InfoSkills Individual Assignment

**Type of group:** Postgraduate research engineering students

**Type of training:** Searching bibliographic databases

**Reasons for choosing:**

I work at the University as the Outreach Team Leader for the Science, Engineering and Medicine Unit. I was previously the Outreach Librarian for Engineering. The Services Librarians provide the course that I have outlined as part of the Graduate School of Engineering. I have been involved minimally in the delivery of this course but not in the design. I wanted to choose a real-life example and try to upgrade the course by making it more engaging. This course is embedded into the program and serves as the students’ introduction to library research skills. It is very important that these students understand how to use our resources.

**Delivery method:** small group training (approx. 15-20) will suit this type of training well since it will require each student to be at a computer for a hands on session. Any bigger than 20 students will make this sort of training unmanageable and students could get lost easily.

**Title:** Essential library research skills for engineering

**Aim:** To provide a comprehensive introduction to core engineering databases

**Objectives:** By the end of this session, participants will be familiar with:

* The databases and other resources which are core to the field of engineering;
* The types of information that is covered by these databases and when you would use certain ones;
* How to break down a research question into an effective search strategy by identifying the main keywords, concepts and possible synonyms;
* How to conduct a search with those concepts utilising the tools provided in the database e.g. facets, controlled language thesaurus, truncation, wildcards and Boolean operators.

**Learning Outcomes:** Upon successful completion of this training course, participants will be able to:

* Evaluate and use subject specific databases
* Develop a search strategy for your research topic
* Conduct a basic keyword search
* Develop and conduct more complex searches using database tools

**Course Schedule:**

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| **Time** | **Key Points** | **Delivery method** | **Resources** | **Duration** |
| 10:00am | Welcome & Introduction | Presentation - overview of course schedule - aim, objectives, learning outcomes | Handout course notes slides and feedback clickers  Projector and computer lab. Internet connection. | 5 min |
| 10:05am | Results of pre-course skills check survey | Presentation and discussion | Powerpoint slides  Projector and computer | 10 min |
| 10:15am | Core databases and resources for engineering - a review of the subject guide | Demonstration of databases and other resources for engineering and where to find them | Projector and computer  Feedback clickers | 20 min |
| 10:35am | Research topic identification – break down into keywords & synonyms | Exercise & demonstration | Exercise sheets | 10 min |
| 10:45am | Compendex tools and search strategies | Demonstration | Projector and computer | 15 min |
| 11am | Break | Break | Break | 15 min |
| 11:15am | Database tools and search strategies | Demonstration and practical hands on session | Projector and computers | 20 min |
| 11:35 | Reference management tools (Endnote/Refworks) | Presentation | Projector and computers | 10 min |
| 11:45 | Overview of other library services available | Presentation | Projector and computer | 10 min |
| 11:55pm | Summary | Questions/Feedback |  | 5 min |

**Delivery Methods**

This training session will be held in a computer lab where every student has access to a computer since there will be a hands on component. I will hand out my presentation slides, worksheets and feedback clicks at the start. Feedback clickers gather student responses to questions posed and are an emerging technology that facilitates interactivity in training sessions.[[1]](#footnote-1)

The pre-course online survey will serve as the training needs assessment. I will ask the students to evaluate their own level of familiarity with the subject matter as well as ask what they hope to learn in this course. I will then present the results and invite discussion.

I will demonstrate where to find the core databases and other resources for engineering, covering the subject guide as a key starting place. The subject guide lists the key databases for all engineering subjects, as well as how to find ebooks, standards, patents, conferences, newspapers and much more. I will also show them how to find these in the catalogue once they know what they are looking for. As I’m going through the resources, I will ask who has heard of certain databases and gather responses via the clickers. This will then guide me to see what databases I must cover. I will also talk about when to use each database, pointing out the descriptions of each one.

Then I will ask the students to take out their exercise sheets and write down their research topic. I will ask for a volunteer to read theirs out and then to think of the main keywords and synonyms that would be appropriate. I’d ask the class if they had any suggestions and/or offer my own. Then I’d ask the rest of the class to write down their own keywords and synonyms.

I would then demonstrate a basic search on Compendex and highlight the key tools of the database, including facets, controlled vocabulary, thesaurus, duplicate removal, and full text options.

After a 15 min break, where they can get up stretch and also talk to each other, I will give them 20 minutes to let them try the strategies that I demonstrated out on their own topic using any of the databases we talked about. I will rove around and offer assistance.

Then I will briefly cover the two reference management tools that we offer, Endnote and Refworks. I will show they how to access and download the tools and the features and benefits of each.

The summary will reiterate what was covered in the class. I will also say that I will email them an evaluation survey in about a months time. The reason for the delay is we want to see if they actually use the skills learned in this session in their research. If you evaluate too soon, you won’t be able to tell if they have put the skill into practice.

1. <http://www.turningtechnologies.com/studentresponsesystems/> [↑](#footnote-ref-1)