

LIANZA Conference 2011



Interactive user instruction, activities and games that work

The ***Interactive user instruction, activities and games that work*** workshop is designed based on the findings of postgraduate research conducted in 2010 in partial fulfilment of the requirements for the degree of Master of Library and Information Studies at Victoria University of Wellington. The final research report is available at: <http://hdl.handle.net/10063/1569>.

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Activity 1: Information seeking habits: What kind of searcher are you?

Have a look at the list of information seeking types of behaviour described below, choose your own type ("animal"), and discuss your choice with the student sitting next to you.

	<p><u>Ostriches</u></p> <p>Ostriches avoid looking for information, especially if it might challenge what they already know.</p>
	<p><u>Squirrels</u></p> <p>Squirrels rely on information which they have previously found and stored away.</p>
	<p><u>Giant pandas</u></p> <p>Pandas rely on a single source of information, even if other sources are available.</p>
	<p><u>Orb weaver spiders</u></p> <p>Spiders rely exclusively on the web.</p>
	<p><u>Giant anteaters</u></p> <p>Anteaters use several sources of information, but do not spend too long with each source.</p>
	<p><u>Vultures</u></p> <p>Vultures are scavengers, not hunters, relying on scraps of information they find lying around.</p>
	<p><u>Cuckoos</u></p> <p>Cuckoos expect others to do all the searching for them.</p>
	<p><u>Magpies</u></p> <p>Magpies get easily distracted by the new and eye-catching objects and ignore other relevant materials.</p>

Adapted from: Borg, M., Stretton, E. (2009). My students and other animals. Or a vulture, an orb weaver spider, a giant panda and 900 undergraduate business students... *Journal of Information Literacy*, 3(1), pp. 19-30.

Activity 2: Boolean stand-up game

The activity has been adapted specifically for large lecture theatre information literacy (IL) teaching at the University of Auckland, Faculty of Engineering. It has been successfully applied during the Semester I 2011 in the following course-related IL presentations: ELECTENG 209 lecture, MEC 2nd Year lecture, CCE 2nd Year lecture, SE 206 lecture. The original activity slides are:

<p>For successful searching: Combine your keywords with</p> <p>Boolean operators: AND OR NOT / AND NOT</p>	<p>BOOLEAN <u>AND</u> SEARCH</p>	<p>ALL who are currently enrolled in SE 206 PLEASE STAND UP</p>
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<p>All who are SE 206 STUDENTS <u>AND</u> GIRLS PLEASE REMAIN STANDING</p>	<p>Those of you who are SE 206 STUDENTS <u>AND</u> GIRLS <u>AND</u> BORN IN NZ PLEASE REMAIN STANDING</p>	<p>ALL PLEASE SIT DOWN</p>
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<p>BOOLEAN <u>OR</u> SEARCH</p>	<p>ALL who are SE 206 STUDENTS <u>OR</u> BORN IN NZ <u>OR</u> BOYS PLEASE STAND UP</p>	<p>BOOLEAN <u>NOT / AND NOT</u> SEARCH</p>
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<p>Those of you who are SE 206 STUDENTS <u>OR</u> BORN IN NZ <u>AND NOT</u> GIRLS PLEASE REMAIN STANDING</p>

Activity 3: Role-play

The Difficult Service Situations role-play scenarios are adapted from:

Willis, M. R. (1999). *Dealing with difficult people in the library*. Chicago: American Library Association.

SCENARIO I

A patron approaches the Lending desk:

Patron: "I don't think it is right that I should have to pay this fine on my record. I never received any recall notices. I only found out I had a fine when I was checking my account online."

Librarian: "Let me just check that. Yes, I can see that a request has been placed on that book by another patron and a notice would have been sent out to your email address the following day."

Patron: "Well, I didn't get a recall notice!"

Librarian: "Were you checking your library email address? Because – that's where the notice was sent!"

Patron: "What are you talking about? I don't know anything about that! Why aren't you sending notices to the address I selected years ago?"

Librarian: "The email policy was changed at the beginning of 2009, there was lots of advertising around the library about it and it is advertised on the front page of the library website"

Patron: "I wasn't here in 2009 so I don't see how you can expect me to know about any of that. Just get rid of the fine."

How would you proceed from here?

Difficult Service Situations: Role-play activity

SCENARIO II

A patron who has been wandering through the library, speaking to an invisible companion, approaches a librarian.

Patron: "That man is messing with my head."

Librarian: "I'm sorry, I didn't understand you. Is someone bothering you?"

Patron: "That man behind the tree is messing with my head. Tell him to leave me alone!"

Librarian: "I would be happy to help you with any questions you have about the library."

Patron (now visibly upset, voice raised): "Tell that man behind the tree to leave me alone!"

What is your next step in dealing with this patron?

Difficult Service Situations: Role-play activity

SCENARIO III

A visibly angry patron approaches the desk and throws a book across the desk.

Patron (screaming): "Every time I come to this library something's screwed up!"

Librarian: "I'm sorry you feel that way. Let's see if..."

Patron (interrupting staff): "Sorry, schmorry! What about my report?"

Librarian: "I'd like to help you. Yelling makes it hard for me to find solutions. If you can tell me more about this, I can help you."

Patron (still screaming): "Something's always broken around here. Today it's the copy machine and I have to copy this to do my report!"

What tactics do you use to deal with this patron?

CHALLENGES OF APPLYING THE INTERACTIVE TEACHING PRACTICES IN INFORMATION LITERACY INSTRUCTION	RECOMMENDED SOLUTIONS
DATABASE INTERFACES & CONTENT CHANGE SUDDENLY	
ORGANISING INTERACTIVE ACTIVITY IN A LECTURE THEATRE (no hands-on)	Solutions: use of humour, controversial examples, questions, activities based on physical movement and props (e.g. dog))
VARIETY OF SKILL LEVELS & PRE-KNOWLEDGE AMONG ATTENDEES <ul style="list-style-type: none"> - Teaching a variety of students with different skill levels/pre-knowledge in the same class. 	Solution: preparing "extra for experts" content and/or an activity in advance; peer teaching.
TIME MANAGEMENT: <ul style="list-style-type: none"> - Managing the duration of an activity - almost unpredictable due to unpredictability of students' response 	Practical solution: <ul style="list-style-type: none"> - Structuring the session and activities to allow additional time spent on answering questions and additional instruction (if needed).
ACHIEVING SUFFICIENT LEVEL OF "DIFFICULTY"	
PARTICIPANT/STUDENT BEHAVIOUR I: <ul style="list-style-type: none"> - Mood of your audience varies depending on the time of the day. - Attendees reluctant to take part in activity – seeing it as irrelevant or as repetition of previous tutorials - Participants quiet and reluctant to respond openly in front of the complete class or group/ feel uncomfortable to take part in an activity and contribute - A person 'taking over' the class, monopolizing/domineering and imposing opinions without consideration for other students 	<ul style="list-style-type: none"> - Creation of relaxed, safe and fun learning environment, the "surprise" effect. - Presenter taking up a role of proactive mediator and making the activity structure more flexible - taking the pressure off the reluctant/shy student. - Asking students to write their responses instead of presenting them out loud. - Creating safe learning environment - it is safe to make mistakes; it is safe to give wrong answer. - Taking their attention off the activity and introducing anecdotal stories about the presenter - we all are human beings, we all have flaws.
PRESENTER BOREDOM <ul style="list-style-type: none"> - Repetitive teaching of the same / dry content 	Theatrical teaching techniques, use of humour, co-teaching with a colleague.
PRESENTER TIRED	Theatrical teaching techniques, use of humour, use of interesting props, co-teaching.
ACTIVITY PREPARATION <ul style="list-style-type: none"> - Difficulty finding adequate examples and materials 	
ONE- SHOT SESSION <ul style="list-style-type: none"> - Presenting in front of a group of 	

<p>strangers you may not have a chance to see again and build rapport</p> <ul style="list-style-type: none"> - Lack of conditions for establishing an adequate learning environment in a class - Inability to see students/patrons again 	
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References:

Activity I

Borg, M., Stretton, E. (2009). My students and other animals. Or a vulture, an orb weaver spider, a giant panda and 900 undergraduate business students... *Journal of Information Literacy*, 3(1), pp. 19-30. Retrieved 10 October, 2012, from: <http://shura.shu.ac.uk/1012/1/230.pdf>

Activity II

Zdravkovic, N. (2010). Spicing-up Information Literacy tutorials: Interactive class activities that worked. *Public Services Quarterly*, 6 (1), pp. 184 – 194. doi: 10.1080/15228950903500627

Activity III

Hannafin, M., Land, S., & Oliver, K. (1999). Open learning environments: Foundations, methods and models. In Reigleuth, C. M. (Ed.). *Instructional-design theories and models: A new paradigm on instructional theory*, v. II. (pp. 116 – 140). Mahwah, N.J.: Lawrence Erlbaum Associates.

Jonassen, D. H. (1999). Designing constructivist learning environments. In Reigleuth, C. M. (Ed.). *Instructional-design theories and models: A new paradigm on instructional theory*, v. II. (pp. 216 – 238). Mahwah, N.J.: Lawrence Erlbaum Associates.

Jonassen, D. H., Rohrer-Murphy, L. (1999). Activity theory as framework for designing constructivist learning environments. *Educational Technology Research and Development*, 47(1), 1-79. Doi: 10.1007/BF02299477

Jonassen, D. H., & Land, S. M. (Eds.). (2000). *Theoretical foundations of learning environments*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Schonmann, S. (2006). Theatrical representations of teaching as performance. *Advances in Research on Teaching*, 11, 283-311. doi: 10.1016/S1479-3687(05)11010-4

Willis, M. R. (1999). *Dealing with difficult people in the library*. Chicago: American Library Association.

Examples of sources of interactive student-centred activities

- Burkhardt, J.M., MacDonald, M. C. (2010). *Teaching Information Literacy: 50 standards-based exercises for college students*. Chicago: American Library Association.
- Cook, D., & Sittler, R. L. (Eds.). (2008). *Practical pedagogy for library instructors: 17 innovative strategies to improve student learning*. Chicago: Association of College and Research Libraries.
- Germain, C. A., Bernard, D. (Eds.). (2004). *Empowering students II: Teaching information literacy concepts with hands-on and minds-on activities*. Pittsburgh: Library Instruction Publications.
- Gradowsky, G., Snively, L., & Dempsey, P. (Eds.). (1998). *Designs for active learning: A sourcebook of classroom strategies for information education*. Chicago: Association of College & Research Libraries.
- Hunt, F., & Birks, J. (2003). *Hands-on information literacy activities*. New York: Neal-Schuman.
- Hunt, F., & Birks, J. (2008). *More hands-on information literacy activities*. New York: Neal-Schuman.
- Markey, K., Swanson, F., Leeder, C, Peters, G. R., et al. (2010). The benefits of integrating an information literacy skills game into academic coursework: A preliminary evaluation. *D-Lib Magazine*, 16 (7/8). Retrieved 10 October 2011, from: <http://www.dlib.org/dlib/july10/markey/07markey.html>
- McDevitt, T. (2011). *Let the games begin! Engaging students with interactive information literacy instruction*. New York: Neal-Schumann Publishing Co.
- Silberman, M. (1996). *Active learning: 101 strategies to teach any subject*. Needham Hights, MA: Simon & Schuster Company.
- Sittler, R., Cook, D. (2009). *The library instruction cookbook*. Chicago: Association of College and Research Libraries.
- York County Community College Library. (2007). *Active Learning Techniques for Library Instruction*. Retrieved October 30, 2009, from http://www.yccc.edu/library/activeLearning/active_learning.htm

Additional examples of activities:

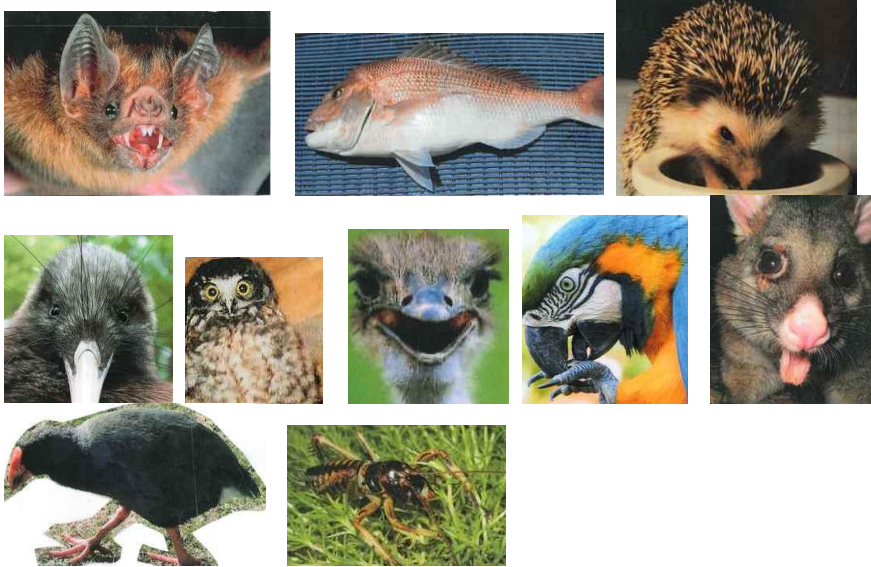
The Listeners

Purpose	To spark interest and concentration during the session, initiate discussion, as well as to obtain feedback on learning and the quality of teaching.
Activity description	<p>At the beginning of the class, a presenter delegates four roles to four participants/volunteers:</p> <ul style="list-style-type: none">• Questioner – is to compose two class-related questions and to ask the rest of the attendees to answer at the end of the session;• Agreer - is to explain to the class what information they found helpful (presented during the session) and why;• Nay sayer - is to comment on an element of the session he/she disagrees with, finds unhelpful or 'boring' and to explain why;• Example giver - is to give one example of how the new knowledge discussed during the course can be applied during their studies at the University of Auckland. <p>Ten minutes before the end of the session, the presenter asks appointed players to provide their examples.</p>


The Envelope

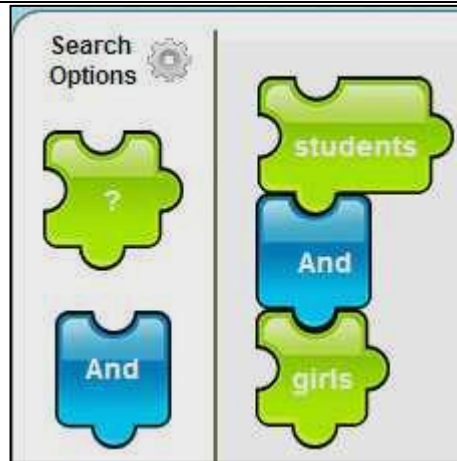
Purpose	To obtain participants' feedback on understanding and learning new concepts, initiate discussion and collaboration while problem-solving.
Activity description	<ol style="list-style-type: none">1. Before class, a presenter writes a different question or a problem on cut out pieces of paper – one question for each participant - and mixes them together in a larger envelope. Questions (problems) are related to the course content.2. At the beginning of the session, participants are asked to draw one question from the envelope.3. Their task is to find the answer to their question during the course and be prepared to explain it to the rest of the class ten minutes before the end of the session.

Boolean game

TYPE	Game-based learning
ACTIVITY DESCRIPTION	<p>Each participant is given a photo of an animal (either birds, New Zealand natives or nocturnal). Presenter puts up a felt sticky board in front of the class with three circles drawn on it (Venn diagram): one circle named "BIRDS", second circle named "NOCTURNAL", third circle named "NZ NATIVE". Students are asked to come out and put their pictures up on the board where they believe they logically belonged, including the crossover space. Samples of images:</p>  <p>After all photos are up on the board (in circles), the presenter initiated the discussion about the Boolean operators - participants are asked to comment on their selection of a circle and the position they have placed the photo of an animal.</p>
APPLICATION (Subject Librarians' comment):	<i>This is something that we did quite successfully throughout a number of years and students got a lot of amusement out of it. So, there's a lot of laughing, having fun with it - but they are actually quite a cohesive group anyway, so they could say (feel free to say): "No, no - you've put that in the wrong place" and similar.</i>
CHALLENGES (Subject Librarians' comment):	<p><i>Time management is a challenge - if there is a relatively large number of participants in a class, the activity and the follow up discussion may prolong unexpectedly and take up a larger portion of the complete session.</i></p> <p><i>Student behaviour during the activity depends a lot on the dynamics of the group itself. The activity wouldn't necessarily work well with other (non-cohesive) groups where the thought of actually having to stand up and come out in front of the class, put something up and get it wrong - would be a sort of a struggle and a cause of unpleasant anxiety.</i></p>
TEACHING MATERIALS	<ol style="list-style-type: none"> 1. A photo of an animal for each participant in a class. Animals need to be either birds, nocturnal or NZ native. 2. Sticky felt board with three large circles (Venn diagram) drawn on it (or this could be drawn on a whiteboard, so that photos can be fixed on it with blue-tack)

Online game Boolify.org

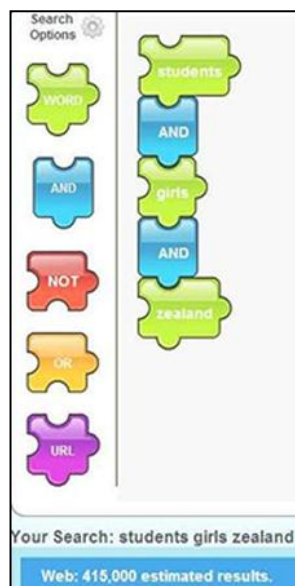
Purpose	To accommodate visual and kinesthetic learning styles, initiate class discussion and collaboration.
Activity description	<p>The original activity information can be found on the <i>Boolify.org</i> website: http://www.boolify.org/index.php. At the beginning of the lesson, a presenter asks students to open up their browsers and go to the <i>Boolify.org</i> website and leave it opened on their desktops. The presenter opens the website on the presenter's PC, so that all students can see it on the projected screen. The presenter explains that this is an online game which will be used for exploring the effects of using the Boolean search symbols.</p> <ol style="list-style-type: none"> 1. The presenter asks the class: "Those of you who are students, please stand up." (all attendees should stand up at this point) <ul style="list-style-type: none"> • While all students are standing, the presenter drags and drops the green puzzle piece in the <i>Boolify</i> game, types in the keyword "students" and clicks Add. <p><u>Figure 3: Step1</u></p>  • The presenter scrolls down the page and shows the number of the results retrieved from the web: 23+ million. 2. The presenter asks the class: "Those of you who are students and girls, please remain standing. The rest of you can sit down." (1/2 the class should remain standing) <ul style="list-style-type: none"> • While all female students are standing, the presenter drags and drops the AND puzzle piece in the game and adds a green puzzle piece to it; types in "girls" keyword and clicks Add. <p><u>Figure 4: Step 2</u></p>



- The presenter scrolls down the page and shows the number of results retrieved - 18 million. Explanation: ½ class standing and fewer results retrieved.

3. The presenter asks the class: "Those of you who are students and girls and born in New Zealand, please remain standing. The rest of you can sit down." (1/4 of the class remains standing)
 - While all female students born in New Zealand are standing, the presenter drags and drops **AND** puzzle piece in the game, adds a green puzzle piece to it and types in "zealand" keyword and clicks **Add**.

Figure 5: Step 3



- The presenter scrolls down the page and shows the number of results: 400+ thousand retrieved. Explanation: 1/4 class standing and at the same time fewer and more specific results retrieved.

4. The presenter asks all students to sit down and use the

	<i>Boolify</i> online game individually, only this time to combine their own keywords using OR symbol between them, compare the difference in number of results retrieved and report back to the class their findings.
Application	The activity has been applied in the course <i>Database Searching II: Advanced</i> as described above, step by step. Although the activity consisted of several steps, it took five minutes to complete during the session. Additional two to three minutes were assigned for student discussion and feedback on using the OR operator in the <i>Boolify</i> game.
Outcomes	<p>Students participated with surprising enthusiasm and excitement, and, according to their feedback, found the activity a fun and interactive way to adopt new information about using Boolean search symbols. Here are the comments provided by the students on the question: "What I liked about this course?"</p> <p><i>Kept the class interactive which was very good as there was no element of 'boring' in the class. This was the best course in that - we were encouraged to do our own searches ... this hit two birds with one stone 1) learned to use the systems AND 2) advanced our own research. Very good use of time! Nice and quick to learn. Very visual. Little tricks. Interactive nature – trying the searching ourselves. Was easy to understand. Simple, interactive and interesting. Good thing I booked this course!</i></p>

Role-play activity: the original description

DURATION	Depending on the number of participants, maximum 30 minutes.
ACTIVITY DESCRIPTION	Participants are organised into smaller groups. Each group is given a different scenario (real-life situation and/or a problem) on a printed sheet of paper. Their task is to discuss the scenario/problem in the group and think about possible solution. Two volunteers from each group are asked to come in front of the class and either read the scenario out loud or act it out (if they would like to) and present their solution to the scenario/problem. The rest of the class is asked to discuss the solution proposed by 'actors' after each role-play/scenario reading.
APPLICATION (Subject Librarians' comment):	<i>Unless you get the class in the right frame of mind and you give clear, explicit instructions that it's not going to be something that people will be targeted on or have any sort of mocking or anything like that, then it probably wouldn't have worked so well. We say to students: "Here's your script, make sure you read and discuss in your group about what solutions would you come up with to solve this problem and then come back and present that to the rest of the class. Instead of reading the script, you may pretend that you're Angelina Jolie and Brad Pitt and put up your best academy award winning performance." Some students really get into it and act the scene out just like on the real stage and some only read the script out loud like plain text - and there's nothing wrong with that. So, again - you've got to choose the right teaching scenario. The class actually starts with the PowerPoint, questions for feedback to get students participating straight off and thinking about the issues to be discussed; there's also a YouTube clip we show before the role-play activity, there may be more questions and explanations, and the role-play actually is performed at the end - so that they've got the knowledge (hopefully from what we've discussed in the class), they have relaxed a little bit with the humour displayed in the PowerPoint and they have gotten used in this class by now that their participation is expected and required - and natural component of their learning and training.</i>
CHALLENGES (Subject Librarians' comment):	<i>You have to be careful for people not to feel insecure to communicate because they get stage fright or feel overexposed. And it is always a matter of balance between giving the information to them and getting them to feedback on it in a form of a role-play.</i>
RECOMMENDATION	This activity is more suitable for smaller classes as it may end up taking a large portion of class time (including the discussion after each scenario) if more than 3 scenarios are acted out.
TEACHING MATERIALS	3 - 5 relevant scenarios on printed A4 sheets. A video clip to introduce the activity at the beginning (optional).