that they weren’t going to teach us, they are just going over and marking, so like I don't need to do that. I have friends who can do that for me. So there is no point in me going.

The reason I didn’t go is I’m not exactly at the same pace as the course. SLGs discuss the topic from that week’s lecture. I’m a bit behind or ahead. I get everything I need from the lecture and that’s enough. I would rather spend that time studying myself.

I was confused with some topics they didn’t cover in the SLG so I didn’t really stay very long….They only talk about the concept during that week and you can’t really ask any questions before. They had this lesson planned just for whatever happened in lecture that week and then they move on to the next week.

You learn this really tough concept in class and SLGs throughout the week will cover that concept, but if you can’t go to an SLG that week than you kind of missed your chance to understand it.

3) The SLG session is too long with not enough payback.

So you could go to an SLG and it could help you or it could be 3 hours where you don’t really learn anything new or resolve any issues. That was always kind of a risk that I took because I was like I don’t know if they are actually going to answer my question. I don’t know if I’m actually going to learn what I have to.

And then it is just a waste of time and not what you expected. And in terms of barriers, it’s about the same thing for me. Just time.
- I don’t (go) just because they’re 3 hours long and I don’t have the time to do that. And I don’t feel like I struggle that much that I need to go to them. And I’d like to have my question directly answered.

- Honestly, it’s so time consuming. SLGs, it’s a 3 hour session. [Interviewer: You can’t just drop in and then leave early?] That’s really awkward, you can’t do that. You can’t just randomly join a table, it would be weird. It’s awkward if you come in late, too.

4) The SLG session is scheduled at an inconvenient time.

- Plus the times when I do want to go it just doesn’t match up with my schedule. There have been times where I’ve wanted to go but I have a lecture at this time.

- I went to a couple last semester for CHEM 1040, but I find it clashes with my schedule so I find I can’t go this semester.

- The problem with SLGs is we are both off campus students. We both live in Mississauga and we drive here every single day. The way we structured our courses is to have courses 5 days a week and we end at 4:30 on Tues and Thurs and a little bit earlier at 3:30 M, W, F, and the commute itself is an hour, so if we were to stay for SLGs later at night--they run from 7-10--and then drive home, that’s 3 hours between 4-7 and we’re not doing anything because we’re tired from lectures. If we did an SLG and then went home, we’d have no time to do homework and no time to eat because we don’t have a campus meal plan. I don’t think I’ve ever been to an SLG. I really wanted to. I know when they happen. I asked leaders, when are you having a session, but I’ve never really gone aside from BIO 1070 which was beneficial, but it doesn’t work out with our schedule...I think SLGs are a great idea but I wish they were more accessible to students not living on campus.

Other Learning Resources

Students told us they used Khan Academy videos, general Google searches, and Facebook study groups. This suggested to us that the sources of information was not critical to them. University of Guelph, Learning Commons, and Library branding was not a factor in their use of resources.

Mastering Chemistry

Mastering Chemistry is a for-purchase tutorial and assessment product from Pearson. Students had the option to purchase this product. If they completed the tutorials and quizzes, they could earn a comparatively easy 10% of their grade. Only one student we spoke to chose not to purchase it.
**TAs**

Students sought out the TAs in the Science Commons to clarify course expectations, such as how many significant digits they need to include in their lab reports. Students were not sure about when they could expect to find a TA in the Library’s Science Commons--it was a bit hit and miss.

- *I had problems and I went to the third floor and went to the “chemistry learning group”, but there were 3 times I went there and nobody was there. It was their working time, because I checked, but nobody was there. I was confused. After that 3 times I was like ‘OK I'm not going to go here anymore. I’m just going to figure it out myself.’*

- *If I have questions I might also go to the TAs because they are the ones that mark your assignments. I sometimes go to them if I have questions like on my paper topic or my focus of the paper. Sometimes they wouldn’t answer because it gave away some stuff, but why not give it a shot because they might give you more information about other kinds of stuff that will help you later. Don’t hesitate to ask anyone!*

**Learning Peer Helpers**

- Two students talked about meeting with a Learning Peer Helper. One told us: *I’d like go to them with my situation and say ‘OK so I study my butt off and do all this’, and they say, ‘I don’t know what you’re doing wrong. I don’t understand why you’re not getting good grades.’ I’d say, ‘I don’t know either!’ ....As much as there are resources here (at UG), I think the only person that can (really) benefit you is you.*

- Another student told us: *I met with somebody on the first floor and I’m not exactly sure the name of the thing. I went and asked for strategies on how to improve and approach problem-based courses and exams and time management and all that and I applied all of those. At least, I think I applied all of them this time and it still didn’t work out....I applied all of that but it doesn’t pay off so I wonder what I’ve done wrong.*

**Tutors**

- One student told us he had hired a tutor: *I hired a tutor. I’ve been to 4 or 5 people and maybe 2 of the 5 were really helpful, but the other three were a waste of my money.*

**Mentors**

- One student told us about a mentorship program which he is greatly benefiting from. He had to apply. (He couldn’t remember, but he thinks it is through the Biomedical Students Association): *An upper year came to the chat and was offering advice. I copied and pasted everything he said and put it into a doc. He said, I’d highly recommend taking Mastering Chem because it will help you. I recommend this prof and this prof. I recommend taking notes like this.... He’s helped so much. I think every student should have a peer mentor. He helps with literally everything: advice, things that don't directly pertain to school like extracurriculars. He is on the executive of the Biomed club which*
works out perfectly because I want to be a pre-med student. He offered advice on course selection, ways to study, research opportunities, extra curricular opportunities what I would have never known because where is this information? He is a bank of information.

Residence Cluster

- One student told us: We live in a biomed cluster so it’s people in the program who can help you. They have study sessions each week that are held in the lounge in residence. At the beginning of the semester a bunch of students used to go there and the leader would teach small little lessons and it was really helpful.

Free Online Resources

We heard about general Google searches, Khan Academy videos, and a few other online resources.

- If it’s late at night and I can’t reach anybody. I will just search online and Google it.

- Khan Academy is a really good site. For last semester I used it for Bio. For that part I went there a lot and studied so much from them. They have videos which are very helpful. Like a teacher explaining and drawing things. I can’t remember how I knew about it, but I think it was a long time ago, like in high school, but I didn’t use it then, but I have now.

- I’ll look up images on Google, just to get an idea of how a concept works and also Khan Academy especially for chemistry.

Courselink

Unsurprisingly, Courselink is home base for the students in this course.

- I use Courselink a lot. I don’t know how anyone could get through without using it, honestly. I don’t think I use the Library resources as much except for finding articles. Maybe because there is nothing you need, because on Courselink you have to go there because your labs and other links are all right there. Once you are on there it is easier to go to the quiz and just try it whereas there is nothing that I actually have to go to the Library website for, so I’m less like to go like ‘Oh look they have course resources’ or things like that…. I don’t know what’s provided there because I haven’t looked, but if whatever stuff is on there they should link to it through Courselink because we are there all of the time.

- (After showing the video Midterm Marks Got You Down? 7 Steps to Get Back on Track) Student A: If I knew about it, I would have watched it by now. Student B: If it was on Courselink. Student A: Yeah, if it was on Courselink. On the side. [Shows his Courselink site]. If
something was offered right here [Points to the right side of the screen]...in my other courses I actually click on them and go through them if they are offered on the side. See? Online workshop help [Shows me another course]. I click on these. I spend more time on this website (Courselink) then any other.

- A lot of my stuff I need is online and most of them are on Courselink. So if I have to navigate to different websites to get to different information, I would feel lazy and not do it. But if there was already a post or a handout about it on Courselink and it is just a link, I would probably do it. Like i said if this was on Courselink or Web Advisor than I might look at it. I’ve never actually been to the Library’s website.

- Yeah if the (video and Learning Commons handout) were all in Courselink it would probably help a lot. For science students we have those widgets for the safety chem workshops and if you had one about like ‘how to get through 1st year’ would be great.

The students pay most attention to the Content pages, the Announcements, and Grades. There were mixed feelings about the Discussion Board. Some thought it was a waste of time, and others followed the discussions diligently. They did not, for the most part, explore other parts of Courselink, and rarely spent any time on any resources not considered core content.

The instructor’s choices in organizing content within Courselink affected what students pay attention to. One student told us he hadn’t realized that practice problems were “hidden in the lecture notes” and students in one section of the course had an easier time finding the links to past years’ midterms on their version of the Courselink site.

A section called “A+ Resources” was embedded into the course. These resources included:
- Past midterms
- Academic integrity
- What successful and unsuccessful university students do
- Undergraduate academic information
- Index of learning styles
- Learning Commons
- Numeracy & Quantitative
- Stress Management
- Library

All the students had clicked on Past Midterms link. Only one student had checked out any of the other links. What we more often heard was:

- (Oh!) Here’s a link to the library and stuff. I’ve never used these....

- [Interviewer: Have you ever clicked on the “useful links at Guelph” link?] No I have not. [Interviewer: Why?] Never really thought of it. On chem there is a lot to do as well. There
is a lot of stuff to take your attention, so there is less time for browsing because you have to do all of your dry and wet labs and quizzes to make you practice.

Limitations

We interviewed a very small slice of students from one course. Would responses be different had we spoken with a different 18 students from the same course, or with students in a different course, or with students majoring in the Arts of Social Sciences, or with upper year undergraduates? No doubt we would have heard different things and more variation were we to conduct a similar study with a different group of students.

Nevertheless, we think this case study provides an intriguing glimpse into some UG students’ learning practices.

Recommendations

- We feel that this study produced a rich description of how students describe their own studying habits and how they interact with the supports and services on campus. We would like to encourage any library staff who are currently collecting only (or mostly) quantitative data to try some in-depth interviews. We’d be happy to help!

- It appears that students are most open to learning supports after they have tried (and failed) on their own. Continue to do active outreach to students right after midterm time. “Pushing” information to students seems to be the best (and maybe only) way to reach them. As one student put it: So I guess what the library can do is after every midterm the Library can send everyone an email saying if you don’t do good, here are some videos and attach these as PDFs.

- If this is not already a practice, follow up with students who have met with learning peers or staff to check in with how their study strategies are working.

- If this is not already being done, learn more about how other campus supports complement Learning Commons services for partnerships, sharing ideas, etc. (e.g. TAs in Science Commons, mentors, residence clusters, etc.)

- Market resources and services in a way which students see a direct link with the core content of their courses, rather than as ancillary learning strategies. For example, students use the vocabulary of ‘problem solving.’ Is this a better way to attract student attention than “how to write multiple choice exams’, for example?

- Focus on creating videos, rather than handouts. If handouts, make them very short. Continue to provide print and online versions.
- Strive to integrate materials into Courselink, especially as news items, or as part of the core Content section.